

HANDBOOK OF PRACTICAL SECOND LANGUAGE TEACHING AND LEARNING

Edited by ELI HINKEL



Handbook of Practical Second Language Teaching and Learning

This authoritative volume is a practical, comprehensive, and state-of-the-art overview of current knowledge and research on second and foreign language teaching and learning.

Thorough and reader-friendly, the Handbook is organized logically into six parts that address all major areas of L2/FL teaching and learning:

- **Part I: Learning Contexts and Language Teaching** covers the diverse populations of language learners, their needs, and the challenges they face
- **Part II: Curriculum and Instruction** addresses curriculum and materials design, and includes exemplars of instructional approaches with wide applicability across contexts
- **Part III: Listening and Speaking** overviews listening pedagogy, speaking skills, and pronunciation, among other key topics
- **Part IV: Reading and Writing** includes chapters on all practical matters related to learning to write in another language, with attention to spelling, orthography, extensive reading, and more
- **Part V: Vocabulary and Grammar** discusses assumptions and practical approaches on vocabulary and grammar instruction, with attention to important topics such as academic writing and multiword expressions
- **Part VI: Intercultural Communication and Pragmatics** concludes the Handbook with an examination of language learning across social, cultural, and regional differences

Bringing together leading experts in the field, the contributors offer important perspectives on major, established, and emerging topics. Each chapter overviews important developments, key research, and considerations and applications for effective second language instruction. A well-rounded, readable, and up-to-date resource, the Handbook is a compendium of the ongoing changes, innovations, and practices in L2/FL teaching and learning. It is an essential resource for students, teachers, faculty, and professionals.

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Edited by Eli Hinkel

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Preface

Eli Hinkel

Overview

Around the world – and in most world regions – a great deal of resources, time, and work are dedicated to second language (L2) and foreign language (FL) learning. According to some counts, there are approximately 1.4 billion English language users around the world. They include a vast majority of nonnative speakers who are learning or have learned English for communication in a myriad of contexts and for a vast range of purposes in all manner of human endeavors. For this reason, the number of language teachers and learners in practically any location where English is taught and learned is predicted to continue to grow for the foreseeable future. The types of L2/FL populations who are English teachers and learners have also become increasingly diverse, thus adding to what was already a very broad field of language instruction, preparation, teaching, education, pedagogy, schooling, tutoring, guiding, coaching, mentoring, and directing. In this light, no handbook, no matter how large, can thoroughly cover the vast expanse of the contemporary language teaching and learning territories.

The contents of this book reflect the importance of practical considerations in language teaching and learning. The practical aspects of research discussed throughout deal directly with the applications of these findings to the needs of teachers and learners. It is a widely recognized fact, however, that a large body of studies on how language is taught and learned presents an incomplete picture, and there is much left to explore. The chapter coverage strives to remain as thorough as possible within the scope of one volume, but the main objective of the book is to shine the light on the practical matters entailed in working with language teaching and learning.

To this end, the book provides a broad-based discussion of language teaching and learning essentials, as well as the types of language learners that populate the language learning universe, such as young and adult learners, K-12 students, academic learners, and professionals in the disciplines. The development of foundational language skills is required for any type of communication. This volume includes all the classical areas in L2/FL pedagogy and applied linguistics, in addition to language curriculum design, digital literacies, computer assisted language learning, and teachers' professional development.

The practical aspects of language teaching and learning are directly concerned with how instruction is carried out, what types of skills and knowledge need to be addressed, and how the language systems and variations are communicated to the learners. One of the key considerations is identifying the ways in which instruction can be adapted to meet learning needs in local contexts. An important goal of this book is to bridge the divide between the large body of research findings and the needs of teachers and learners to make instruction as effective and as efficient as possible.

In light of the increasing importance of L2/FL usage around the world, the chapters examine in some depth the core areas without which no communication can take place: speaking, listening, reading, vocabulary, grammar, and writing. In each of the skill areas, the contents take a look at traditions, innovations, and new directions in the practical aspects of instruction.

Methodology for Content Design

To identify areas and topics of relevance, importance, and usefulness, it was necessary to examine the topics of interest among professional and teaching associations around the world. The following approach was adopted:

- (1) To focus on currency and relevance, the themes and shifts highlighted at professional conferences, meetings, gatherings, academies, presentations, and in-progress workshops were collected.
- (2) The divisions, affiliates, special interest groups, as well as the topic areas in various professional associations and organizations in many countries and across continents were compiled to ensure the currency and breadth of research topics, content areas, and values.
- (3) A thorough and extensive review of the L2/FL research on teaching and learning published in the past several years played a key role. Regrettably, the number of pedagogical research publications has been in decline in the past couple of decades.
- (4) The new and additional teaching areas that complement established instructional areas are driven by the indelible effects of technology and real-world events on how languages are taught and learned at the present time.

This book includes six parts, each divided into several chapters, depending on the topics and contents. In general terms, the inclusion or exclusion of a particular theme or topic in this already huge compendium of overviews reflects its prominence in L2/FL research literature, and professional gatherings.

The structure of the book seeks to acknowledge the enormous complexity of teaching and learning the essential language skills. Most teachers, methodologists, and curriculum designers typically accept it as given that L2/FL teaching and learning is such a vast and complex area of study that it might be simply impossible to grasp it in its entirety.

One outcome of this complexity is that multiple perspectives, learning priorities, and instructional techniques can be found in most aspects of linguistic analysis and pedagogy. The diversity of perspectives reflects the rising professionalization of the field. The studies of language, as well as language learners, fundamentally hinge on indirect and interpreted evidence, and in almost all cases, more than one perspective and interpretation are possible. It may come as little surprise that in practical terms, views on key principles in language teaching and learning can differ to a great extent. Multiple and different perspectives on most aspects of L2/FL teaching and learning are probably inevitable.

The audience for the book is envisioned to be language practitioners of all sorts. These can include, for example, novice and experienced classroom teachers, advanced and not-so-advanced undergraduate and post-graduate students, the teaching faculty in teacher training institutes, teacher education, and applied linguistics programs, teacher trainers, curriculum designers, and material developers, or others who are still merely considering joining the profession.

The Organization of the Book

The societal contexts of L2/FL learning and users who undertake to learn a language (most commonly, English) are the top priority of the book. Thus, the book begins with language learning people, and the examination of the many populations of learners and their learning needs in a range of social and educational systems.

The book opens with **Part I, Learning Contexts and Language Teaching**. As is typical of many populations, language learners everywhere have broad-ranging objectives for achieving

different L2/FL proficiencies in order to accomplish their educational, vocational, personal, academic, professional, and communicative goals.

Part II, Curriculum and Instruction, discusses curriculum and material design and deals with a few prominent exemplars of instructional approaches in language teaching. These approaches were selected for a closer look because they are widely adopted in various geographic locations and social contexts around the world. The same can be said about the growing prominence of corpus analyses and their findings in all manner of language pedagogy. The proliferation of technology in language learning and instruction in and out of school (not to mention the ubiquity of technology anywhere and everywhere world-wide) has dramatically changed how learners go about their daily language-related activities.

The focus on specific language skills begins in **Part III, Listening and Speaking**. These chapters address the current and divergent perspectives on listening pedagogy and the development of speaking skills, as well as the role of pronunciation.

The chapters in **Part IV, Reading and Writing**, treat a number of broad domains of research such as orthography and spelling, the practical matters in learning to write in another language and teaching writing, L2/FL reading as an essential language skill, and the increasing prominence of extensive reading. Reading and writing are foundational first and second language skills. However, how teachers and learners go about teaching and learning to read and write is likely to vary greatly in a broad range of instructional contexts. For instance, pen-and-paper skills can find themselves in the company of digital technology that, by definition, requires advanced reading and writing abilities.

The six chapters in **Part V, Vocabulary and Grammar**, focus on various aspects of learning L2/FL lexicon and its nearest relative, grammar. In recent decades, dramatic shifts in theoretical foundations, teacher beliefs, and the practice of teaching have had enormous influence on the place of vocabulary, grammar, and their contributions to language pedagogy and uses. Although typically whole books are written on L2/FL vocabulary, grammar, or vocabulary combined with grammar, the chapters in this part only touch the tip of the iceberg. How, when, and in what contexts vocabulary and grammar are learned are the topics without which no handbook can do without.

The topics of **Intercultural Communication and Pragmatics** are considered in **Part VI**. The connections between language learning and communication across cultural, social, and regional divides has long remained one of the pivotal areas of study. More recently, intercultural and international communication have attracted further attention due to the increasing effects of globalization. Studies in L2/FL pragmatics are bound up with cross-cultural and cross-national language usage in an enormous array of socio-cultural frameworks.

The Structure of the Chapters

In this Handbook, as in any other large book that consists of dozens of chapters written by three or four dozen authors and co-authors, the contributions are likely to differ in character. To a large extent, the chapters reflect the diversity of the language teaching profession, the contexts in which language is taught and learned, and the individuals who teach and learn. However, each of the chapters seeks to present reader-friendly, accessible, and teacher-oriented overviews of the key areas in L2 teaching and learning.

In light of the great diversity of the field, research, and disciplinary perspectives, every effort has been made to make the chapters consistent in style, tone, and the depth of material coverage. For this purpose, all contributors were requested to construct their chapters along a similar outline:

- An explanation of how the topic discussed in the chapter fits into a larger picture of the practical aspects of language teaching

Preface

- Important developments, trends, and traditions in the specific area of instruction, as well as current controversies and the reasons that they have arisen
- A detailed explanation of the perspective expressed in the chapter and a review of current practices and innovations that supports this perspective
- A section on conclusions and/or future research directions
- A substantial list of references that can assist interested readers in backtracking seminal and relevant works

Each chapter represents a stand-alone examination of a specific area in language teaching and learning. However, the book as a whole seeks to reflect the major trends in the current state of professional affairs, as well as the people and the contexts where second and foreign languages are taught and learned.

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In Memoriam

The previously published volume of *The Handbook of Research in Second Language Teaching and Learning* and its three earlier volumes have been around since 2003 when the first handbook was originally proposed and then developed. In the past many years, the earlier handbooks have greatly benefitted from the expertise and generosity of world-class chapter authors, colleagues, and friends. Their scholarship, work, and contribution to the field have been invaluable to the study and teaching of language and second language. Their contributions to the lives of their colleagues, students, and readers have touched and will continue to touch all those who learned and will continue to learn from them.

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Part I

Learning contexts and language teaching



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The changing landscape of English language teaching and learning

David Nunan

Introduction

When Eli Hinkel invited me to write the opening chapter of the Handbook, she told me that the audience and focus would differ from previous handbooks to which I had contributed. The principal audience would be pre-service, in-service, and early-career teachers of English working in a diverse range of global contexts. The chapter had to be reader-friendly, accessible, and teacher-oriented. She wanted a state-of-the-art overview of current and future trends and developments in second language teaching and learning focusing on the people and contexts that constitute language teaching and learning in different parts of the world. The topic was daunting. Numbers alone speak to this. For example, estimates of the number of students engaged in learning English range from 1.5 to 2 billion.

Over the last 50 or more years, there has been substantial diversification and fragmentation in the field, driven partly, but not exclusively, by globalization and technology. When I started teaching in the early 1970s, several binary distinctions circumscribed the field: EFL vs ESL, native speakers vs non-native speakers, general vs specific purpose English, children vs adults, and private vs public sectors.

These days, binary distinctions are far too crude. In terms of 'language people', we have students, teachers, program administrators, researchers, academics, curriculum designers, policy makers, materials developers, publishers, leaders of professional and academic organizations, owners of private language schools, volunteers working with immigrants, refugees, and asylum seekers – the list goes on. Any one of these groups could be further broken down. Learners, for instance, can be classified in terms of age (from early childhood to seniors), level of education (no formal education to Ph.D.), level of proficiency (beginner to advanced), legal/political status (foreign overseas students, immigrants, refugees), and in reasons for learning English (very general to very specific).

Contexts are as variable as people. Andy Curtis makes the point that every context is a unique mix of lesson, location, students, and teacher (Curtis, 2015). Years ago, context referred to whether teaching occurred in countries where English is the dominant language (ESL) and contexts in which it is a foreign language (EFL). This distinction has long been seen as inadequate, lumping together countries as diverse as Poland, Brazil, and Japan. In the 1980s, Braj Kachru proposed a three-circles model of English. The Inner Circle consists of countries in which English is a first language for most of the population. The Outer Circle includes those former colonies of England such as India, Pakistan, and Singapore where English is the second (and in some cases the first) language of large

numbers of citizens. The Expanding Circle consists of countries in which English is learned and used as a foreign language (Kachru, 1990). Although influential at the time it was proposed, Kachru's model was increasingly criticized. His characterization of Inner Circle countries underplayed the multilingual reality of their populations. For example, a quarter of all children in the United States are born to mothers who use a language other than English in the home (Garcia & Freede, 2010). Additionally, as noted earlier, the Expanding Circle category failed to capture significant contextual differences between the countries falling into this category. (For a detailed critique of the Kachru model, see Jenkins, 2014.)

One core contextual variable is purpose. There are various reasons for learning English. Young learners in non-English-speaking countries have no particular purpose other than that it is on the school timetable or because parents insist on it. These programs are known as General Purpose English (sometimes facetiously called TENOR courses – Teaching English for No Obvious Reason). For older learners, the major purposes are for education and employment: Vocational English; English for Specific Purposes (ESP); English for Academic Purposes (EAP), and so on. In 1960, Michael West proposed another contextual variable: the availability of educational resources, drawing a distinction between resource-rich countries and those that are under-resourced. Interest in this variable has been revived with the publication of books and articles, and conferences devoted to the subject (Coleman, 2018; Curtis, 2021; Christian & Bailey, 2021; Kuchar & Smith, 2018). Later in the chapter, I will discuss the issue of equity. The existence of resources is one thing, access to those resources is another.

Although the chapter is populated with people and contexts, they are woven into the fabric of the chapter, rather than appearing in separate sections. My purpose is to tell the story of the changing landscape of English language teaching and learning. Selecting a broad topic enabled me to focus on the people and contexts that shaped my own evolution as a teacher, teacher educator, researcher, curriculum developer, and writer. In writing the chapter, I was mindful of the intended audience, and attempted to present complex concepts, themes, and perspectives in an accessible yet non-trivial manner.

I embark on the chapter with the premise that language teaching is part of education, that we are educators first and language teachers second. I therefore begin by addressing a fundamental philosophical and political question: *What is education for?* How we answer the question will determine how we go about dealing with practical issues: what content should be covered, what learning experiences should be provided for the learners, and how we will know what worked and what didn't (Nunan, 2017).

I synthesize what past philosophers of educators have had to say on the question before describing how globalization and the inevitable instability it brings, the knowledge explosion, and the impact of technology have forced present-day educators to look for different answers from those that were appropriate for former generations. I also look at resistance to change and point out that in education a significant innovation can take up to 30 years to take root.

The sheer pace of change in all areas of life, social, political, and economic, has created a dilemma for educators who are charged with preparing the present generation for an unknown future. One response to the dilemma has been an attempt to redefine education in terms of skills/competencies rather than the mastery of content, much of which will be obsolete by the time learners graduate from school. I describe the 21st century competencies movement and argue that language education has an important place within that movement. I'm not wedded to the phrase '21st century competencies', particularly as we are almost a quarter of the way through the century. However, I agree with key principles such as a shift of focus from teachers and input to learners and output. I address these principles in greater detail in the body of the chapter.

I then turn back to the 1970s, when the nature of language was being reconceptualized as a resource that enables us to communicate rather than as a body of content to be mastered. Those who advanced this view argued that, for language educators, the question should no longer be 'what

language content do my students need to learn?', but 'what resources and skills do my learners need in order to communicate competently?' Although it would take years for this view to have an impact in many educational systems, the shift in focus from knowledge acquisition to skills development was more-or-less what the 21st century competency movement would argue for 30 years later. I'm not arguing that content is irrelevant, although, over time, some becomes redundant and has to be updated or replaced. It's a matter of balance, as I pointed out some years ago in a piece on the need for an integrated approach to syllabus design (Nunan, 2017).

Having surveyed past and present shifts in the educational landscape, I look to the future. This is a tricky business. As I have said, we don't know what the world will be like five years from now, let alone in 30 years. Epidemiologists apart, who could have predicted the pandemic that would sweep the world in 2020 and change all our lives? In looking forward, I draw on an important summit meeting that took place in Athens, Greece, in 2017 which addressed the future of TESOL as a profession.

Throughout the chapter, the word 'profession' and its offspring, 'professional' and 'professionalism', occur over 20 times. In the penultimate section of the chapter, I revisit a question I posed two decades ago: *Is language teaching a profession?* In interrogating the question, I pull together the key themes running through the chapter.

What is education for?

I begin the substantive part of the chapter with what might seem a lofty question. If you are a pre-service or early-career teacher, you may think that the question isn't one for you, it's one for higher-ups such as university professors and boards of education. I would encourage you to think otherwise. It's a relevant question for anyone with a stake in education, which means anyone who pays taxes. Parents with school-age children are, or should be, vitally interested. Politicians, who spend vast amounts of our tax dollars on education, certainly are, as are the media

The question is particularly relevant for those of us who are actively engaged in education. It will shape subsidiary questions relating to syllabus design (what content should I provide for learners and how should I sequence it?), methodology (what learning experiences should I provide for my learners?), assessment (how will I know how well my learners have done?), and evaluation (how will I know how well the elements that constitute courses, including me the teacher, have served the learners, and what can be improved?).

The 'lofty' question has been approached in different ways. One set of arguments focuses on society, and societal needs. These include the notion that the purpose of education is to produce workers with the knowledge and skills to contribute to the growth of the economy; to preserve and pass on the cultural values of society; and to induct learners into domains of knowledge. Another set focuses on the individual, arguing that the purpose is to foster personal growth and development, that learning is an end in itself and should be pursued for its own sake, and that the end of education is to equip citizens to lead fulfilling lives (Myhill, 2016). This might be called the 'personal emancipatory' perspective.

Those who argue that the purpose of education is to turn out productive workers do so on the grounds that educational institutions are funded by the broader society and should serve the needs of that society. The principal proponents of this argument are politicians, and business and industry leaders. We could label this perspective the 'utilitarian' argument. On the surface, it might seem a reasonable view. However, as I point out in the next section, it begs the question of what knowledge and skills will be relevant in a rapidly changing world.

The argument that the purpose of education is to preserve and pass on cultural and societal values is a conservative one. It assumes that these values are relatively stable and agreed upon by most of the population. However, few modern societies are so consensus oriented. Even in past eras, it is the

values of the dominant culture that are embedded in the educational system. 'Dominant' does not mean the largest cultural group. In many contexts, it refers to a cultural elite that, through economic superiority and entrenched power, is able to impose its cultural norms on less privileged groups.

The knowledge domain view is closely allied to the cultural preservation position. Proponents of this view see the primary purpose of education as the development of the intellect through a liberal education founded on knowledge-based subjects such as mathematics, the physical sciences, the human sciences, history, morals, religion, fine arts, literature, and philosophy. Each of these knowledge domains has its own particular way of looking at the world. Each has its own body of knowledge generated through unique principles of inquiry or 'rules of the game'. The rules for generating scientific knowledge differ from the rules for generating historical knowledge. These knowledge domains have their own intrinsic value and should be studied for their own sake (Dearden et al., 1972). R.S. Peters, a principal proponent of the knowledge domain school, drew a distinction between education (acquisition of abstract knowledge and higher-order reasoning abilities) and vocational training (knowing how to drive a truck or plumb a house). School curricula consist of disciplinary domains such as "science, mathematics and history ... not bingo, bridge and billiards. Presumably there must be some reason for this apart from their utilitarian or vocational value" (Peters, 1966, p. 144). Fifty years before Peters, John Dewey argued that the purpose of education was not to inculcate subject knowledge but to develop critical thinking skills that would equip students for lifelong learning; a view that was generations ahead of its time (Dewey, 1916). More recently, the cultural preservation and knowledge-domain positions have been attacked for their outmoded 19th century concepts of knowledge and their exclusive focus on Western civilization and traditions (Oance & Bridges, 2009).

Dewey's views on education were complex and multifaceted, and much of his writing is as relevant today as it was 100 years ago. His progressive and liberal views put him firmly in the 'personal emancipatory' camp, although they were controversial in his native America. In Britain, two philosophers of education, John White and Richard Pring, are worth mentioning. White, a former student and later colleague of Peters, is broadly sympathetic to the notion of knowledge acquisition for its own sake, although he also argues that the purpose of education is to equip people to lead happy flourishing lives, meet basic needs such as health and food, find interesting work, and form lasting relationships (White, 2010). White's stance incorporates elements of the vocational and liberal traditions. He points out that they are not mutually exclusive, and that the curriculum can, and should, incorporate both utilitarian and non-utilitarian ends.

His perspective is shared by Richard Pring, whose work I first encountered in the 1970s at the University of Exeter, where I was a graduate student and Pring was Professor of Education. In an article entitled *What is education for?* he says, "One needs to argue for the kind of personal development and fulfillment which we believe to be worthwhile, and for the kind of society which, through educating young people, we think worth creating" (Pring, 2010, p. 98). This statement mirrors and reinforces White's position. Pring also reiterates the need for educational systems to be renewed to reflect the changing needs of society and emerging concepts of what it means to be educated:

... not any kind of learning is thought of as 'educational', but only that kind of learning which is considered to be valuable – which leads to improved and more intelligent understanding of the physical, social and economic world in which we live. Therefore, just as those worlds change (society and the economic conditions have changed considerably in the last twenty years) so we need constantly to review our view of the 'educated person'.

(Ibid)

In this section, I have provided a brief and admittedly subjective response to the 'lofty question' that heads it. In the next, I take as my point of departure Pring's comment on the need for education to

keep pace with societal and economic change and examine the phenomena that forced a shift in the educational landscape in general, and language education in particular.

Forces for change

Education is inherently conservative. When responding to the ebb and flow of economic times, the demands of industry, the pace of social change, and the disruptive power of technology, it is anything but nimble. In the 1970s, Lawrence Stenhouse pointed to this conservatism as one reason why it took approximately 30 years for innovations to take root (Stenhouse, 1975, 1978). Many years later, in some respects not much has changed. Over 30 years ago, I published a book proposing that tasks be a central organizing principle for language programs (Nunan, 1989). The idea continues to bemuse many new to language teaching.

At the beginning of the 21st century, this conservatism was increasingly criticized by business and government leaders who argued that education systems were failing to produce graduates with the skills, knowledge, and dispositions corporations and industry required to survive and thrive in an increasingly globalized world (Soland et al., 2013). These criticisms and calls for curriculum renewal prompted educational bureaucracies to reconsider the purposes for education and the knowledge and skills required of citizens in the 21st century (see, for example, Ministry of Education, Singapore, 2014). At the same time, academics were formulating their own proposals for change. As long ago as 1966, Jerome Bruner argued that it should be "... self-evident that each generation must define afresh the nature, direction, and aims of education to assure such freedom and rationality as can be attained for a future generation" (Bruner, 1966, p. 23). He identified several phenomena that made change crucial. Fundamental was the information explosion which had led to a revolution in our understanding of human physical, cognitive, and social development, as well as on the nature of the learning process. He argued that the role of the teacher was not to transmit facts, which would soon become redundant, but to scaffold the learning process through guided, inductive procedures. Focus in the classroom should be on the learner, not the teacher, there should be more learning, less teaching (Bruner, 2006). Bruner's work influenced my own thinking on the centrality of the learner to the learning process (Nunan, 1988, 2013a) and experiential task- and project-based language learning (Nunan, 1989, 2004). His notion of scaffolded learning has been developed and applied to language learning and teaching by educators such as Pauline Gibbons (2014).

Given Bruner's astonishment at the pace of change in the 1960s, what would he have made, 50 years on, of the baffling rate at which it comes at us, and the dilemma it presents educators? Ken Robinson explained the dilemma as follows:

We all have a huge, vested interest in education, partly because it's education that's meant to take us into this future that we can't grasp. If you think of it, children starting school this year will be retiring in 2065. Nobody has a clue ... what the world will look like in five years' time, and yet we're meant to be educating them for it. ... So, the unpredictability is extraordinary.

(Robinson, 2006)

In his talk, Robinson criticized the hierarchical nature of school curricula, which place mathematics and science at the top, and the creative arts such as music and dance at the bottom. In his view, the hierarchy, which had evolved and been perpetuated over centuries, should be reversed, with creativity at the top.

Educators working in a range of contexts in different parts of the world have proposed responses to the dilemma. These responses have emerged in various guises and with differing labels: 21st century Competencies/Skills, New Learning/Literacies, 'SMART learning', and so on. Despite differences of emphasis, they share several principles (principles which Bruner took to be "self-evident")

50 years ago!). Fundamentally, the curriculum had to move beyond the transmission of information and the mastery of content. The focus had to shift from teachers and input to learners and outcomes. These outcomes should be specified as competencies; that is, things learners should be able to do at the end of the instructional process. Cope and Kalantzis, 2015; Kalantzis and Cope, 2012; Soland, Hamilton, and Stecher, 2013; Ministry of Education, Singapore, 2014; Ackoff and Greenberg, 2008 all agree that the measure of success must be learner outcomes, not teacher input. In the next section, I will sketch out what this shift in focus from teacher input to learner output might look like.

Competency-based education

A competency is a statement of the attitudes, dispositions, and behaviors that an individual should display at the end of a course of instruction. I say, ‘at the end of a course of instruction’ rather than ‘as a result of instruction’, because the latter implies a direct causal relationship between instruction and learning. There must be some sort of a relationship. If not, what would be the point of teaching? However, the relationship is complex and indirect, and mastery is a developmental, not an all-or-nothing, process. This is true of all subjects, none more so than language. Memorizing and regurgitating grammar rules and identifying violations of a rule in a grammar test is called declarative knowledge. Gradually acquiring the ability to use a grammatical feature to communicate effectively and appropriately in a range of different contexts and content domains requires procedural knowledge, a very different matter from declarative knowledge, involving speech processing and production. For a discussion of this complexity, and the multiple factors involved in procedural mastery, see Goldschneider and DeKeyser (2001). Elsewhere, I have described language acquisition as an organic rather than a linear process: in metaphorical terms, it is more akin to growing a garden than building a wall.

There is nothing new in the idea that the curriculum should be specified in terms of learning outcomes. According to Eisner (1967, pp. 250–51) “a belief in the usefulness of clear and specific educational objectives emerged around the turn of the (19th) century with the birth of the scientific movement in education.” Midway through the century, Ralph Tyler developed his self-styled ‘Rational Curriculum Model’. It was a clever label because a person objecting to the model ran the risk of being accused of irrationality. The model has four basic steps. The first of these is the specification of behavioral objectives. Next comes the creation and sequencing of learning experiences. The final steps involve evaluating the curriculum and revising those parts that fail to achieve the prespecified objectives (Tyler, 1949).

The model had a significant impact on curriculum development. In 1972, Valette and Disick developed an approach to the teaching of modern languages based on performance objectives. They used the term ‘performance’ rather than ‘behavioral’, as the latter was associated with behaviorist psychology, which was largely discredited by the 1970s.

‘Performance’ also captured another essential feature of the approach. Learner outcomes had to be visible, students having to demonstrate through observable performance that learning had taken place. Verbs such as ‘appreciate’ and ‘understand’ were unacceptable because they couldn’t be seen in learner performance, and therefore presented a major challenge when it came to assessment.

Formal performance objectives [were] meant to include three elements: (a) a *performance* or *task* statement, (b) a *conditions* statement, and (c) a *standards* or *criterion* statement. The task element specifies what learners are to do, the conditions statement specifies the circumstances and conditions under which learners are to perform the task, and the standards statement specifies how well the task is to be performed. The following statement illustrates a three-part objective. *In an authentic interaction* (condition), *the student will request prices of shopping items* (task). *Utterances will be comprehensible to a sympathetic native speaker* (standard).

(Nunan, 2007, p. 423)

The objectives movement had its critics as well as its champions. There is no space here to review the debate in detail. I have done this in several publications, including my 2007 paper. (Comprehensive critiques can also be found in classic rebuttals such as Eisner, 1967, and Popham, 1972.) Here, I will mention only two criticisms, because they are pertinent to the 21st century competency movement. Providing a list of formal, three-part objectives of the type illustrated earlier for an entire curriculum is unrealistic, although sample objectives in the early stages of instruction can be useful for sensitizing learners to intended learning outcomes. An exhaustive list would spawn hundreds, if not thousands, of objectives, and could lead to sterile, mechanistic instruction. Second, it can, and has been argued, that education is successful to the extent that it leads to outcomes that can't be predicted in advance, a point Eisner made in his critique over 50 years ago:

... the outcomes of instruction are far more numerous and complex for educational objectives to encompass. The amount, type, and quality of learning that occurs in a classroom, especially when there is interaction among students, are only in small part predictable. The changes in pace, tempo, and goals that experienced teachers employ when necessary and appropriate for maintaining classroom organization are dynamic rather than mechanistic in character.

(Eisner, 1967, p. 254)

Eisner goes on to state that his critique is pertinent to some subject areas but not to others. In his opinion, it is perfectly possible to prespecify precise learning outcomes for mathematics, languages, and the sciences, but not for subjects such as the arts that require creative, and therefore non-predictable, responses. I agree with most of what Eisner has to say but would argue that the previous quote is applicable to all subjects including mathematics, languages, and the sciences. Years ago, Henry Widdowson (1983) persuasively pointed out that, as language educators, we need to develop in our learners not only communicative competence (Hymes, 1971, 1972) but also communicative capacity, which requires creativity, resourcefulness, and the ability to produce novel utterances and texts (Jones, 2020).

While the 21st century competencies movement and the objectives approach in its various guises and iterations take as their point of departure learning outcomes, that's about all they share. Competencies can encompass dispositions that are not directly observable. The movement also accepts diversity of outcomes. "Diversity, not uniformity of learners and their responses to instruction, is not only desirable, it is inevitable and ... must feature at the core of our thinking about education" (Kalantzis & Cope, 2012, p. 9).

I will illustrate competencies with reference to Soland et al. (2013). Their model is comprehensive and comprehensible. The authors identify three broad categories of competency: cognitive, intrapersonal, and interpersonal. Cognitive competencies include mastery of core academic content such as mathematics, science, language arts, foreign languages, history, geography, critical thinking, and creativity. Interpersonal competencies are those that are needed to relate to other people. They include communication and collaboration, leadership, and global awareness, which they describe as 'intercultural empathy'. The final cluster are competencies that reside within the individual. These include having a 'growth mindset'; learning how to learn, that is, a student's ability to determine how to approach a problem or task, monitor his or her own comprehension, and evaluate progress toward completion; and intrinsic motivation (see, also, Mercer et al., 2018). (Following on from the previous discussion, I would move creativity to this category and add resourcefulness.) A student who understands his or her own learning processes is better able to self-motivate, respond to teacher feedback, and develop stronger self-perceptions of academic accomplishment. The final competency Soland et al. identify is 'grit', an ability to stick with a task until it is completed, or to persist with a problem until it is solved.

The centrality of language to 21st century education

None of these competencies can be realized without language. Although, in schemes such as that proposed by Soland et al., language is identified as a cognitive competency along with other knowledge domains, it is fundamental to all competencies. Communication, collaboration, creativity, and critical thinking/reasoning, for example, are not possible without language if we expand our view of language to include non-verbal communication, self-talk, and so on. There is also renewed interest in language for subject teaching. Content and Language Integrated Learning (CLIL) and Content-Based Instruction (CBI) had been around since the 1970s. Current interest, and the development of new perspectives on integrating language and content, has been prompted, at least in part, by a recognition of the centrality of language in an increasingly integrated and globalized world. (See the contributions in the collection edited by Snow & Brinton, 2017.)

Following on from this, I would point out that language differs from the other cognitive competencies in that it has no substantive content. While we can talk about grammatical rules in the abstract (declarative knowledge), in actual use (procedural knowledge), the experiential content has to come from elsewhere: everyday life, for example speculating about the cause of an accident, or some other subjects on the curriculum, such as science, in which students will need to carry out tasks such as describing the steps involved in carrying out an experiment. When we talk or write, it has to be about something. To this extent, language is a sort of parasite.

The ability to communicate effectively in a wide range of personal, educational, and business contexts across a range of cultures is a core competence. The term competence has a long (and contentious) history in linguistics and language education. In his book *Aspects of the Theory of Syntax*, Noam Chomsky (1965) drew a distinction between competence (the implicit linguistic knowledge of the ideal native speaker) and performance (the use of this knowledge to communicate). Chomsky's aim was to develop a theoretical account of the mental mechanisms underlying language. He was not concerned with language learning and teaching, and was quite explicit in stating that his work had nothing to say to language educators. Not surprisingly, those who saw language as a social tool objected to Chomsky's mentalist approach. They argued for the study of language in context, and proposed the notion of 'communicative competence', a term first coined by the sociolinguist Dell Hymes (1966, 1972). Hymes pointed out that Chomsky's linguistic competence was only part of the broader 'communicative competence'. The concept of communicative competence was further developed by Canale and Swain (1980) and Canale (1983) who identified four key elements of communicative competence. These were linguistic, discourse, strategic, and sociolinguistic. Since then, there have been many developments and debates about the concept and the relationships between communicative competence, communicative performance, linguistic proficiency, and so on. (See, for example, Bachman, 1990; Bachman and Palmer, 1996.)

At the same time, the British linguist Michael Halliday was developing his own model of language as communication. Through this model, he sought to make explicit the systematic relationships between linguistic form and communicative function, and his model came to be known as systemic-functional linguistics. The statement, '*Language is what language does*' (language is the way it is because of what it does), captures the essence of his approach (Halliday, 1973, 1978, 1985).

A seismic shift in the language teaching landscape

The expanded view of language had implications for language teaching. If the ability to communicate competently in a second or foreign language requires more than linguistic competence, that is knowledge of grammar, vocabulary, and pronunciation, these other aspects have also to be at the heart of teaching and learning. Language educators had to address the question of what it is that learners need to be able to do functionally in a second language. In fact, one of the earliest

textbook series to embrace this new view of language was called *Functions of English* (Jones, 1977). Initial attempts at designing communicative courses and materials were rather crude. In fact, they didn't look so different from the courses they replaced. Units of work were given functional rather than grammatical labels, so a unit entitled *The simple past* might be relabelled *Describing what you did on your vacation*. However, for a time, the exercises and drills remained much the same as those that underpinned audiolingualism.

The so-called 'communicative revolution' created challenges at all levels of the curriculum from syllabus design (selecting and sequencing content) to methodology (selecting and sequencing learning experiences) to assessment (determining what learners are able to do during and at the end of a course of instruction). It was no longer acceptable to adopt a 'one size fits all' approach to syllabus design. Different learners would have different communicative needs and purposes according to the context and situation in which they were learning. This diversity needed to be reflected in the content of the course. Another problem was that syllabus issues (the *what*) and methodological ones (the *how*) could no longer be so easily separated. Communication was a process. Learning was no longer a matter of mastering a body of content but of acquiring complex, procedural skills. Indirect assessment of content through traditional 'pencil and paper' tests had to be replaced by direct measures of students' spoken and written communication skills. This shift in focus from content to process preceded a similar shift by the 21st century movement by about 25 years (although it lagged by a decade Bruner's call for such a shift).

These challenges led to a flurry of activity on the part of applied linguists along with debates between traditionalists who wanted to maintain the status quo, and those advocating change. In his book on language syllabus design, David Wilkins argued that despite their seeming differences, various syllabus options could be divided into two categories: synthetic syllabuses and analytic syllabuses. A synthetic syllabus consists of the individual linguistic elements (sounds, words, and grammar) that make up the language. These are "taught separately and step-by-step so that acquisition is a process of gradual accumulation of parts until the whole structure of language has been built up" (Wilkins, 1976, p. 2). Despite major differences in their assumptions about the nature of language and learning, the grammar-translation and audiolingual methods are both synthetic. In contrast, analytic syllabuses are organized around concepts that are non-linguistic in nature. Content-based, task-based, project-based, and text-based syllabuses are all analytic in nature (Snow & Brinton, 2017).

The seismic shift in my own professional development occurred at about this time. It was stimulated by my years as a graduate student and teacher in the UK: the scholars I read, the mentoring and guidance from teachers such as Richard Pring, and encounters with extraordinary people such as Bruner. The vignette rounding out this section describes one experience that shifted my own language teaching landscape.

In the 1970s, I left university in the UK with postgraduate degrees in English language teaching, and curriculum studies, a depleted bank account, and a brain buzzing with all I'd learned during my years of study. Itching to return to the classroom, I applied for a number of summer school positions. After several rejections, I received an offer from Bowthorpe Hall in Norwich, a school run by the Bell Educational Trust. I accepted immediately. The Trust was known for the professionalism of its teachers and its tolerance for progressive ideas. When I arrived at the school, I learned that there was no set curriculum. I was at liberty to structure my course in any way I wished. All that the school required was a title and a brief course description. Students would be guided by these when selecting courses from the range on offer. That afternoon, I looked through the student files. Most were Europeans aged from 18 to 26, and the majority were studying a diversity of subjects in a range of institutions. Not surprisingly, a good many expressed interests in language, literature, cultural, and media studies.

The library, containing reference books, class sets of coursebooks, and a range of other resources, occupied a corner of the teachers' common room. It was here that I found the inspiration for my

course – a class set of Edward Albee’s play, *Who’s Afraid of Virginia Woolf?* That became the title of the course. When Dave Allan, principal of Bowthorpe, saw the title and course description he was intrigued and sought me out in the teachers’ room.

I explained the details of the proposed course. We would explore in depth all dramatic, literary, and linguistic aspects of the play. We would watch the film starring Richard Burton and Elizabeth Taylor, and on one weekend we would travel to London to see the stage version. During the course, the students would select a key scene from the play and turn it into a self-contained mini-play which they would perform at the end of the course for anyone who wanted to come along.

Planning the course in this way had been stimulated by my desire to try out ideas related to communicative language teaching and analytic syllabus design. A decade later, as I began writing about task-based language teaching (TBLT), project-based language teaching (PBLT) and learner-centeredness, I remembered this course, which the students had loved, having arrived at the school expecting more of the same traditional language instruction they had experienced in their home schools and universities. I realized the course had all the basic principles of TBLT and PBLT. TBLT developed in the 1980s as a set of procedures for realizing the principles of communicative language teaching in the classroom. It is classified as analytic because the syllabus is organized around tasks based on student needs, not on an inventory of grammar items. Two book-length treatments on TBLT appeared in the late 1980s: an edited collection by Candlin and Murphy (1987), and a single authored monograph by me (Nunan, 1989). In that book, and a substantially revised second edition (Nunan, 2004), I pointed out that TBLT was not a single method, but a family of approaches sharing several key principles. Tasks focus students on exchanging meaning rather than manipulating grammatical forms. As part of a teaching cycle, there are opportunities for students to focus on form, but this is in the service of achieving task outcomes. The approach makes explicit for students the nexus between grammatical form and communicative function in ways that decontextualized grammar pattern drills do not. In completing tasks, students resourcefully generate their own language rather than regurgitating models provided by the teacher or a textbook. In keeping with language use outside the classroom, the outcome will be something that goes beyond language itself: information about the departure time of a flight, a cup of coffee, the acceptance of a dinner date and so on. Importantly, in-class tasks will have a principled relationship to target or real-world tasks.

Projects can be thought of as ‘super-tasks’. They contain similar characteristics as tasks but will be larger in scope. The *Who’s Afraid of Virginia Woolf?* project took about 45 hours to complete and culminated in the performance of a mini-play. In working toward the project outcome, students engaged in many tasks, such as collaboratively writing a plot summary. These had outcomes in their own right but were undertaken in the service of the larger outcome. The advantage of a project-based approach is that it has a greater coherence than one constructed around a sequence of discrete tasks. Both task- and project-based learning are also ideal for fostering the development of 21st century competencies, particularly communication, collaboration, creativity, and the development of learner autonomy. (For greater elaboration, see Mercer & Dornyei, 2020; Nunan, 2017.)

The future of the profession

In 2017, the TESOL International Association held a summit on the Future of the TESOL profession in Athens, Greece. Guided by a steering committee chaired by past TESOL President Denise Murray, and a reference panel, the Summit was two years in the planning. I was fortunate to be invited to serve on the committee, which included a diverse international membership.

The initiative was unique. In order to obtain views, perspectives, and experiences from the field, discussion groups were established on a Summit website based on the themes of Futurology, English in Multilingualism, Reimagining English Competence, and the Profession as a Change Agent. Each of these was to be explored through three guiding principles: Inquiry, Equity, and Professionalism.

By inquiry, we meant that TESOL practice and policy should be inquiry-based, with practice informing research as well as research informing practice and policy. Further, inquiry should include voices from a range of stakeholders. Through equity, we expressed the belief that English is an additional language and should not supplant the home language(s). We noted that TESOL occurs in many different contexts around the world with varying practices, cultures, and access to resources. Quality instruction was not available to disadvantaged groups in many parts of the world and this was an issue that the steering committee wanted the Summit to address. Professionalism was the third guiding principle. Professional development should promote sustainable, continuous, collaborative, and coherent activities and focus on positive change and innovation rather than academic outputs. We then identified speakers to fill the twelve speaking slots, each exploring one of the themes through one of the guiding principles. Speakers represented different TESOL communities around the world. The following matrix sets out the speakers and their assigned areas.

	<i>Inquiry</i>	<i>Equity</i>	<i>Professionalism</i>
Futurology	Sue Garton	Asmaa Abu Mezied	Greg Kessler
English in multilingualism	Li Wei	Joe Lo Bianco	Robinah Kyeyune
Reimagining English competence	Anne Katz	Giselle Lundy-Ponce	Ahmar Mahboob
The profession as a change agent	Constant Leung	Franklin Tellez	Misty Adonou

The initial task for each speaker was to post questions on the website to stimulate discussion and debate in the months leading up to the Summit and to engage with online participants in the ensuing discussions. Following the Summit, they were tasked with producing a 1,500-word position paper on their chosen area, which was informed by the Summit discussions, as well as their understanding of current knowledge. These papers, along with weblinks, are included in the reference list at the end of the chapter.

The Summit format was organized around twelve discussion sessions corresponding to the twelve slots in the matrix. Each session was initiated by a fifteen-minute presentation by one of the speakers followed by round-table discussions of questions posed by the speakers during their presentations. As far as possible, each of the discussion tables contained a cross-section of stakeholders who attended the Summit. These included policy makers, professional organizations, teacher educators, materials and assessment writers, publishers, administrators, teachers, and researchers. At the end of each discussion period, there was a plenary session in which a rapporteur summarized the main points raised at their table. The entire Summit was webcast live and, following the event, made available on the TESOL website.

The web discussions, presentations, and round-tables yielded an enormous amount of data, which was subsequently summarized and synthesized by the steering committee and used as a basis for the publication of an Action Agenda. The Agenda (TESOL, 2017) identified five priority areas. Each of these included a rationale and a list of recommendations for action to be undertaken by stakeholders as well as the broader TESOL community. In the rest of this section, I will summarize each of the priority areas.

Priority 1: Strengthen the status and visibility of the profession

There has been an explosion in the demand for English as an additional language programs in diverse contexts around the world. Along with this has been an increasing professionalization of TESOL through teacher preparation programs at pre- and post-graduate levels, career-long professional

development opportunities provided by associations such as TESOL and IATEFL, and the emergence of a robust applied research agenda. Despite these initiatives, a consistent message on the online discussion boards as well as at the Summit itself was the fact that TESOL, as a profession, is consistently undervalued, if not completely ignored, by policy makers, politicians, and some private sector interests who see English language as a commodity to be sold rather than as a resource for global communication. Perpetuation of the myth that native-speaker status is all that is required to teach a language subverts the efforts of language educators to advance the cause of TESOL as a profession. The Action Agenda calls for TESOL professionals to claim and promote their expertise through steps such as disseminating TESOL professional knowledge and resources to stakeholders who influence the profession and increasing the visibility of the profession through social media.

Priority 2: Redesign English language education programs to foster global engagement

Another issue that generated considerable discussion and debate at the Summit was the use of the learners' first language in learning a second and subsequent languages. The English-only movement has become deeply entrenched over many years for political and ideological reasons. A persistent argument is that in many contexts the language classroom is the only place in which learners have an opportunity to practice their English and, with the use of the L1, this opportunity is diminished. Although, with an increasingly interconnected world and the ubiquity of technology, this objection has lost much of its potency (Choi, 2017; Choi & Ollerhead, 2018; Li, 2017).

A growing body of research has challenged this 'monolingual mindset'. In his article on myths about early childhood bilingualism, Genesee (2015), argues that second language learners' most valuable resource is their first language. Fielding and Harbon (2020) point out that there is no empirical support for the monolingual position. In their own research, they found that primary (elementary) students in bilingual programs outperform peers in monolingual programs on standardized tests of literacy and numeracy. Multilingual teaching strategies enable students to activate the prior knowledge and experiences they have acquired through their home language (Cummins et al., 2005). A similar outcome is reported in (Kirsch, 2018). Helping young (4–7-year-old) children develop their multilingual repertoires facilitates the development of 21st century competencies such as communication skills and knowledge construction. In his contribution to the Summit, Li Wei called for the development of instructional decisions and practices informed by a multilingual mindset. He urges teachers to remember that the goal is "not trying to replace the learners' L1 and make them into another monolingual. We are developing more bilinguals with the flexibility that multilingualism gives them" (Li, 2017, p. 3). (See also recent empirical studies showing the advantages of students' fluid use of languages in academic learning settings: Choi & Liu, 2021; Herrera, 2017; Preece, 2020; Wu & Lin, 2019).

Priority 3: Mobilize leaders to confront and embrace the challenges and complexities of English language education

English language teaching and learning can no longer be seen as an activity isolated from content and context. As indicated earlier in the chapter, it (and, indeed, any additional language) is well-placed to develop key 21st century competencies. While communication is the obvious example, others include interpersonal collaboration, cultural awareness, intrapersonal autonomy, learning skills, and creativity. Other candidates could include critical thinking, multiliteracy, and digital literacies (Christison & Murray, 2020). Bringing together the notion of 'wellbeing' (which they see as a central aim of education) and language education, Mercer et al. (2018) argue for a broader role for languages within educational systems, pointing out that "... language education specifically is an ideal context with which to develop wellbeing competence... language education typically aims for more

than narrowly defined linguistic competence and it often involves many aspects of the individual” (Mercer et al., 2018, p. 21).

Significant advantages accrue to those who are competent in English and other languages used for international communication. However, access to quality language education, indeed *any* education, is not available to all. Conflicts around the world have destroyed the hopes of education for over 100 million children (Abu Mezied, 2017). Figures indicate that in the world’s poorest countries literacy rates hover at around 30%, and significantly lower than that for women (UNESCO, 2015). The Action Agenda argues that TESOL professionals, working either in their home countries or abroad, are well-placed to address the issues of social justice, equity, and human diversity that affect their learners’ access to high-quality English language education. Teachers and teacher educators should be provided with “appropriate, affordable, and ongoing opportunities for lifelong professional learning” so they have the skills and knowledge to act as change agents, and advocates for their students (TESOL, 2017, p. 15).

Several speakers who work in under-resourced contexts shared the strategies they have developed to act as advocates and effect change. For example, Franklin Tellez described his efforts to change policy makers’ perceptions that the role of language teachers is to stand in front of the class and instruct their learners to “listen and repeat”:

Public and private institutions involved in Education believe that our role is only teaching English. As TESOL professionals we have let them understand through our leadership, and professionalism that we go beyond the traditional “repeat after me teaching”, [to] be agents of change in the classrooms, in the communities and in our countries.

(Tellez, 2017, p. 2)

Priority 4: Expand capacity for inclusive and comprehensive research

The rationale for this priority is “practice and policy must be research based, meaning that research should inform practice and policy as much as policy and practice should inform research.” The Action Agenda argues that the findings of robust research, “especially when those findings offer conclusive answers to relevant questions be widely disseminated to all sectors of the TESOL community” (TESOL, 2017, pp. 7–8). Two such findings have been dealt with earlier: one relating to the value of the L1 to L2 acquisition, and the other relating to teachers having appropriate qualifications and pedagogical skills, not when or how they learned English.

The Action Agenda points out that much research deals with questions that are of interest to academics but doesn’t provide solutions to pressing teaching problems. It argues that we need collaborative, action-based research in which practitioners are partners in, rather than recipients of, research. Also noted are that many teacher education courses are superficial and based on linguistic models that are 200 years out of date (Mahboob, 2017). As a consequence, many graduates go into the workforce with an inadequate knowledge of the fundamentals of language and how to teach it.

Priority 5: Cultivate a culture of innovation that is responsive to global trends

The Summit identified six megatrends that made innovation and change imperative. There are few surprises in the trends: a massive shift of populations from rural to urban areas; the technology and science-driven knowledge explosion; increasing inequity due to uneven economic development; political tension driven by nationalism versus globalization; climate change; and forced migration due to political conflict. As we saw earlier in the chapter, these trends have increased demands by governments and business for an English proficient workforce. Individuals see English proficiency

as the key to personal, professional, and economic advancement. However, as we have also seen, access to quality English education is not equitably distributed. The Summit called on stakeholders such as professional associations, teacher education institutions, binational centers, nongovernmental organizations, and publishers to “act with foresight when change is expected, create accountability measures for their actions, use the appropriate media to educate interested parties, and share success stories and challenges through effective channels” (TESOL, 2017, p. 20).

Is language teaching a profession?

In 2001, as I was coming to the end of my four-year term in the TESOL presidential line, I published an article entitled “Is language teaching a profession?” Drawing on work carried out by the TESOL Board of Directors at the time, I proposed four criteria for answering the question:

- the existence of advanced education and training
- the establishment of standards of practice and certification
- an agreed theoretical and empirical base, and
- the work of individuals within the field to act as advocates for the profession.

I concluded my article with the following statement:

Is TESOL a profession? The answer to this question is: It depends on where you look! It is possible to find language teaching institutions in different parts of the world which fit none of the criteria set out in this paper. However, it is also possible to find institutions and associations that are actively committed to advancing education and training, to developing standards and certification, to supporting the development of theory and research so that a disciplinary base can be established, and working as advocates to influence broader communities in ways that are positive for second language learners.

(Nunan, 2001, p. 8)

In this section, I revisit the question in the light of developments that have occurred in the two decades since I wrote the paper. (Occasionally I will slip back to earlier decades.)

Advanced education and training

The 1960s saw the birth of two associations which were to play a significant role in the professionalization of the teaching and learning of English as an additional language. The International Association of Teachers of English as a Foreign Language (IATEFL) was founded in the UK, while TESOL International was established in the United States. Each association has an annual conference with a variety of professional development events including plenaries, colloquia, workshops, and other types of parallel sessions. Professional activities at the conference and throughout the year are facilitated by elected committees, known as Special Interest Groups (SIGs) in IATEFL and as Interest Sections (ISs) in TESOL. These include professional meetings and more localized conferences, often jointly planned with local affiliates. Other professional growth opportunities are provided by publications of various kinds, from newsletters and journals to books and applied research reports. Despite criticisms of elitism, cultural imperialism, and the cost of membership/conference attendance, both associations have had a significant, positive impact promoting a sense of professional identity, mentoring new teachers, and providing opportunities for career-long professional development, a point that was endorsed by the Action Agenda.

Advanced education and training refers to comprehensive university programs at undergraduate and postgraduate levels (TESOL, 2017, p. 7). In the 1970s, such programs in English language education were not widely available. In Australia, despite its large immigration and refugee program, there were none. I had to travel abroad to get the language teaching education I needed. These days, a wide variety of programs is available in a range of modes: part-time, full-time, face-to-face, online, and blended. The Internet provides advanced education and training opportunities for language educators working in parts of the world where postgraduate programs are not readily available. This is particularly true of under-resourced contexts.

Standards of practice and certification

The development and promotion of standards of practice and certification/accreditation is the second criterion for defining a profession. Standards of practice and certification go together. Without the imprimatur of a body (usually a governmental or educational bureaucracy) which has the legislative authority to certify them, standards have no ‘teeth’. Professional associations have a leading role to play in the development of standards, in liaising with certifying bodies, and in the training and appointment of accreditors. In the 1990s and 2000s, significant progress was made in the language education field thanks to the initiatives of professional associations. For example, TESOL International established working groups to develop standards in key areas. For example, for different learner groups: *Pre-K-12 English Language Proficiency Standards*; for teachers: *Standards for ESL/EFL Teachers of Adults*; and for programs: *Standards for Adult Education ESL Programs*. For more detail on the nature of standards, see the paper I referred to earlier (Nunan, 2007).

TESOL was also instrumental in establishing a commission for the accreditation of English Language Programs (CEA). This happened in 1999 following a recommendation of a Board of Directors task force. TESOL provided operational and financial support to get the Commission started. Four years later, it was recognized by the U.S. Secretary of State as the national accrediting agency for English language programs and institutions.

An agreed theoretical and empirical base

Over 20 years ago, Donald Freeman argued that, in contrast with other professions, teaching does not constitute a discipline because it doesn’t have a commonly agreed on set of research procedures or ‘rules of the game’ for creating and testing knowledge. He added that: “Teachers are seen – and principally see themselves – as consumers rather than producers of knowledge. Other people write curricula, develop teaching methodologies, create published materials, and make policies and procedures about education that teachers are called upon to implement” (Freeman, 1998, p. 10).

I would argue that diversity of approach and debate on appropriate research procedures is healthy. Lack of involvement by teachers in research is more of a concern. As I mentioned earlier in the chapter, if teachers are not involved as collaborators rather than consumers of research, the disconnect between research and practice will persist. This is not to say that all research conducted by academics is irrelevant, nor that research should be mandatory for all teachers. Many lack the time to add research to their busy schedules. Others say they lack the expertise. Collaborative engagement and mentoring between teachers, teacher educators, and researchers can help build research skills (Barkhuizen, 2019; Xerri, 2019; Nunan et al., 2019). The International Research Foundation for English Language Education (TIRF) also provides a wealth of resources on their website for those interested in teacher research (www.tirfonline.org).

Advocacy

The final criterion for determining professionalism is advocacy. This area is controversial. There are some who argue that advocating for our profession is inappropriate for professional associations as it represents political activism and (probably more to the point) that it might threaten their not-for-profit status. I find this a little odd. Everything has a political dimension. Even the decision not to advocate for teachers, our students, and the profession in general, is political! It is also not true for associations in other professions. Medical Associations in many countries are formidable advocates for their profession and their leaders are regularly invited by the media to present their case for a particular cause. This happens much less often when it comes to education. As Misty Adoniou (2017) points out, politicians don't listen to teachers, but they listen to parents because parents vote. One of her strategies for influencing politicians and policy makers is to work through parent and teacher associations.

The Action Agenda provides a rationale along with strategies through which TESOL professionals who work with immigrants and refugees can advocate for social justice and equity for their students, as well as achieving greater visibility for the profession. I refer you to the Action Agenda, and well as position papers by the Summit speakers, for more detailed examples of these strategies.

Based on the four criteria I have proposed, there is enough evidence to support the proposition that TESOL is a profession, if not an academic discipline. That said, there is much to be done. Significant progress has been made in developing standards of practice and certification in some contexts but not in others. We need to continue efforts to foster collaborative research initiatives between teachers and academics. While progress has been made in advocacy, we continue to face challenges in making our voices heard. As I write this chapter, planning is underway for staging a summit on advocating for the profession.

As indicated earlier in the section, there has been an explosion in the number, variety, and quality of university programs since I started teaching. In many contexts, a master's degree is becoming a prerequisite for entry to the profession.

That said, I want to raise a concern in the provision of postgraduate language education programs. At the risk of being accused of overgeneralizing, there are too many newly minted graduate teachers entering the profession with an inadequate knowledge of language (Mahboob, 2017). Universities themselves are only partly to blame. The root of the problem lies in the failure of school systems to provide all students with a systematic introduction to English language. (Obviously, my comments are confined mainly to school systems in Anglophone countries in which English is the medium of instruction.) I'm not arguing for a return to transmission teaching accompanied by the dreary, decontextualized parsing and analysis exercises to which I was subjected as a schoolboy – although through such exercises, I did develop a thorough understanding of the structure of English, along with the metalanguage to talk about it. When my teacher pointed out that a particular sentence in an essay lacked a finite verb, I knew what she was talking about, where the problem lay, and how to fix it. A detailed, contextualized introduction to the fundamentals of language underpinned by a functional model of grammar can be taught through the scaffolded, inductive procedures promoted by Bruner all those years ago. As he said, through such procedures, even relatively young learners can be led to form powerful generalizations in core subjects such as language, mathematics, and science. The problem is that the type of language course I have in mind is no longer seen as core (Nunan, 2013b).

As a consequence of failure at the school level, many students are admitted to postgraduate TESOL programs lacking the procedural and declarative language knowledge required to be an effective language teacher. This knowledge cannot be acquired in a couple of 30-hour graduate courses, where they will be jostling with a plethora of other courses. It's highly unlikely that school systems will address inadequacies in English language study any time soon. Universities will have

to deal with the problem themselves – assuming they accept there is a problem. One option would be to set prerequisites, as is the case with teacher preparation programs for other subjects. However, often, when prerequisites are set, they are wholly inadequate. The prerequisite at one prestigious university is a single unit of foreign language study. Whatever the merits of a semester's study of Japanese or German, they do not include the detailed knowledge of English required to be an effective teacher of the subject.

Prerequisites for students preparing to teach mathematics, science, and other courses usually include having an undergraduate major in the subject in question (which, in turn, implies having studied the subject throughout high school). In the case of English, the assumption appears to be that if you can speak the language, you can teach it, an assumption that I challenged earlier in the chapter.

In English-speaking countries, I sometimes encounter the objection that, “I don't plan to become an English language teacher, so why should I have to study the subject in school?” My response reflects the orientation I have taken in this chapter. Our responsibility as educators is to equip our students with the knowledge, competencies, and dispositions to deal with an unknown future. One of the core competencies listed by Soland et al. is mastery of core academic content. They name mathematics, science, language, foreign languages, history, and geography. (There are others of course, such as music, visual arts, and religion.) These represent ways of knowing the world, and an educated person will have at least a basic grounding in a range of them. As they progress through the education system, students will have an aptitude and affinity for some subjects, and not others, they will pursue those for which they have an aptitude throughout their schooling and (usually) into university, while dropping others. My argument here takes me back to Peters, Pring, and others who argued the case for ‘knowledge for its own sake’, a case that is derided by utilitarians: politicians, policy makers, and many engaged in the education ‘industry’. But not by all. I end this section with a quote by Debra Myhill who argues for the value of studying the structure of one's language for its own sake. In the unknown future to which Ken Robinson alerted us, for those who find themselves embracing language teaching as a career, it will not only be *valuable*, but also *useful*.

Curiously, the contested history of grammar teaching has been preoccupied with whether learning grammar improves learners' attainments in reading and writing, but there has been no serious consideration of the value of grammatical knowledge in its own right. Yet, in every jurisdiction, the school curriculum determines what bodies of knowledge are valued and, in most cases, this is not simply on utilitarian grounds, but on a cultural judgement about what constitutes a broad and balanced education. Knowing the periodic table or the history of medieval England are unlikely to be *useful* knowledge to most adults, yet they may well be *valuable* knowledge. Grammatical knowledge of the structure of your own language could very plausibly be argued as equally valuable knowledge.

(Myhill, 2016, pp. 38–39)

Conclusion

In keeping with the intended audience for this edition of the Handbook, I have attempted to provide an account of the changing landscape of second language teaching and learning that is reader-friendly and accessible without glossing over the complexities of language education. Themes addressed in the chapter include the purposes and political nature of education; conceptions of language, knowledge, and learning; the paradox of equipping young learners for an unknown future; and the notion of language teaching as a profession. We have seen that while landscapes change, they change slowly, interrupted by occasional seismic shifts. This is true of the themes in the terrain I have traversed. Each is contested, on one side by those pointing to the imperative for innovation

and change, and on the other, by those who argue for the preservation of traditions that have served us well in the past.

The account is a personal one, reflecting my 50 years as a teacher, teacher educator, researcher, curriculum developer, and author. It is populated by the people who have influenced my thinking and professional development, either in person or through their writing. It also reflects the widely varied contexts in which I have been privileged to live, teach, and learn.

These days, I hold advisory and consulting positions at universities in several countries. I also get to evaluate graduate programs and examine doctoral theses. Prior to travel restrictions imposed by the Covid-19 pandemic, I had the opportunity to meet many graduate students. With few exceptions, their passion for teaching, interest in applied research, and desire for ongoing professional development augur well for the future of the profession. However, on graduating and entering the workforce, they find a very different professional world from the one they anticipated. Non-teaching time is consumed, not by professional work such as lesson planning and student consultations, but administrative chores: form-filling, producing reports of dubious relevance, and attending meetings at which inconsequential issues are debated at length. Worse, they embark on their career brimming with enthusiasm, only to have it blunted. One young teacher said to me, “I approached my department head with an idea based on the capstone project I completed at the end of my degree. I was told to forget about all that rubbish I was taught at university.” “I was told exactly the same thing,” I replied. “And that was 50 years ago.”

There are steps that early-career teachers can take to counteract this dismissiveness. Not all senior teachers are cynical and jaded. If you have embarked, or are about to embark, on your teaching career, seek out a mentor, who might be a more experienced colleague or a former university teacher. Mentorships can be critical in helping new teachers survive the first year or two of teaching. Joining a local teachers’ association and becoming involved in activities such as attending conferences and writing for newsletters is another. Sign up for online seminars and symposia offered by international associations. IATEFL, for example, has an outstanding webinar program. Join an online action learning or action research network and take advantage of the research skills you developed during your studies.

These are just a few of the steps you can take to make the notion of career-long professional development a reality and to contribute to your personal and professional wellbeing (Mercer, 2021). They will help to counteract burnout, and the cynicism of others, and through them, you can become part of the global community of TESOL professionals.

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Bibliography

- Abu Mezied, A. (2017). *Futurology—Equity and access to education*. www.tesol.org/docs/default-source/advocacy/asmaa-abu-mezied.pdf?sfvrsn=0
- Ackoff, R. & Greenberg, D. (2008). *Turning learning right side up: Putting Education back on Track*. Prentice Hall. <https://knowledge.wharton.upenn.edu/article/the-objective-of-education-is-learning-not-teaching/>
- Adoniou, M. (2017). *Professionalism and the profession as change agent*. www.tesol.org/docs/default-source/advocacy/misty-adoniou.pdf?sfvrsn=0

- Bachman, L. (1990). *Fundamental consideration in language testing*. Oxford University Press.
- Bachman, L. & Palmer, A. (1996). *Language testing in practice*. Oxford University Press.
- Barkhuizen, G. (2019). (Ed.). *Qualitative research topics in language teacher education*. Routledge.
- Bruner, J. (1966). *Toward a theory of instruction*. Harvard University Press.
- Bruner, J. (2006). *In search of pedagogy. Volume II. The Selected Works of Jerome S. Bruner*. World Library of Educationalists Series. Routledge.
- Canale, M. (1983). From communicative competence to communicative language pedagogy. In J. C. Richards & R. Smith (Eds.), *Language and communication* (pp. 2–14). Routledge.
- Canale, M. & Swain, M. (1980) Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1–41.
- Candlin, C. & Murphy, D. (1987). (Eds.) *Language learning tasks*. Prentice-Hall.
- Choi, J. (2017). *Creating a multivocal self: Autoethnography as method*. Routledge.
- Choi, J. & Liu, K. (2021). Knowledge building through collaborative, translation and translanguaging practices. *Journal of Language, Identity & Education*, 1–16.
- Choi, J. & Ollerhead, S. (2018). (Eds.) *Plurilingualism in teaching and learning: Complexities across cultures*. Routledge.
- Chomsky, N. (1965). *Aspects of the theory of syntax*. MIT Press.
- Christian, D. & Bailey, K. (2021). Introduction. In D. Christian & K. Bailey (Eds.) *Research on teaching and learning English in under-resourced contexts* (pp. 1–13). Routledge.
- Christison, M. A. & Murray, D. E. (2020) An overview of multilingual learners' literacy needs in the 21st century. In G. Neokleous, A. Krulatz, & R. Farrell (Eds.), *A handbook of research on cultivating literacy in diverse and multilingual classrooms* (pp. 1–21). IGL Publishing.
- Coleman, H. (2018). An almost invisible “difficult circumstance”: The large class. In H. Kuchar & R. Smith (Eds.), *International perspectives on teaching English in difficult circumstances* (pp. 29–48). Palgrave Macmillan.
- Cope, B. & Kalantzis, M. (2015). (Eds.) *A pedagogy of multiliteracies: learning*. Palgrave.
- Cummins, J., Bismilla, V., Cohen, S., Giampapa, F., & Leoni, L. (2005). Timelines and lifelines: Rethinking literacy instruction in multilingual classrooms. *Orbit*, 36(1), 22–26.
- Curtis, A. (2015). (Ed.) *ELT in context*. TESOL Press.
- Curtis, A. (2021). What do we mean by under-resourced context? In D. Christian & K. Bailey (Eds.), *Research on teaching and learning English in under-resourced contexts* (pp. 14–28). Routledge.
- Dearden, R., Hirst, P. H., & Peters, R. S. (Eds.) (1972). *Education and the development of reason*. Routledge & Kegan Paul.
- Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. Macmillan.
- Eisner, E. (1967). Educational objectives: Help or hindrance? *The School Review*, 75 (Autumn, 1967), 250–260.
- Fielding, R. & Harbon, L. (2020). Dispelling the monolingual myth: Exploring literacy outcomes in Australian aboriginal programmes. *International Journal of Bilingual Education and Bilingualism*. doi.org/10.1080/13670050.2020.1734531
- Freeman, D. (1998). *Doing teacher-research: From inquiry to understanding*. Heinle & Heinle/Thomson Learning.
- Garcia, E. & Freede, E. (Eds.) (2010). *Young English language learners*. Teachers College Press.
- Garton, S. (2017). *Futurology through the lens of inquiry*. www.tesol.org/docs/default-source/advocacy/1-sue_final.pdf?sfvrsn=0
- Genesee, F. (2015). Myths about early childhood bilingualism. *Canadian Psychology*, 56(1), 6–15.
- Gibbons, P. (2014). *Scaffolding language, scaffolding learning*. Heinemann.
- Goldschneider, J. & DeKeyser, R. (2001). Explaining the “Natural Order of L2 Morpheme Acquisition” in English: A meta-analysis of multiple determinants. *Language Learning*, 51(1), 1–50.
- Halliday, M. A. K. (1973). *Explorations in the functions of language*. Arnold.
- Halliday, M. A. K. (1978). *Language as social semiotic*. Arnold.
- Halliday, M. A. K. (1985). *An introduction to functional grammar*. Arnold.
- Herrera, L. Y. (2017). *Translanguaging practices for educational equity: Moments in a bilingual middle school classroom*. [Doctoral dissertation, City University of New York]. https://academicworks.cuny.edu/gc_etds/2125
- Hymes, D. (1966). Two types of linguistic relativity. In W. Bright (Ed.), *Sociolinguistics* (pp. 114–158). The Hague: Mouton.
- Hymes, D. (1971). On linguistic theory, communicative competence, and the education of disadvantaged children. In M. L. Wax, S. A. Diamond, & F. Gearing (Eds.), *Anthropological perspectives on education* (pp. 51–66). Basic Books.
- Hymes, D. (1972). On communicative competence. In J. B. Pride and J. Holmes (Eds.), *Sociolinguistics. Selected readings* (pp. 269–293). Penguin.
- Jenkins, J. (2014). *Global Englishes*. Taylor & Francis.
- Jones, L. (1977). *Functions of English*. Cambridge University Press.

- Jones, R. (2020). Creativity in language learning and teaching: Translingual practices and transcultural identities. *Applied Linguistics Review*, 11(4), 535–550.
- Kachru, B. (1990). World Englishes and applied linguistics. *World Englishes*, 8(1), 3–20.
- Kalantzis, M. & Cope, B. (2012). *New learning: Elements of a science of education* (2nd ed.) Cambridge University Press.
- Katz, A. (2017). *Reimagining English competence*. www.tesol.org/docs/default-source/advocacy/anne-katz.pdf?sfvrsn=0
- Kessler, G. (2017). *Summary report*. www.tesol.org/docs/default-source/advocacy/greg-kessler.pdf?sfvrsn=0
- Kirsch, C. (2018). Young children capitalising on their entire language repertoire for language learning at school. *Language, Culture and Curriculum*, 31(1), 39–55. doi/abs/10.1080/07908318.2017.1304954
- Kuchar, H. & Smith, R. (Eds.) (2018). *International perspectives on teaching English in difficult circumstances*. Palgrave Macmillan.
- Kyeyune, R. (2017). *Using local languages alongside English: Shaping student success*. www.tesol.org/docs/default-source/advocacy/robinah-kyeyune.pdf?sfvrsn=2
- Leung, C. (2017). *The profession as a change agent*. www.tesol.org/docs/default-source/advocacy/constant-leung.pdf?sfvrsn=0
- Li, Wei. (2017). *Translanguaging and the goal of TESOL*. www.tesol.org/docs/default-source/ppt/li-wei.pdf?sfvrsn=0
- Lo Bianco, J. (2017). *Multilingualism in education: Equity and social cohesion: Considerations for TESOL*. www.tesol.org/docs/default-source/advocacy/joseph-lo-bianco.pdf?sfvrsn=0
- Lundy-Ponce, G. (2017). *Reimagining English competence: Pedagogy, equity and the need for fair and unbiased hiring practices*. www.tesol.org/docs/default-source/advocacy/giselle-lundy-ponce.pdf?sfvrsn=0
- Mahboob, A. (2017). *Reimagining language competence: On professionalism*. www.tesol.org/docs/default-source/advocacy/ahmar-mahboob.pdf?sfvrsn=0
- Mercer, S. (2021). An agenda for well-being in ELT: An ecological perspective. *ELT Journal*, 75(1), 14–21. <https://doi.org/10.1093/elt/ccaa062>
- Mercer, S. & Dornyei, Z. (2020). *Engaging language learners in contemporary classroom*. Cambridge University Press.
- Mercer, S., MacIntyre, P., Gregersen, T., & Talbot, K. (2018). Positive language education: Combining positive education and language education. *Theory and Practice of Second Language Acquisition*, 4(2), 11–31. www.journals.us.edu.pl/index.php/TAPSLA/article/view/7011
- Ministry of Education, Singapore (2014). *Framework for 21st century competencies and student outcomes*. Government of Singapore. www.moe.gov.sg/education-in-sg/21st-century-competencies
- Myhill, D. (2016). The effectiveness of explicitly language teaching: Evidence from the research. In M. Giovanelli & D. Clayton (Eds.), *Knowing about Language: Linguistics and the secondary English classroom* (pp. 36–47). Routledge.
- Nunan, D. (1988). *The learner-centred curriculum*. Cambridge University Press.
- Nunan, D. (1989). *Designing tasks for the communicative classroom*. Cambridge University Press.
- Nunan, D. (2001). Is language teaching a profession? *Language in Context*, 11(1), 4–8.
- Nunan, D. (2004). *Task-based language teaching*. Cambridge University Press.
- Nunan, D. (2007). Standards-based approaches to the evaluation of ESL instruction. In J. Cummins & C. Davison (Eds.), *International handbook of English language teaching* (pp. 421–438). Springer.
- Nunan, D. (2013a). *Learner-centered English language education: The selected works of David Nunan*. World Library of Educationalists. Routledge.
- Nunan, D. (2013b). *What is this thing called language?* Second edition. Palgrave Macmillan.
- Nunan, D. (2017). The integrated syllabus: Content, tasks, and projects. In M. A. Snow & D. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 124–136). University of Michigan Press.
- Nunan, D., Black, H., & Choi, J. (2019). Teacher empowerment through action research. *Fine Print*, 42(2), 8–13.
- Oance, A. & Bridges, D. (2009). Philosophy of education in the UK: The historical and contemporary tradition. *Oxford Review of Education*, 35(5), 553–568.
- Peters, R. S. (1966). *Ethics and education*. Allen.
- Popham, W. J. (1972). *An evaluation guidebook: A set of practical guidelines for the educational evaluator*. The Instructional Objectives Exchange.
- Preece, S. (2020). Postgraduate students as plurilingual social actors in UK higher education. *Language, Culture and Curriculum*, 33(2), 126–141. <https://doi.org/10.1080/07908318.2019.1676767>
- Pring, R. (2010). What is education for? In B. Little (Ed.), *Radical futures: Politics for the next generation* (pp. 98–102). Middlesex University.

- Robinson, K. (2006). *Do schools kill creativity?* TED Talk February 2006. www.ted.com/talks/sir_ken_robinson_do_schools_kill_creativity
- Snow, M. A. & Brinton, D. (Eds.) (2017). *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 124–136). University of Michigan Press.
- Soland, J., Hamilton, L. S., & Stecher, B. M. (2013). *Measuring 21st century competencies: Guidance for educators*. Rand Corporation.
- Stenhouse, L. (1975). *An introduction to curriculum research and development*. Heinemann.
- Stenhouse, L. (1978). Case study and case research: Towards a comprehensive history of education. *British Journal of Educational Research*, 4(2), 21–39.
- Tellez, F. (2017). *When voices work together, needs are solved and opportunities become dreams*. www.tesol.org/docs/default-source/advocacy/franklin-tellez.pdf?sfvrsn=0
- TESOL. (2017). *Action agenda for the future of the TESOL profession*. TESOL Press.
- Tyler, R. (1949). *Basic principles of curriculum and instruction*. University of Chicago Press.
- UNESCO. (2015) *The world factbook*. www.cia.gov/the-world-factbook/field/literacy/
- Valette, R. & Disick, R. (1972). *Modern language performance objectives and individualization*. Harcourt Brace and Jovanovich.
- West, M. (1960). *Teaching English in difficult circumstances*. Longman.
- White, J. (2010). Why general education? Peters, Hirst and history. *Journal of Philosophy of Education*, 43, Special Issue, 123–141.
- Widdowson, H. G. (1983). *Learning purpose and language use*. Oxford University Press.
- Wilkins, D. (1976). *Notional syllabuses*. Oxford University Press.
- Wu, Y. & Lin, A. M. (2019). Translanguaging and trans-semiotising in a CLIL biology class in Hong Kong: Whole-body sense-making in the flow of knowledge co-making. *Classroom Discourse*, 10(3–4), 252–273. <https://doi.org/10.1080/19463014.2019.1629322>
- Xerri, D. (2019). Researching teacher research. In G. Barkhuizen (Ed.), *Qualitative research topics in language teacher education* (pp. 174–179). Routledge.

Second Language Literacy

Kindergarten to Grade 12

Reginald Arthur D'Silva and Lee Gunderson

Introduction

More individuals learn Second Language Literacy (L2L) than First Language Literacy (L1L) (Gunderson et al., 2020). The language of literacy instruction in elementary and secondary classrooms varies globally because of colonization, jurisdictional policies related to language unification, programs for language revitalization, or the perceived prestige of a language in the world economy. We define the terms literacy, second language, multiliteracies, and second language literacy and propose that variables such as digital and programing code are L2Ls. We conclude with observations about the teaching and learning occurring in K-12 classrooms where students learn L2L and suggest a heuristic to guide L2L literacy instruction.

Defining Literacy

The origin of the word literacy is Latin, meaning “one who knows the letters.” Read, to “understand the meaning of written symbols,” is unique to Old English, while write meant to scratch or draw (Diringer, 1968). Willinsky (1990) notes that “‘literate,’ dates back to the fifteenth century, and was used to describe one who can read and write” (p. 14), the evaluative term “literacy” primarily used to compare rates of literates and illiterates in nation-states was introduced in the late 19th century (Lal, 2010). Leu (1981) proposed that reading involves “production” and/or “comprehension” and we maintain that production without comprehension is often a feature of L2L.

UNESCO extends the definition of literacy to include a “means of identification, understanding, interpretation, creation, and communication in an increasingly digital, text-mediated, information-rich and fast-changing world” (UNESCO, 2019, para 3). Some suggest the term “multiple literacies” (see Cope & Kalantzis, 2000; Lankshear & Knobel, 2003; Street, 2003). The term “multiliteracies” was advocated by the “New London Group” to represent “the multiplicity of communications channels and media” and the “increasing salience of cultural and linguistic diversity” (Cope & Kalantzis, 2000, p. 5). They note that, “[w]hat we might term ‘mere literacy’ remains centred on language only, and usually on a singular national form of language at that, being conceived as a stable system based on rules such as mastering sound-letter correspondence” (p. 5).

Lead pencils, pens of various kinds, typewriters, radio, television, word processors, computers, cellular technologies, the internet, and social networking have all been associated with different, sometimes subtle, changes in the concept of literacy. Watching the Olympics live on television while tweeting with others about what is happening as it happens argues for an expanded view of literacy.

New Literacy Studies (NLS) focuses on the local, everyday experience in particular communities of practice (Barton, 1994; Barton & Hamilton, 1998). Literacy practices vary within areas such as education, religion, workplace, public services, and family and community activities. NLS scholars argue that literacy as a social practice has “profound implications for how we teach reading and writing” as “it varies with social context” (Street, 1997, p. 48). Such developments prompt us to include a discussion of first and second languages, and literacies associated with languages from regions around the world.

Second Language Defined

The term “second language” is used to designate the language of those who speak one language at home (perhaps a mother tongue) and an additional language (or more) outside the home. The term is misrepresentative in many cases. When we refer to L2 it may be the third or fourth language. L2 is used here as a term to represent “not the first language or mother tongue.”

First Languages

Eberhard et al. (2020), editors of *Ethnologue: Languages of the world*, note: “7117 languages are spoken [in the world] today. That number is constantly in flux, because we’re learning more about the world’s languages every day. And beyond that, the languages themselves are in flux. They’re living and dynamic.” Figure 2.1 shows the number of living languages broken down by area as reported by Eberhard et al. (2020).

Many languages have orthographies (Daniels, 1996). Joshi and Aaron (2006) classify them as “morphemic writing (Chinese), syllabic writing (Japanese Kana), alphabetic-syllabic system (Kanada and Tamil), and alphabetic writing (Italian and Spanish)” (p. xiii). They also note that there are different scripts: “The graphic format in which writing is presented” (p. viii). Roman, Arabic, and Indic scripts are used to represent many different languages. A script is often borrowed or adopted to represent a language for various complex reasons. Urdu, for instance, is written in a modified Arabic script in Pakistan and in some cases in Devanagari script in India (R. D’Silva, personal

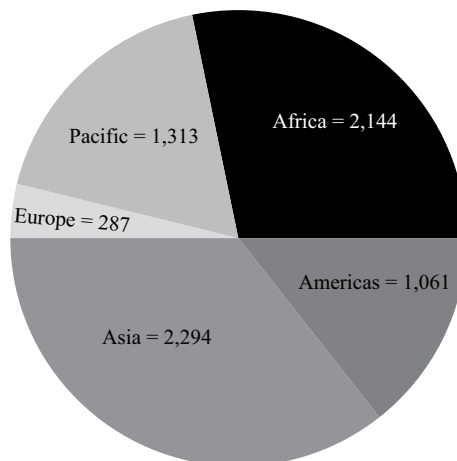


Figure 2.1 Number of living languages broken down by region (Eberhard et al., 2020)

Source: R. D’Silva

communication, January 2022). Many L2s are written in a script different from L1s, and many students learn L2L in scripts different from their L1s.

Second Languages

Eberhard et al. (2020) estimate the number of L2 users to be: Mandarin (198,728,000), English (898,396,120), Hindi (295,266,900), Spanish (74,879,850), Russian (104,326,510), Portuguese (24,236,000), German (56,086,000), and French (199,303,420).

Immigrants and others learn Norwegian, Danish, Swedish, French, German, Italian, Spanish, Portuguese, Arabic, Kurdish, Malay, Japanese, Indonesian, Turkish, Russian, Hebrew, Swahili (Kiswahili), English, Mandarin, and hundreds of other languages as L2s because of migration, economics, technology, and governmental educational policies; some because the language of instruction is related to colonialism, some because of immigration, and some because the L2 is thought to be a world language. Consequently, the diversity and complexity of L2Ls cannot be overstated.

Second Language Literacy

More human beings are involved in L2L than in First Language Literacy (L1L). We know individuals who can decode Greek, Arabic, Korean, and Hindi, but do not understand the discourse. They have learned the sound-symbol relationships and can “read,” that is decode, L2 texts without understanding them. One can learn to decode Korean orthography in an hour or two because it is shallow (Dennis Murphy Odo, personal communication. August 2015). Students can decode L2 because of their knowledge of the phoneme-grapheme correspondences of their L1. They are helped to read an L2 by their knowledge of their L1. There are instances in which learning to decode an L2 is an integral part of a culture such as the Kalaodi in eastern Indonesia who learn to read the Koran, but do not understand Arabic (Baker, 1992).

Chinese: Second Language Literacy

There is one national language (Mandarin) and seven regional languages in China. About 1.085 billion individuals communicate in Putonghua which has 907 million L1, and 178 million L2 users (Eberhard et al., 2020). Putonghua is taught to students in school. It has also been adopted in Singapore as one of the four official languages even though very few speak it. For a large majority in China and in Singapore, Putonghua is a second language. Students in China are taught literacy skills initially including the international-phonetic alphabet (i.p.a.) called Pinyin. Simplified characters are introduced with Pinyin added so that students can “decode” characters. This system is used until about the third grade, with new characters being introduced with Pinyin, but not thereafter (Hudson-Ross & Dong, 1990). In Taiwan, students are introduced to a phonetic transcription system that involves non-Roman syllables called zhùyīnfúhào or bopomofo. Students in Taiwan learn to read standard, classic Chinese characters. While these transliteration systems are effective instructional tools to develop literacy skills initially, teachers are cautioned to not allow learners to be over-reliant on these tools, especially when learning Chinese as a foreign language, as they may impact long-term vocabulary and language development (Mushangwe & Chisoni, 2015).

In Hong Kong, until recently, learning to read Cantonese was by a system that involved drill and rote memorization of classic Chinese characters using a “flash card” approach that begins at about age 3 for many students (Gunderson, 2007, pp. 195–197). The commonly held view is that spoken Chinese is not difficult to learn because it has simple phonological (except tones) and grammatical structures. The most difficult aspect is to learn to recognize and write the calligraphy. Putonghua appears to have been adopted to unify China in terms of language. “One obvious advantage of the

logographic and morphosyllabic nature of Chinese is that the same script can be used in a large population in which people speak different dialects” (Ho et al., 2002, p. 544).

Spanish: Second Language Literacy

Spanish is an L2 in many countries. It is the most widely spoken language, after English, Mandarin-Chinese, and Hindi (Eberhard et al., 2020). Eurocentric language policies that imposed monolingualism during colonial periods leading up to the 20th century contributed to the dominance of Spanish in Latin America (Mar-Molinero, 2000). In Mexico, for instance, the national language is Spanish. López-Gopar states that, “For 500 years, Indigenous people have been discriminated against and manipulated to believe that they need to abandon their language and culture if they want to succeed in Mexican society” (2007, p. 161). In essence, L2L skills are promoted as a key to success in Mexico at the expense of the L1. López-Gopar (2007) states that “[t]he writing systems developed by Aztecs, Mayans, Zapotecs, and Mixtecs are represented in what are generically called codices” (p. 166). Codices involve images, logograms, and phonetic representations. L2L instruction has had a negative effect on many students from different L1 backgrounds in Mexico (López & Gunderson, 2006). Spanish as an L2 has had similar effects on L1s in South and Central America. Pérez (2009) in reference to Peru notes: “Formal education has played a central role in the promotion of a Spanish-only policy” (p. 202). She states that “90% of indigenous pupils still receive education that does not involve their language or culture” (p. 206).

English: Second Language Literacy

English is an official or major language in 112 countries (Lewis et al., 2015). Ethnologue suggests that over 1.2 billion speak English. It is estimated that roughly 369 million of these are first-language speakers of English (Eberhard et al., 2020). With the growing global popularity of English, the British Council forecasts that 2 billion people would be using it worldwide by the 2020s (British Council, 2013). As the “world’s common language” (British Council, 2013), English is spoken in different contexts for a diverse set of purposes making the estimation of the number of speakers a difficult task.

Some continue to capitalize on the global spread of English (British Council, 2013), others argue that its dominance is influencing other languages, like the syntax of Italian, for instance, in irreversible ways suggesting that “every day English spreads, the world becomes a little more homogenous and a little more bland” (Mikanowski, 2018, para 9). Nevertheless, centuries of influence in regions in the Global North, and international trends in a post world war world, have given English a unique status making it a “hyper central language” that is at the nexus of global language systems (De Swaan, 2001, p. 17). English is a major language of books, newspapers, airports and air-traffic control, international business and academic conferences, science, technology, diplomacy, sport, international competitions, pop music and advertising.

The use of English in diverse settings has generated varieties of the language and a range of functions. In recent years, this has given rise to theory and practice around terms such as “World Englishes” (WEs), “English as a Lingua Franca” (ELF), and “English as an International Language (EIL). World Englishes is “the result of [the language’s global] spread [as a result of which] both formally and functionally, English now has multicultural identities. The term ‘English’ does not capture this sociolinguistic reality; the term ‘Englishes’ does” (Kachru, 1992, p. 357). Kachru’s (1985) *World Englishes* model proposes three concentric circles “representing the types of spread, the patterns of acquisition and the functional domains in which English is used across cultures and languages” (p. 12). The *inner circle* represents countries such as the USA, the UK, and Canada, where English is the primary language or L1. Countries in the second circle, called the *outer circle*, are characterized

by the historical spread of English due to colonization. English in countries such as India are in the outer circle; it has an important status and is often an official language. The third circle, named the *expanding circle*, refers to countries where English is used as an additional or foreign language. Countries in this circle include China, Korea, and Japan where English is used in limited domains.

ELF is conceptualized as “any use of English among speakers of different first languages for whom English is the communicative medium of choice, and often the only option” (Mauranen, 2018, p. 8). EIL refers to “those uses of English in an international context, or a context that cuts across and goes beyond any national border” (Friedrich & Matsuda, 2010, p. 23). The three concepts, WEs, ELF, and EIL, recognize and acknowledge the evolution of English and the impact of changes in the language on L2 speakers’ development of literacies. These terms are used interchangeably and are often the source of confusion among teachers (Tosuncuoğlu & Kirmızı, 2019).

Literacy learning in English and in English as a Second Language (ESL), especially reading, appears to have received the most research attention (Gunderson et al., 2010). Joshi and Aaron (2006) note: “Until about two decades ago, the study of writing systems and its relationships to literacy acquisition has been generally modeled after studies of the English language” (p. xiii).

India: Second Language Literacy

English and Hindi are the national “official” languages. Eberhard et al. (2020) report that there are 260,000 native English speakers in India, but there are also 238 million English L2 speakers. Hindi speakers include 339 million L1 and 294 million L2 individuals. The overwhelming number of people lacking basic literacy skills in either their L1 or L2 have led to the development of literacy initiatives that have become a major focus in the country’s efforts to achieve universal literacy in the face of poverty and population growth. Bhargava (2008) reports that the Human Resource Development ministry’s “multi-pronged approach” that was

being implemented by the Bureau of Elementary Education, through the State Governments, for formal elementary education catering to children age 6–14 [and] the Bureau of Secondary Education ... for formal education for the 14–18-year-old age group, facilitating their entry into higher education and work situations [was designed to] combat this problem of illiteracy.

(p. 51)

As a result, hundreds of millions have been involved in L2L in India, particularly in K–12 contexts. Recent reports suggest that the country has made considerable progress with the current average literacy rates placed at 77.7 % (International Literacy Day, 2020), although significant challenges such as the gender gap in literacy attainment persist (Chandra, 2019).

Schools are mandated to provide literacy instruction (Sinha, 2000) and although guidelines from the Ministry of Education recommend that instruction in early grades (until Grade 5) should be in the mother tongue/regional language (Ministry of Human Resource Development: Government of India, 2022), most students develop literacies in languages other than their mother tongue. With a multilingual landscape of 447 established living languages (Eberhard et al., 2020), and numerous associated dialects, L2 issues cannot be adequately addressed here. One of the authors (Reginald D'Silva), for instance, speaks six languages. He is L1 literate in English. He also learned Hindi, Kannada, Konkani, Tulu, and German literacy skills. Kannada, Konkani, and Tulu in his region are represented by the same orthography, but not in other regions.

Jhingran (2009) notes that “[a] rough assessment indicates that almost 25% of primary school children face moderate to severe problems in the initial months and years of primary school because their home language differs from the school language” (p. 267) and that 103,732 primary schools have populations of 90% who have a home language different from the language of

instruction. Mohanty et al. (2009) argue that “[f]orced submersion of minority children in dominant or majority language classrooms with subtractive effects on their mother tongues continues to be the most pressing educational issue in multilingual settings” (p. 283). The National Literacy Mission (NLM) established in 1988 provides functional literacy instructional support to school dropouts among other marginalized populations in the 15–35 age range and while literacy projects across the nation have been recognized by UNESCO as successful, significant work in literacy remains (Bhargava, 2008).

Same language subtitling (SLS) is a simple yet effective way of providing literacy, including L2L, to people of all ages through high-interest television programming. Successfully used in rural India to promote mass literacy usually in Hindi or an official scheduled language, this feature, also called “literacy karaoke,” uses subtitles in the same language as the visual content to promote reading. This highly cost-effective literacy tool is the winner of the 2002 World Bank’s Global Innovation Competition (planetread.org). The SLS technology has now been included in educational resources such as digital books in over 20 languages (bookbox.com). It appears to help students improve their L2L skills. Recent reports suggest that “only a quarter of Indian children become good readers at school. When exposed to just 30 minutes of subtitled film-songs a week, that proportion doubles” (Staff Writer, 2015)

The majority of students in India are involved in learning literacy skills in an L2 and the L2 varies both between and within regions. Success in learning L2L skills is a challenge for many, particularly those who speak a language at home that is different from the language of instruction.

Africa: Second Language Literacy

Africa has about one-third of the languages in the world (Bendor-Samuel, 1996). Colonists brought both their religions and their alphabets to Africa. The Church Missionary Society in 1848 established an approach for writing different African languages using a Roman alphabet (Bendor-Samuel, 1996). In 1928 the International African Institute published “The Practical Orthography of African Languages” which established the “Africa” alphabet (Bendor-Samuel, 1996). Most African languages, mostly sub-Saharan, are written using either a modified Roman alphabet or the International Phonetic Alphabet (IPA). Africa is unique and complex in terms of orthographies (Heine & Nurse, 2000; Prah, 1998). Heugh (2009) notes: “European languages have generally come to be used for high-level purposes in each African country south of the Sahara” (p. 105). She notes that English is used even in countries that were never British colonies, i.e., Namibia and Ethiopia.

The following data from Eberhard et al. (2020) are a sampling of the complexities of L2Ls in Eastern, Western, Southern, Northern, and Middle African regions. Angola has 48 living languages, and the official language is Portuguese. Benin has 55 living languages with French as a national or official language. Botswana’s principal languages are English and Setswana with 31 living languages. French and Rundi are the main languages of the three established in Burundi. Chad’s official languages are Standard Arabic and French alongside 129 other living languages. Spanish is the principal language among the 12 living languages of Equatorial Guinea. Ethiopia has Amharic as an official language, with 90 other languages. French and Standard Arabic are the principal languages of Mauritania. Among the 30 living languages of South Africa, Afrikaans, English, Ndebele, Northern Sotho, Setswana, Southern Sotho, Swati, Tsonga, Venda, Xhosa, and Zulu are principal languages. L2L and bilingual instruction are features of many countries in Africa. Okedara and Okedara (1992) opined that mother-tongue literacy was important, especially for a country such as Nigeria. They concluded that “[a] local language or mother tongue facilitates the acquisition of literacy” (p. 92). An interesting point is that “[a]n individual illiterate may thus end up being bilingual or multilingual before he or she can truly be regarded as functionally literate since he or she has to be able to communicate with neighbours but also the wider community” (p. 102).

Swahili (aka Kiswahili – *the language of the Swahili people*) has evolved from the Bantu language bringing with it influences from Arabic, Persian, German, Portuguese, and Indic languages (Mugane, 2015). The growing popularity, and increase in the number of speakers, has prompted calls for Swahili to be adopted as the language of Africa (Mendey, 2019). It “is now the official language in the states of Tanzania and Kenya, and widely used in the neighbouring countries of Uganda, Mozambique, Burundi, the Congos, Madagascar and the Comoros” (Ostler, 2005, pp. 104–105). It is mostly an L2. “Despite the vast number who use it (estimated at 40 million), Swahili is learnt as a native language only on the islands and coast close to Zanzibar” (p. 105).

Among East African countries where it is widely spoken, Swahili is the medium of instruction only in Tanzania where until recently only the elementary schools use the language for instruction (Kajoro, 2016). While English continues to be the language of instruction in many sub-Saharan African countries (Iruoma, 2017), Tanzania appears to have adopted Swahili as the language of instruction for secondary schooling (Omar, 2015). This policy change comes amid dissenting voices from stakeholders and the wider community who believe English being a global language is more beneficial (Tibategeza & Plessis, 2018). English continues its strong presence in education; however, a recent trend offering Mandarin as an optional language in schools in South Africa, for instance, is being met with resistance (Kaschula et al., 2015). The presence of 51 Chinese government funded Confucius Institutes across the continent is being seen as the reason behind the emergence of Mandarin as a global language, akin to English, raising concerns that such trends threaten the use of African languages (Odinye, 2015; Berya, 2019).

Heugh (2009) argues that “literacy instruction and language learning programmes and materials that originate from or that may be currently fashionable in English-dominant contexts beyond Africa cannot be trans/imported successfully to Africa” (p. 122). She speaks of Mother Tongue (MT) and Mother Tongue Medium (MTM). She also notes the “explicit teaching of literacy in the MT and the L2; and that MTM education is required for at least eight years of schooling, along with L2 teaching and learning” (pp. 104–105). In general, it appears that L2L across Africa often results in lower achievement than bilingual programs. UNESCO (2008) states that “the detailed analysis of these regional patterns shows that: whilst there have been substantial gains in East Asia and especially China, the Arab States, Bangladesh and Sub-Saharan Africa are lagging behind” (p. 48).

The launch of Internet.Org (aka Free Basics Platform) in Africa was poised to significantly impact education in a positive way given the easy access to the internet that it promised to provide (Zuckerberg, 2015). Express Wi-Fi, Facebook’s initiative to bring “more people online to a faster internet” (<https://connectivity.fb.com/>), was thought to be an important resource impacting education and in turn online literacies in Africa and other regions of the world. Some believed teachers would play a key role in developing students’ literacies amidst this new wave of technologies in classrooms (Schmitt, 2015). Recent reports, however, point to a slow down in the efforts and growing questions about Facebook’s pursuit of altruism in the face of profits (Hempel, 2018).

Europe: Second Language Literacy

The history of language in Europe is complex and involves the influence of Greek, Latin, German, French, English, and other languages (Ostler, 2005). Many immigrants are involved in Finnish, Norwegian, and Swedish L2L programs. The Sámi in Finland, Norway, and Sweden have “their own language(s) and distinct culture(s)” (Aikio-Puoskari, 2009, p. 238). “From the mid-19th to the mid-20th century, the Sámi were subjected to a conscious and, at times, very harsh assimilation policy” (Aikio-Puoskari, 2009, p. 238). However, “the Sámi language can be the language of instruction, or a subject called ‘the mother tongue/first language,’ or ‘a foreign/second language’ in the schools of Norway Sweden and Finland” (p. 245). There are hundreds of L1s in Europe (Eberhard et al., 2020), which are often not represented in schools (Ostler, 2005). Phillipson (2006) concludes that, “roughly

300 languages are in use in EU member states ...” (p. 90). Eurostat (2020) suggests that these include indigenous, regional, and minority languages like Galician and Basque, for instance, spoken in Spain. The European Union (EU), however, recognizes 24 official languages with some regional languages like Catalan acquiring co-official status. Arabic, Turkish, and Chinese are languages mainly spoken by immigrants. Devlin (2018) suggests that an overwhelming number are learning a foreign language in European schools, with over 80–90% of students in some countries; many learners are involved in L2L in their home countries. Phillipson (2006) concludes that “English linguistic hegemony has been progressively asserted in the EU system” (p. 91). “It is believed that English is the most studied language across all age ranges in Europe” (Devlin, 2018, para 6).

Plurilingualism refers to an individual’s linguistic repertoire – “L1 and any number of languages or varieties” (Beacco & Byram, 2007, p. 8) – and is a noteworthy feature of the language education policy in Europe. Komorowska (2015) believes that “valuing all languages, the promotion of language education, broadening of the offer of language programmes, teaching less widely used languages and awareness of the role of languages in mobility and social inclusion” are central in the delivery of instruction in K-12 schools (p. 146). However, implementing these policies with students of diverse backgrounds and L2L literacies is a challenge. In Finland, for instance, teachers struggle to deliver plurilingualism education to immigrant students amid a variety of institutional and policy hurdles (Sunı & Sirkku, 2012, Voipio-Huovinen & Martin, 2012).

Programing Code: Second Language Literacy

Musical notation literacy skills are used around the world. The L2 transcends the L1. An Urdu speaker can read and write music that a Zambuanan speaker can read and understand, although they cannot communicate in L1 with each other. Math is an international L2. There are others. However, the most significant is likely to be programing language. Programing code for computers has been around since the 1940s. There are about 2,500 programing languages and hundreds of “dialects,” which are variants of programs. Computers are inflexible machines that only accept specific forms of input. Program languages have syntactic and semantic features. Syntax refers to the grammar and “spelling” of a programing language. In essence, the syntax of a language determines the expected form and different programs have defined their own syntactical rules that determine which words, what order the words should be in, and what punctuation the computer can “understand.” Semantics refers to meaning and in many cases is written in natural language, often English, or mathematical terms.

Figure 2.2 is a program written by Reginald D’Silva in Java. This is a typical program written by students to practice writing different languages such as BASIC and JAVA. The program tells a computer to print out on the screen the phrase “Hello World.” Syntax statements include English, mathematical, and punctuation components that follow language-specific syntactic patterns. A compiler is a language-specific program that is used to make the program computer readable. A program may run successfully because of its syntax but results in an incorrect outcome because of semantic problems in the program. A programmer can both read and write code. The underlying syntax and semantics of programing code are related to English in significant ways. There are those who write and read programing code but cannot communicate orally or in writing with each other because their L1s are different. The proliferation of computer viruses, worms, and trojans argues for the position that programing code is a major L2L.

“code.org,” a non-profit initiative, is striving to make programming code an essential L2L that students can acquire as part of their public education in North America. It highlights the importance of this literacy in the continually expanding presence of technologies in modern educational contexts (Partovi, 2014). Programing code also makes possible a great variety of digital applications, including Artificial Intelligence (AI), instruction of which is now provided by code.org. Experts believe recent advancements like the Internet of Everything (IoE) that brings “together people, process, data

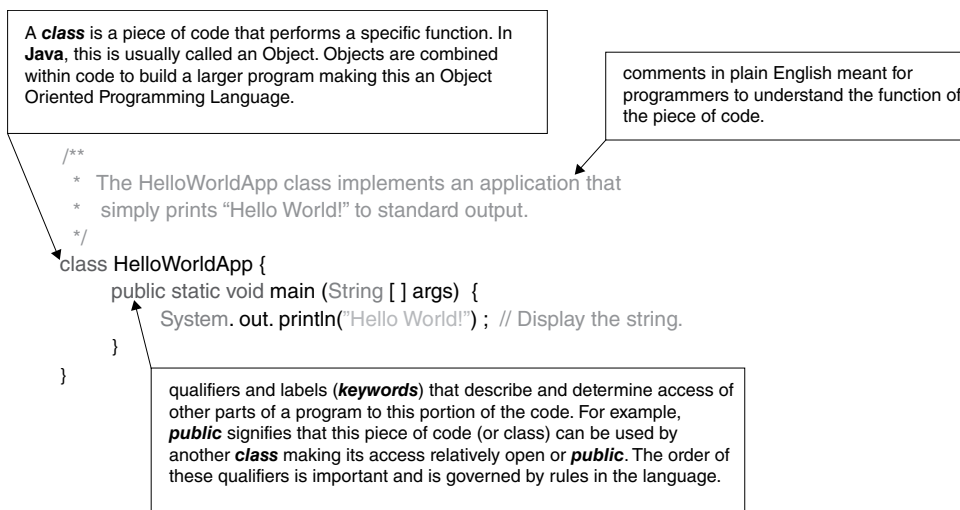


Figure 2.2 An example of a java program

Source: R. D’Silva

and things to make networked connections more relevant and valuable than ever before” will soon “transform pedagogy” (Selinger et al., 2013, p. 4). L2Ls such as programming code, as suggested by code.org’s vision, may be useful to both elementary and secondary students. Over 55 million students, including those from historically underrepresented groups such as young women and marginalized racial minorities, have participated in this L2L initiative. In Finland, coding is taught from a young age as an interdisciplinary tool – a skill that can be applied across different subjects. The objective is “to show students why understanding how technology works is relevant to their lives by linking its use to a multitude of activities” (DeRuy, 2017, para 4). Coding is seen as an L2L that can support students’ development of other school literacies.

Multiliteracies: Second Language Literacy

Kress (2003) identifies two distinct modes – *writing* and *image* – and their associated media, namely the *book* and *screen* respectively. Some identify *web literacies* as making meaning in the *context* of the web (Eagleton & Dobler, 2007). Every literary act has a *purpose*, which may be one of making meaning or that of communicating with another human being. However, the *importance*, *relevance*, and *legitimacy* of these skills are determined by the communities in which they are situated. With the rapid advancement of information and communication technology (ICT), the importance, relevance, and legitimacy of online literacy is growing at an unprecedented rate. “The former constellation of *medium of book* and *mode of writing* is giving way, and in many domains has already given way, to the new constellation of *medium of screen* and *mode of image*” (Kress, 2003, p. 9). Internet use has grown dramatically in the last decade by over 1200% (Internetworldstats.com, 2020) making online literacy – the skills needed to read, write, publish, and interact online – one of the most important and relevant concepts in academic and non-academic domains in the economically advantaged countries of the Global North. With large-scale, transnational efforts like Facebook’s Internet.org, and Google’s Project Loon (<https://loon.com/>) and their goal to connect “everyone everywhere,” access to the internet is seen as a “basic human right” making online literacies essential and relevant even in the Majority World, i.e., lesser-connected countries in Africa and Asia. Some believe in the notion of a *digital language* that mediates online literacy and suggest that those born into the age of

ICTs are native speakers of this language or *digital natives*, while those who have acquired the skills to use these technologies and have been socialized into these environments are *digital immigrants* (Prensky, 2001). Given an increase from 26.6 % to 63.2 % of the world internet usage in the last decade (Internetworldstats.com, 2020), this view implies that an overwhelming majority of the world's population have or will have digital as a second language (DSL) (Haynes, 2007).

The advancement in internet technologies continue to necessitate the redefinition of terms such as *online literacy*. Leu et al. (2015) argue that “the rapidly evolving nature of literacy presents an important challenge for theory development. How can adequate theory be developed when the object that we seek to study is itself ephemeral, continuously being redefined by a changing context?” (p. 38). They believe the term “new literacies of online research and comprehension” more accurately captures our online literacy practices which include “reading to define important questions, and locate, critically evaluate, synthesize and communicate online information (p. 39).

The demands that these *new literacies of online research and comprehension* wield on our educational goals when juxtaposed with those of traditional literacies continue to intensify instructional challenges in our classrooms. As a result, rather than eliminate literacy problems, technology seems to create a wide range of them, making what is current, appropriate, and effective literacy instruction a moving target. Teachers are faced with the need to identify, evaluate, and integrate potentially valuable digital literacy tools in their curricula in order to scaffold classroom instruction and prepare learners for literacy skills mediated by digital technologies that they will need in their prospective workplaces. Issues of access to technology, availability of infrastructure to use technology in classrooms, and teachers' knowledge and skills in employing digital technologies in the classrooms have plagued schools even in North America in the past decade, contributing to “Digital Disconnect” as teachers and school administrators fail to provide adequate and effective digital ways of meaning making in these educational contexts (Pew, 2002).

At the turn of the millennium, one of the authors, in speculating on how literacy will be defined in the new millennium, suggested that

Electronic learning disabilities will be a factor in the increasing diversity as some students find it difficult or impossible to deal with electronic and hypertexts. An increasing number will favor electronic information processing and will become unable to deal with printed texts – they will become print disabled.

(Gunderson, 2000, p. 69)

While this insight is still relevant, challenges in making meaning with digital and print texts will continue to intensify in our classrooms in the next decade as students use both digital and print texts in complex ways.

Second Language Literacy Instruction

The UN has committed to “ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy” by 2030 (UN Sustainable Development Goals, 2020, p. 5), efforts that have resulted in a sustained rise in literacy rates among youth (UNESCO Institute of Statistics, 2017a). However, UNESCO Institute of Statistics (2017b) reports that “six out of ten children and adolescents are not achieving minimum proficiency levels in reading and mathematics,” including “more than 387 million children of primary school age (about 6 to 11 years old) and 230 million adolescents of lower secondary school age (about 12 to 14 years old)” (p. 2). The report also suggests that:

56% of all children will not be able to read or handle mathematics with proficiency by the time they are of age to complete primary education; the proportion is higher for adolescents, with

61% unable to achieve minimum proficiency levels when they should be completing lower secondary school.

(p. 2)

There appears to be a pervasive need to provide and sustain L2L instruction.

In most cases instruction is in an L2L; the three major L2Ls are Putonghua, Spanish, and English, but there are many others (Eberhard et al., 2020). Learners involved in instruction other than their home languages generally have lower L2L achievement (Elley, 1992; UNESCO, 2004; Schnepf, 2008).

Learners, who typically begin formal reading instruction at about 5 or 6 years of age (7 in some countries), have good sized speaking vocabularies and a well-ingrained working knowledge of grammar. Beginning L2 learners, regardless of their chronological age, may be learners with no L2 vocabulary or grammatical knowledge. This represents a significant hurdle. We refer to this as the L1 to L2 developmental ratio. Often immigrants to English-speaking nations are at-risk; many fail to learn English literacy skills, to read and learn from textbooks, to learn from lectures in academic classes, and to acquire the literacy skills needed in anything but low-level labor-intensive work (Gunderson, 2007). As the historically major language, English has become a kind of benchmark against which other languages are compared and researched.

Joshi and Aaron (2006) conclude: “It was also tacitly believed, if not overtly stated, that what is true of English is also true for other writing systems” (p. xiii). The problem is that the learning of English literacy skills is likely one of the most difficult L2L tasks (Gunderson et al., 2010). Ziegler et al. (2003) note that “[t]he slower rate of learning to read in English does not seem to occur because of variations in teaching methods across different countries, rather it seems due to the relatively low orthographic consistency of English” (p. 13). English appears to be the most difficult language to learn to read and there appear to be more individuals who have trouble learning to read it. “The empirical evidence that is presented ... clearly suggests that reading acquisition in the English writing system proceeds more slowly than any other orthography that has been looked at so far” (Landerl, 2006, p. 514).

Our purpose is to propose some principles to support K-12 instructional strategies that are applicable to L2Ls in general, not just English. Human beings are typically involved in perceiving and interpreting features of their environments that help them to survive. “Reading,” features of the environment enables some to live successfully, while others additionally require literacy skills as an essential component in complex ways, such that they are,

[l]anguages caught up in the multimodal environment of contemporary communication, which combine verbal linguistics meaning-making with the gestural, visual, spatial, and the radically altered writing and reading regimes of computer literacy, such as the oral-like writing and writing-like oralism in voice instruction, complicate literacy practices with multicultural contexts as the modes, codes and cultural meaning interact with each other.

(Lo Bianco, 2000, pp. 93–94)

It also seems many are immersed in L2L artifacts or icons such as “Tata,” “Toyota,” “stop,” “Starbucks,” “the Golden Arches,” and “Colonel Saunders.” The L2L universe is complex and students are exceptionally diverse. Given the complexity and diversity we have the following suggestions.

Suggestions for L2L Instruction

The provision of comprehensible input is essential to L2L instruction (Gunderson et al., 2020, pp. 33–50). For an English L1 student, for instance, 象, 코끼리, لىف, and हार्थी are not comprehensible, while

Table 2.1 Instructional matrix

	Zero L2	Very Limited L2	Limited L2	Limited L2 Fluency
No L1 Instruction				
1–2 Years L1 Instruction				
3+ Years L1 Instruction				

Source: Gunderson et al., 2020

σλον, πιλ, norsu, gajah, and ελέφαντας may be more “decodable” but not comprehensible because of similarities to English. The word “elefante” is comprehensible, however. The difficulty is that teachers may not have the expertise to evaluate the degree to which two orthographies are comprehensible to each other, and it may be that no one has measured this variable.

We propose, based on our research and practice related to L2L English instruction, that *L1 instructional background and L2 proficiency are variables that predict the degree to which L2L will be comprehensible*. An elementary student who has never learned to read in L1 and who has no, or zero-level, L2 proficiency should be involved in oral language development (L1 instruction if possible) and no L2 reading activities, while a student with three or more years of L1 instruction can be included in beginning L2 reading activities (see Table 2.1).

The matrix in Table 2.1 is based on the notion that the provision of appropriate comprehensible input is an essential requirement for teaching students who are learning in a language other than their home language. In this respect, the matrix helps to predict what will be comprehensible for students in the K–12 school years. A student who has an extensive L1L background and has limited English will find connected L2 discourse comprehensible, while a student with no L1 background and no L2 proficiency will not. There are also essential differences between age groups. A 5-year-old who has never been to school and speaks no L2 is entirely different from the 18-year-old immigrant with no L1 schooling and no L2 proficiency, who is in turn different from the 60-year-old with no L1 schooling and no L2. While a detailed discussion on the matrices, and classroom instruction, for K–12 students, is beyond the scope of this chapter, Gunderson et al. (2020) provide guided plans and instructional materials for K–12 literacy instruction that can be adapted to a variety of teaching and learning contexts.

Conclusion

More school-age students around the world learn literacy skills in an L2 than they do in their own L1. It appears that many view English as *the* primary L2. This is, of course, an English-centric notion that does not reflect the realities of the world. Chinese appears to be the major L2. Spanish, Russian, English, Hindi, Swahili, and others are also significant L2s. Learners involved in L2L instruction generally do not do as well as those involved in L1L instruction. L2 is the language of instruction as a result of colonialism, political choice, immigration, or overt assimilationist policies.

The term “second language literacy” is inadequate to describe the complex interactions occurring in multiple multimodal environments. A single human being has the potential to learn literacy skills in a number of second or additional languages that are not necessarily traditional in nature. A monolingual Farsi speaker, for instance, may have programing code literacy skills, digital as an L2, and music or math as an L2. Rather than the term “second,” it may be more appropriate to

categorize these languages as “additional.” English, for the moment, does appear to be a significant component of the World Wide Web. However, this seems to be changing as use of the Web increases around the globe. The underlying program codes continue to employ English-like languages.

Multiliteracies broaden the view of what literacy activities L2 students should and can be involved in. There is a significant need to explore L2L issues as the scope of multiliteracies expands and the world itself grows smaller. As our understanding of what constitutes multiliteracies expands, defining the term will become more complex and difficult.

References

- Aikio-Puoskari, U. (2009). The ethnic revival, language and education of the Sámi. In T. Skutnabb-Kangas, R. Phillipson, A. K. Mohanty, & M. Panda (Eds.), *Social justice through multilingual education* (pp. 238–262). Bristol: Multilingual Matters.
- Baker, J. N. (1992). The presence of the name: Reading scripture in an Indonesian village. In J. Boyarin (Ed.), *The ethnography of reading* (pp. 98–138). Berkeley, CA: University of California Press.
- Barton, D. (1994). *Literacy: An introduction to the ecology of written language*. Malden, MA: Blackwell.
- Barton, D. & Hamilton, M. (1998). *Local literacies: Reading and writing in one community*. London: Routledge.
- Beacco, J.-C. & Byram, M. (2007). *From linguistic diversity to plurilingual education. Guide for the Development of Language Education Policies in Europe*. Strasbourg, France: Council of Europe. <https://rm.coe.int/16806a892c>
- Bendor-Samuel, J. (1996). African languages. In P. T. Daniels & W. Bright (Eds.), *The world's writing systems* (pp. 689–691). New York: Oxford University Press.
- Berya, S. (2019, July 23). Is Mandarin Chinese the language of East Africa's future? China exports language and culture via Confucius Institutes in Africa. <https://globalvoices.org/2019/07/23/is-mandarin-chinese-the-language-of-east-africas-future/>
- Bhargava, A. (2008). Functional literacy in India: A progress report. *Education Canada*, 48(2), 50–52.
- British Council. (2013). *The effect of English: The impact of English, what it's worth to the UK and why it matters to the world*. London: British Council. Retrieved July 30, 2016, from www.britishcouncil.org/sites/default/files/english-effect-report-v2.pdf
- Chandra, T. (2019). Literacy in India: The gender and age dimension. *Observer Research Foundation*. ORF Issue Brief No. 322
- Cope, B. & Kalantzis, M. (Eds.) (2000). *Multiliteracies: Literacy learning and the design of social features*. New York: Routledge.
- Daniels, P. T. (1996). The study of writing systems. In P. T. Daniels & W. Bright (Eds.), *The world's writing systems* (pp. 1–20). New York: Oxford University Press.
- De Swaan, A. (2001). Introduction: The global language system. In A. De Swaan (Ed.), *Words of the world: The global language system* (pp. 1–17). Cambridge, UK: Polity.
- DeRuy, E. (2017, February 24). In Finland, Kids Learn Computer Science Without Computers: Students can learn the basics with a set of knitting needles. *The Atlantic*. www.theatlantic.com/education/archive/2017/02/teaching-computer-science-without-computers/517548/
- Devlin, K. (2018, August 6). Most European students are learning a foreign language in school while Americans lag. *FactTank: The Pew Research Center*. www.pewresearch.org/fact-tank/2018/08/06/most-european-students-are-learning-a-foreign-language-in-school-while-americans-lag/
- Diringer, D. (1968). *The alphabet (Vols 1 & 2)*. New York: Funk & Wagnalls.
- Eagleton, M. B. & Dobler, E. (2007). *Reading the web: Strategies for internet inquiry*. New York: Guilford Press.
- Eberhard, D. M., Gary F. S., & Charles D. F. (Eds.) (2020). *Ethnologue: Languages of the world* (23rd ed.). Dallas, Texas: SIL International. Online version: www.ethnologue.com.
- Elley, W. B. (1992). *How in the world do students read?* Hamburg: The International Association for the Evaluation of Educational Achievement.
- Eurostat. (2020). Education and training in the EU – facts and figures. *Eurostat: Statistics Explained*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Education_and_training_in_the_EU_-_facts_and_figures
- Friedrich, P. & Matsuda, A. (2010). When five words are not enough: A conceptual and terminological discussion of English as a lingua franca. *International Multilingual Research Journal*, 4(1), 20–30.
- Gunderson, L. (2000). How will literacy be defined in the new millennium? *Reading Research Quarterly*, 35, 68–69.
- Gunderson, L. (2007). *English-only instruction and immigrant students in secondary school: A critical examination*. Mahwah, NJ: Lawrence Erlbaum and Associates.

- Gunderson, L., D'Silva, R., & Chen, L. (2010). Second language reading disabilities: International themes. In R. Allington & A. McGill-Franzen (Eds.), *Handbook of research in reading disabilities* (pp. 13–24). New York: Routledge.
- Gunderson, L., D'Silva, R. A., & Murphy Odo, D. (2020). *ESL (ELL) literacy instruction: A guidebook to theory and practice*. New York: Routledge.
- Haynes, J. (2007). *DSL—Digital as a second language*. Retrieved 15 March, 2010, from www.everythingsl.net/inserVICES/dsl_digital_second_language_11955.php
- Heine, B. & Nurse, D. (Eds.) (2000). *African languages: An introduction*. Cambridge: Cambridge University Press.
- Hempel, J. (2018, May 17). What Happened to Facebook's Grand Plan to Wire the World? *Wired*. www.wired.com/story/what-happened-to-facebooks-grand-plan-to-wire-the-world/
- Heugh, K. (2009). Literacy and bi/multilingual education in Africa. In T. Skutnabb-Kangas, R. Phillipson, A. K. Mohanty, & M. Panda (Eds.), *Social justice through multilingual education* (pp. 103–124). Bristol: Multilingual Matters.
- Ho, C.S.-H., Chan, D. W.-O., Tsang, S.-M., Chan, S.-H., & Lee, S.-H. (2002). The cognitive profile and multiple-deficit hypothesis in Chinese developmental dyslexia. *Developmental Psychology*, *38*, 543–553.
- Hudson-Ross, S. & Dong, Y. R. (1990). Literacy learning as a reflection of language and culture: Chinese elementary school education. *The Reading Teacher*, *44*, 110–123.
- International Literacy Day. (2020, September 8). How literacy rate is calculated in India, *Times of India*. <https://timesofindia.indiatimes.com>
- Internetworldstats.com. (2020). *World internet usage statistics*. Retrieved December, 15, 2020, from <https://internetworldstats.com/stats.htm>
- Iruoma, K. (2017, October 3). Tanzania adopts Swahili as the official language of instruction in schools. *This is Africa*. <https://thisafrica.me/african-identities/tanzania-adopts-swahili-official-language-instruction-schools/>
- Jhingran, D. (2009). Hundreds of home languages in the country and many in most classrooms: Coping with diversity in primary education in India. In T. Skutnabb-Kangas, R. Phillipson, A. K. Mohanty, & M. Panda (Eds.), *Social justice through multilingual education* (pp. 263–282). Bristol: Multilingual Matters.
- Joshi, R. M. & Aaron, P. G. (2006). Introduction to the volume. In R. M. Joshi & P. G. Aaron (Eds.), *Handbook of orthography and literacy* (pp. xiii–xiv). Mahwah, NJ: Lawrence Erlbaum Associates.
- Kachru, B. (1992). Teaching World Englishes. In B. Kachru (Ed.) *The Other Tongue: English across Cultures* (2nd ed.) Urbana and Chicago, IL, University of Illinois Press.
- Kachru, B. B. (1985). Standards, codification and sociolinguistic realism: The English language in the outer circle. In R. Quirk & H. G. Widdowson (Eds.), *English in the world: Teaching and learning the language and literatures* (pp. 11–30). Cambridge: Cambridge University Press.
- Kajoro, P. M. (2016). Transition of the medium of instruction from English to Kiswahili in Tanzanian primary schools. In A. Halai & P. Clarkson (Eds.), *Teaching and learning mathematics in multilingual classrooms*. Rotterdam: Sense Publishers. https://doi-org.ezproxy.library.ubc.ca/10.1007/978-94-6300-229-5_6
- Kaschula, R. H., Nosilela, B., Heugh, K., Hendricks, M., & Maseko, P. (2015, November 12). Teaching Mandarin in schools is another slap in the face for African languages, *The Conversation*. <https://theconversation.com/teaching-mandarin-in-schools-is-another-slap-in-the-face-for-african-languages-48505>
- Komorowska, H. (2015). The European language policy and the teaching profession in the 21st century. *Studia Linguistica Universitatis Iagellonicae Cracoviensis*, *132*(3), 135–150.
- Kress, G. (2003). *Literacy in the new media age*. London and New York: Routledge.
- Lal, V. (2010, November 30). Postcolonialism has had nothing to say about the imperialism of categories. *Lal Salaam*. <https://vinaylal.wordpress.com/tag/literacy/>
- Landerl, K. (2006). Reading acquisition in different orthographies: Evidence from direct comparisons. In R. M. Joshi & P. G. Aaron (Eds.), *Handbook of orthography and literacy* (pp. 513–530). Mahwah, NJ: Erlbaum.
- Lankshear, C. & Knobel, M. (2003). *New literacies: Changing Knowledge and classroom practice*. Buckingham: Open University Press.
- Leu, D. (1981). Questions from a metatheoretical perspective: The interdependence of solutions to issues involved in the development of reading comprehension models. In M. Kamil (Ed.), *Directions in reading: Research and instruction* (pp. 96–107). Washington, DC: The National Reading Conference.
- Leu, D. J., Forzani, E., Rhoads, C., Maykel, C., Kennedy, C., & Timbrell, N. (2015). The new literacies of online research and comprehension: Rethinking the reading achievement gap. *Reading Research Quarterly*, *50*(1), 1–23. Newark, DE: International Reading Association. doi: 10.1002/rrq.85
- Lewis, M. P., Simons, G. F., & Fennig, C. D. (Eds.) (2015). *Ethnologue: Languages of the world* (18th ed.) Dallas, Texas: SIL International. Online version: www.ethnologue.com.
- Lo Bianco, J. (2000). Multiliteracies and multilingualism. In B. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design of social features* (pp. 92–105). New York: Routledge.

- López, M. & Gunderson, L. (2006). Oaxacan parents' perception of literacy. In V. Pang & R. Jimenez (Eds.), *Race, ethnicity and education: Language, literacy and schooling* (pp. 95–113). Westport, CT: Praeger.
- López-Gopar, M. (2007). Beyond the alienating alphabetic literacy: Multiliteracies in indigenous education in Mexico. *Diaspora, Indigenous and Minority Education*, 1(3), 159–174.
- Mar-Molinero, C. (2000). *The politics of language in the Spanish-speaking world*. London: Routledge.
- Mauranen, A. (2018). Conceptualising and positioning ELF. In J. Jenkins, W. Baker, & M. Dewey (Eds.), *The Routledge handbook of English as a lingua franca* (pp. 7–24). London: Routledge.
- Mendey, T. F. (2019, October 24). Swahili: The promising official language of Africa. *Eye Gambia Newsletter*. <https://eyegambia.org/swahili-the-promising-official-language-of-africa/>
- Mikanowski, J. (2018, July 27). Behemoth, bully, thief: How the English Language is taking over the planet. *The Guardian*. Retrieved November 11, 2020, www.theguardian.com/news/2018/jul/27/english-language-global-dominance
- Ministry of Human Resource Development: Government of India (2022). *National Education Policy 2020*. www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- Mohanty, A. K., Mishra, M. K., Reddy, N. U., & Ramesh, G. (2009). Overcoming the language barrier for tribal children: Multilingual education in Andhra Pradesh. In T. Skutnabb-Kangas, R. Phillipson, A. K. Mohanty, & M. Panda (Eds.), *Social justice through multilingual education* (pp. 283–297). Bristol: Multilingual Matters.
- Mugane, J. M. (2015). *The story of Swahili*. Athens, OH: Ohio University Press.
- Mushangwe, H. & Chisoni, G. (2015). A critical analysis of the use of pinyin as a substitute of Chinese characters. *Journal of Language Teaching and Research*, 6(3), 685–694. <http://dx.doi.org/10.1080/01443410601061306>
- Odinye, S. I. (2015). The spread of Mandarin Chinese as a global language. *Journal of Linguistics, Language and Culture*, 1(1), 1–13.
- Okedara, J. T. & Okedara, C. A. (1992). Mother-tongue literacy in Africa. *Annals of the American Academy of Political and Social Science*, 520, 91–102.
- Omar, M. (2015, March 4). Tanzania dumps English as its official language in schools, opts for Kiswahili. *Quartz*. <https://thisisafrica.me/african-identities/tanzania-adopts-swahili-official-language-instruction-schools/>
- Ostler, N. (2005). *Empires of the word: A language history of the world*. New York: HarperCollins.
- Partovi, A. (2014, May 13). *Code.org: Why coding is imperative in public education*. www.youtube.com/watch?v=YqRXgKKtoNg
- Peréz, S. J. (2009). The contribution of post-colonial theory in intercultural bilingual education in Peru: An indigenous teacher education programme. In T. Skutnabb-Kangas, R. Phillipson, A. K. Mohanty, & M. Panda (Eds.), *Social justice through multilingual education* (pp. 201–219). Bristol: Multilingual Matters.
- Pew. (2002). *The digital disconnect: The widening gap between Internet savvy students and their schools*, from www.pewinternet.org/Reports/2002/The-Digital-Disconnect-The-widening-gap-between-Internetsavvy-students-and-their-schools.aspx
- Phillipson, R. (2006). The tension between linguistic diversity and dominant English. In T. Skutnabb-Kangas, R. Phillipson, A. K. Mohanty, & M. Panda (Eds.), *Social justice through multilingual education* (pp. 85–102). Bristol: Multilingual Matters.
- Prah, K. K. (Ed.) (1998). *Between distinction and extinction: The harmonisation and standardization of African Languages*. Johannesburg: Witwaterstrand University Press.
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1–6.
- Schmitt, C. (2015, April 2). *Why a mobile-technology revolution needs teachers*. www.dw.com/en/lifelinks-education-mobile-africa/a-18358008
- Schnepf, S. V. (2008). *Inequality of learning amongst immigrant children in industrialised countries* (Discussion Paper No. 3337). Institute for Study of Labour Website: <http://ftp.iza.org/dp3337.pdf>
- Selinger, M., Sepulveda, A., & Buchan, J. (2013). *Education and the Internet of Everything: How ubiquitous connect-edness can help transform pedagogy*: Cisco & Affiliates (EMEAR Education Team).
- Sinha, S. (2000). *Acquiring literacy in schools*. Retrieved August 10, 2015, from www.india-seminar.com/2000/493/493%20shobha%20sinha.htm
- Staff Writer. (2015). A bolly good read: Literacy in India. *The Economist*, 415.
- Street, B. (1997) The implications of the new literacy studies for education. *English in Education*, 31, 45–59.
- Street, B. (2003). What's "new" in New Literacy Studies? Critical approaches to literacy in theory and practice. *Current Issues in Comparative Education*, 5(2), 72–91.
- Suni, M. & Sirkku, L. (2012) Dealing with increasing linguistic diversity in schools – the Finnish example. In J. Blommaert, S. Leppänen, P. Pahta, & T. Räisänen (Eds.), *Dangerous multilingualism: Northern perspectives to order, purity and normality* (pp. 67–95). Basingstoke: Palgrave Macmillan.

- Tibategeza, E. R. & Plessis, T. (2018). The prospects of Kiswahili as a medium of instruction in the Tanzanian education and training policy. *Journal of Language and Education*, 4(3), 88–98. doi:10.17323/2411-7390-2018-4-3-88-98
- Tosuncuoğlu, İ. & Kırmızı, Ö. (2019). Views of university instructors and students on English as a Lingua Franca (ELF) and World Englishes (WES). *Journal of Language and Linguistic Studies*, 15(1), 158–173.
- UN Sustainable Development Goals. (2020). *Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development* (United Nations SDG: E/CN.3/2020/2). https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%202020%20review_Eng.pdf
- UNESCO. (2004). *Literacy: A UNESCO perspective*. Paris: UNESCO.
- UNESCO. (2008). *International Literacy Statistics: A review of concepts, Methodology, and current data*. Montreal: UNESCO Institute for Statistics.
- UNESCO. (2019). *The UNESCO.Org Website: Literacy*. <https://en.unesco.org/themes/literacy>
- UNESCO Institute for Statistics. (2017a). *Literacy rates continue to rise from one generation to the next* (UNESCO Fact Sheet No. 45 - FS/2017/LIT/45). http://uis.unesco.org/sites/default/files/documents/fs45-literacy-rates-continue-rise-generation-to-next-en-2017_0.pdf
- UNESCO Institute for Statistics. (2017b). *More than one-half of children and adolescents are not learning worldwide* (UNESCO Fact Sheet No. 46 - UIS/FS/2017/ED/46). <http://uis.unesco.org/sites/default/files/documents/fs46-more-than-half-children-not-learning-en-2017.pdf>
- Voipio-Huovinen, S. & Martin, M. (2012). Problematic plurilingualism – teachers' views. In J. Blommaert, S. Leppänen, P. Pahta, & T. Räisänen (Eds.), *Dangerous multilingualism: Northern perspectives to order, purity and normality* (pp. 96–118). Basingstoke: Palgrave Macmillan.
- Willinsky, J. (1990). *The new literacy: Redefining reading and writing in the schools*. New York: Routledge.
- Ziegler, J. C., Perry, C., Ma-Wyatt, A., Ladner, D., & Schulte-Körne, G. (2003). Developmental dyslexia in different languages: Language specific or universal? *Journal of Experimental Child Psychology*, 86, 169–193.
- Zuckerberg, M. (2015, April 16). *Internet.org* [Facebook Post]. www.facebook.com/zuck/posts/10102033678947881

Teaching L2 Academic Language in K-12

A Contextual and Developmental Perspective

María Estela Brisk

Throughout the world, many students are educated in a language other than their home language. This is especially prevalent in English speaking countries such as Australia, Great Britain, Canada, and the United States, which have a tradition of receiving immigrants in their schools. Educators working with these second language (L2) learners have been concerned for some time with the need to develop language that goes beyond everyday use. Since the turn of the 21st century there has been an explosion of studies investigating what is referred to as the language of schooling (Schleppegrell, 2004), academic English (Bailey, 2007), academic language (Gibbons, 2009; Zwiers, 2008), and disciplinary linguistic knowledge (Turkan et al., 2014). Concern for language and literacy development in education is reflected in such reforms as the one promoted by the British educational system (Chen, 2007), the Common Core State Standards Initiative (2010) and the Next Generation Science Standards (NGSS Lead States, 2013) in the United States, and the Australian Curriculum Assessment and Reporting Authority (ACARA, 2012). In addition, language specific standards such as WIDA English Language Development Standards (WIDA Consortium, 2020) and TESOL Pre-K-12 English Language Proficiency Standards (2006) have added to the focus on academic language instruction and proficiency.

This chapter takes a contextual and developmental perspective on language and literacy development of students who speak a language other than English, including Black Language (also called Ebonics and African American language) speakers, advancing a productive approach to the controversial notion of academic language (AL). It explains the context of children and texts and the stages of language and literacy development. The chapter summarizes the knowledge needed by students and teachers and concludes with a number of practices that help advance this knowledge.

Definitions and Relevance for Instruction

There is no unified definition of academic language (AL) nor consensus as to whether it exists at all. Cummins (1979) first made a distinction between decontextualized, “cognitive academic language proficiency” (CALP) and less cognitively demanding “basic interpersonal communication skills” (BICS). Critics argued that one is not more cognitively demanding but that they are different forms of language, each with their own complexity (Bailey, 2007; MacSwan & Rolstad, 2003). In the broadest sense, researchers and educators refer to AL as the language needed by students to function in school to acquire, understand, and demonstrate knowledge (Chamot & O’Malley, 1986; Gottlieb

& Ernst-Slavit, 2014; Schleppegrell, 2004; Zwiers, 2008). Uccelli et al. (2020) defined academic language as the language in professional communities used “for shared reasoning, reflection and debate about ideas and perspectives” (p. 77). This type of language is also used in schools’ texts and instruction.

Blair (2016) challenged the association of AL with school context, showing that students in out-of-school settings engage in academic discourses and practices. Bailey (2020) agreed with Blair and further argued that students participate in school using language other than AL, thus questioning the dichotomy between context (school and out of school) and function of language (social and AL). Bailey (2020) considers that what students need is to express themselves with explicit language rather than appropriate or correct language.

There is no agreement in relation to instruction either. Some researchers focus on general aspects of language such as the language connected with different levels: vocabulary, grammar, and discourse (DiCerbo et al., 2014), and explicitness demanded by different communicative situations (Bailey, 2020). Others focus on the specific linguistic features of disciplines, such as math, science, history, literature and so on (Gottlieb & Ernst-Slavit, 2014; Moore & Schleppegrell, 2020; Turkan et al., 2014). Uccelli et al. (2020) consider that there are both the specific language of the disciplines and cross-disciplinary “high-utility language skills” (p. 76). Scarcella (2003) expanded AL beyond the linguistic dimension to include cognitive and sociocultural/psychological dimensions. Currently, most educators consider that AL instruction should include a critical perspective on the societal attitudes toward AL as well as the need to incorporate in instruction the language practices that students bring to school (Jensen & Thompson, 2020).

Most of the research and practice related to AL has been directed to minoritized populations. However, the abstract nature of the language, lexical density, and need for precise expression makes it challenging for all students (Gottlieb & Ernst-Slavit, 2014; Zwiers, 2008). Moreover, the critical perspective is needed not only for students whose language practices may suffer from the emphasis on AL but also for those whose languages are not threatened by it (Baker-Bell, 2020b).

While the motivation of a number of researchers and educators to advocate for AL instruction, especially among minoritized populations, is promoting social justice (Gottlieb & Ernst-Slavit, 2014; Rose & Martin, 2012), other educators claim that the emphasis on AL has marginalized these students as well as their language and culture. For example, some practices include segregating multilingual students to learn AL, depriving them of a connection to the content of disciplines, and Black students are presented with AL as a correct form of the language they speak (Baker-Bell, 2020b; Flores & Schissel, 2014; Valdés, 2004).

Conceptual Framework

AL needs to be embedded in a contextual and developmental perspective of language and literacy development. As children grow up in a specific social context, they develop language, literacy, and knowledge of the world. This development is influenced by cognitive and linguistic maturity as well as the context of language use.

Language and literacy develop in stages. After infancy there are broadly four stages: early childhood, primary school years, middle childhood, and adolescence (Christie, 2012; Menyuk & Brisk, 2005). During early childhood, children learn to interact with others, begin to narrate, and demonstrate initial knowledge of literacy. As they enter the early school grades they learn to interact with the oral and written discourses of school. In middle to late childhood (about 9 to 12/13 years old), children construct more abstract concepts and encounter in earnest the subject specific language of the disciplines. They also learn to make meaning through other semiotic resources such as graphs, images, tables, diagrams, and so on. As children move to middle years and then to high school, they become better at storytelling, tracking clearly all participants. They are better at making language choices given the particular situation or register. They learn to use and understand fully figurative

language and to cope with more dense language, disciplinary language, and theoretical concepts (Christie, 2012; Menyuk & Brisk, 2005).

During the primary years, children’s written language looks more like oral language written down. Over time, it becomes more packed as published written texts are. The structure of the written clauses changes from simple short sentences through various levels of complexity, ending again with simple sentences with complex noun groups (Brisk, 2021).

For multilingual learners, these phases of development vary for each language, depending on when they are introduced and whether children are exposed to literacy and/or schooled in those languages. The profile of multilingual learners changes constantly depending on age, use, and context (Baker & Wright, 2017; Menyuk & Brisk, 2005).

The language(s), literacy, and content knowledge children develop depend on the language(s), literacy practices, and experiences growing up in various contexts (see Figure 3.1).

Typically, these contexts expand as the child grows, starting with the home and neighborhood, continuing with school and later in life with work and further schooling. Some children may spend the time from birth through K-12 school in the same neighborhood, others experience moves across neighborhoods, states, or even countries. For example, my daughter within the first three years of her life moved within the United States and spent two extended stays in Latin America. These moves were due to her parents’ professional activities. For other children the moves are the result of economic or political factors and tend to be more traumatic. In some cases, their schooling may be interrupted or may not start until later in life. For example, while Adam and Warkana emigrated from Ethiopia having attended school, Saynab arrived from war torn Somalia at age 14 with no formal education, anxious to leave life in refugee camps and get an education. These adolescents struggled to adjust to their new family life and schooling (Hersi, 2005, 2011). Some students grow up in contexts that use the same language as commonly used in school while others use different languages from school (Baker-Bell, 2020a; Heath, 1983; Menyuk & Brisk, 2005).

All these experiences impact children’s well-being and their acquisition of content, language, and literacy knowledge. Therefore, when children come to school, they are not empty vessels. They know about the world as they have experienced it so far, they know one or more languages, and may be literate in one or more of them. Thus, what is considered academic language is not a separate form of language that starts with the entrance to school but it is just the continuation of language and literacy development that comes as a result of encountering new content and texts, especially those connected to the subject matter areas covered in school. For many children it also means learning a new language.

A set of contextual factors impact the children, while others impact the text used by these children (see Figure 3.2).

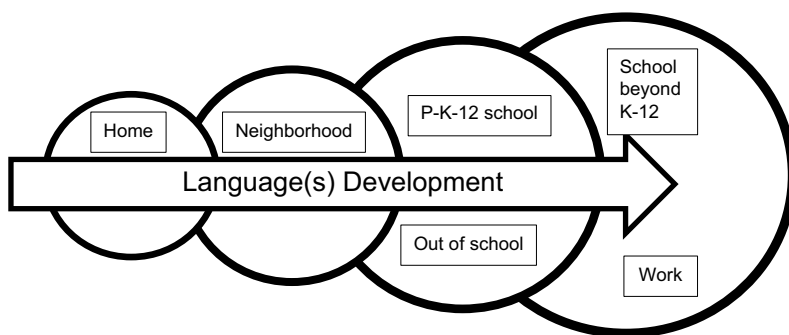


Figure 3.1 Developmental and Contextual Development

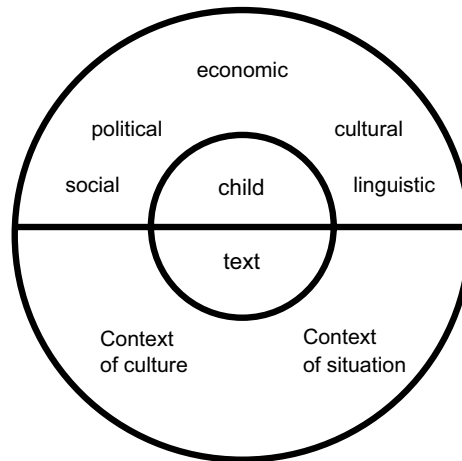


Figure 3.2 Contextual Factors Impacting Child and Text

Multiple social, economic, political, and cultural factors impact languages, their users, and the space where they are used. A number of researchers have written in depth about these factors (Brisk, 2006; Brisk et al., 2004; García et al., 2017; Spolsky, 1978). There is no inherent value in the nature of specific languages; the value and hierarchical stratification of languages comes about as a result of these social, economic, cultural, and political factors, often exacerbated by the media (Kaveh, 2018). Families and schools are influenced by them, although their perceptions may not align, and in turn influence students. Because English is widely used in our society, families view acquiring English as the path to advancement. Other families may want their children to develop both their heritage language as well as English (Kaveh & Sandoval, 2020). Schools may use and have a positive attitude toward English only or they may promote multiple languages. Children are very susceptible to what the larger society values and tend to prefer the language with the highest status in their society (Caldas & Caron-Caldas, 2000). Among bilingual children, preference for the language of societal power often increases with age (Kaveh & Sandoval, 2020). In educational contexts, valuing the language of power translates into choosing curriculum and instructional resources in that language, forbidding children to use their heritage languages (Gándara & Hopkins, 2010), and, most alarming, having students internalize negative attitudes toward their home and community languages (Baker-Bell, 2020b). Some educators argue that embracing English, especially the school variety, does not always help overcome inequality for children because other variables, such as race, ethnic affiliation, and class are at play (Baker-Bell 2020b; Commins, 1989).

In addition to contextual factors affecting the child, context also impacts the texts that children encounter and produce. According to Systemic Functional Linguistics (SFL) theory, the choice of language and organization of oral and written texts depend on the context of culture, which defines the genres and the context of situation, which defines the register. In the case of multilingual contexts, the choice also involves specific languages. The writing practices of a culture are characterized by recurrent forms of texts, called genres, used for specific purposes with specific discourse organization and language features (Martin & Rose, 2008). The purposes of genres traditionally taught in schools include telling stories, organizing information, giving instructions, and persuading. Genres that tell stories include personal recounts, fictional narratives, and a number of historical genres. Those that organize information are reports and many types of explanations. Procedures and protocols provide instructions, and arguments (also called expositions, discussion, and challenge) aim at persuading (Butt et al., 2012; Martin & Rose, 2008). The purpose of each genre is achieved through the different stages or text structure.

Language users also make choices given the context of situation in the three dimensions of the register: field, tenor, and mode. Language reflects the *field* or content of the text, the *tenor* of a text which reflects the relationship between language users. Language choices depend on the author's awareness of the intended audience as well as the writer's voice or identity. Language resources used to create a cohesive text orally, in writing, or in multiple modes constitute the *mode* (textual function) (Thompson, 2004).

In sum, AL learning is part of the process of students' language and literacy development, influenced by the situational context of the students and of the texts, oral or written, encountered and produced by those students.

Instruction: Content and Practice

A contextual and developmental perspective on AL places instruction as the need to further develop the language and literacy knowledge students bring to school. The need arises from the natural course of development and not because students are deficient. Contextual factors, including social, political, economic, cultural, linguistic, and historical, influence this developmental process. The content and practice of instruction is best grounded on this developmental and contextual perspective on students.

Curricular Content

Content that supports writing comprises curriculum content of various disciplines and aspects of language and literacy necessary to produce different text types or genres of writing. Schools that act responsibly toward minoritized populations will include in the curriculum content that addresses the contextual factors that affect these groups, not only for the sake of those students but for the school community at large. Review of the history of various groups as well as the sociocultural, economic, and political factors affecting them offers multiple topics for inclusion in the curriculum (see Baker-Bell, 2020a; Brisk et al., 2004; Spolsky, 1978).

There are many opportunities for incorporating knowledge of the various communities of students in different disciplines greatly enriching the curriculum. For example, Angela, a 5th grade teacher, had students explore the notion that U.S. foreign relations impact the treatment of ethnic groups in the United States. The project resulted in a rich geography and history unit while incorporating the life experiences of students (Brisk et al., 2004). In a lesson for a class of African American high school students that explored the formation of Black Language, students were exposed to the policies adopted by slave traders, not only considering an important aspect of the African American heritage but enriching history instruction (Baker-Bell, 2020a).

Language and Literacy Content

Language and literacy knowledge must also inform AL instruction. As students create or read texts in various genres, they need to know the structural patterns of those texts (Martin & Rose, 2008). In addition, students need to understand and learn to use the language demands of the register, i.e. topics, audience, and voice, and create a cohesive text. The features of the register guide students in the linguistic choices they make to express meaning. In the context of schooling, the language of the topics of inquiry are framed within various disciplines (Turkan et al., 2014). Disciplines express meaning through texts in specific genres and features of the register. The disciplinary texts include semiotic resources other than language such as graphs, diagrams and so on (Schleppegrell, 2007). Some researchers prioritize features of language used across curricular areas rather than specific disciplines (Uccelli et al., 2020).

Table 3.1 Structural Organization of Selected Genres

<i>Genre/Structural components</i>	<i>Introduction</i>	<i>Body</i>	<i>Conclusion</i>
Procedure	Goal, Materials	Method or Steps	Optional ending
Recounts and historical genres	Orientation: who, where, what, when	Events in sequence	Closing depends on the specific type
Narratives	Orientation: who, where, when, foreshadow the problem	Events with crisis and resolution	Moral or lesson learned
Reports	General Statement	Subtopics	optional
Explanation	Identification of phenomenon	Explanation sequence, factors, and so on.	Ending depending on type
Argument (one sided)	Thesis	Reasons supported by evidence	Reinforcement of statement

The purposes of genres used in school texts typically include telling stories, giving instructions, organizing information, and persuading. Each purpose is present in a range of genres. In turn, the structural organization of texts differs in each genre (see Table 3.1 for a sample).

Each opportunity to use language, either oral or written, calls for decisions on language choices. The language user makes decisions on which language to use to name and describe participants, processes, and circumstances given the topic and how to express relationships between ideas. They have to consider how their choices will impact and convey meaning given their audience and which voice or identity they want to reflect. Moreover, they need to consider how to put the whole text together to make it cohesive. For example, when writing about the water cycle, writers make decisions as to which words express each aspect of the cycle and how technical to make the description given the age of the audience. They may also choose to reflect an authoritative voice by using only third person and may connect each stage in the cycle with adverbial phrases of time that make clear the order of the cycle. The role of educators in supporting students to make the choices they want is to develop their language resources and to explore the impact on the audience given the choices.

Although writers make language choices given the situation, there are features of language typical of various disciplines. The genres of specific disciplines have been analyzed by SFL researchers, including English language arts (Christie & Derewianka, 2008; Fang & Schleppegrell, 2008), history (Coffin, 2006; Schleppegrell & Achugar, 2003), science (De Oliveira & Dodds, 2010; Fang, 2006; Veel, 2000), and mathematics (De Oliveira & Civil, 2020; Marks & Mousley, 1990; Schleppegrell, 2007). These studies provide specifics with respect to the genres of the disciplines, text structure of these genres, and language features typically found in that discipline.

Some features of disciplinary language are found in all four major disciplines, others are more typical of specific disciplines. Humanities and STEM each tend to share a number of features. As students mature and advance in grade, they encounter language that is packed and complex to express the content of what they are learning, such as:

- (1) Clause complexes with conjugated verbs, especially subordinate clauses expressing many different logical connections: *If only you would come to life and be my bride, how happy I would be!*
- (2) Clause complexes with non-conjugated verbs: *Waves tend to bend around obstacles in their way and scatter somewhat, becoming less focused.*
- (3) Complex noun groups with a variety of modifiers: *Each house was a three-foot-deep circular hole with a grass-mat roof.*

- (4) Nominalizations: *The Fifth Amendment protects citizens against “double jeopardy.” This protection means that people cannot be put on trial or punished twice for the same crime.*
- (5) Technical vocabulary specific to the discipline. (*Snakes attract their prey instead of ambushing it.*) In English Language Arts (ELA) text is found in connection to topics that provide the context for the narratives (*Soon they found a spot where the ice was cracked and broken. After shoveling away a pile of snow, she reached for the ice-chisel).*
- (6) Everyday words with specialized meaning: *Adding and subtracting expressions is very similar to adding and subtracting integers and other rational numbers.*
- (7) Use of lexical ties to highlight the topics the piece is about: *Magnetism is the force exerted by magnets when they attract or repel each other.*
- (8) Use of passive voice to focus on the topic rather than who was doing the action (*The glass is sorted by color at these centers*) or to hide the doer of the action (*Books belonging to Jews were burnt*).
- (9) Discourse markers that indicate what the whole text will be about in an initial paragraph (*More than 2,500 kinds of snakes slither and creep throughout the world*) and what the topic of each paragraph is through the use of topic sentences (*Snakes have only one shape, but they come in many different sizes*), help keep the flow of the text.
- (10) Theme/new information connection to keep flow of ideas within paragraphs (*There are many different types of telescopes, both optical and non-optical. Optical telescopes are designed to focus visible light.*)
- (11) Use of 3rd person to draw attention to the topic rather than the writer or audience. However, some of the narratives and recounts in ELA may be written in first person.

Moreover, there are features that tend to be found in specific disciplines (see Brisk, 2021; Christie, 2012; and Fang & Schleppegrell, 2008 for detailed analysis of each discipline). For example, in chronological texts typical of ELA and history, paragraphs often open with adverbial phrases or clauses of time to move the action forward (*After the French and Indian War, many British moved west*). Putting a participant as the doer of the action is used as a strategy to assign praise or blame (*The Germans incessantly bombed London*). In math and science an important distinction is in the use of relational verbs to either define (*Metamorphosis is the process of transformation from an immature form to an adult form*) or describe (*A tadpole in its first stage has a tail and no legs*).

In addition, most disciplines use other semiotic devices to make meaning to reinforce or complement the message contained in the language, such as tables, graphs, and photographs. Social studies texts also use maps and paintings that record images from the past before photography. ELA texts with images tend to have mostly drawings. The younger the students the more images in the texts. Science and math use formulas as well.

This extensive description of the content needed for students and teachers to develop the language and literacy in the school years may appear overwhelming. The purpose is to show that there is a lot involved in the process of schooling and helping minoritized students develop language and literacy in a healthy way. Instead of feeling inhibited, teachers should slowly start the process of trying different things and with time and success they can enhance their teaching. Following, there are a number of strategies to attend to context and language development to support the learning.

Practice

Researchers and educators have proposed instructional practices that address both developmental and contextual factors impacting learners. These practices have been grouped relative to what they address:

- Attitude toward minoritized students and their language practices.

- Explicit presentation of new aspects of language and literacy.
- Critical view of language and curricular choices of the schools they attend.

All three areas are important to incorporate in a curriculum that supports social justice.

Instructional Practices that Address Attitude toward Minoritized Students and their Languages

Ways to address the needs of these students is to explore and use their language and analyze objectively the external factors that affect their lives. Students often come to school with a wealth of language and life experiences that can be tapped for a healthy development.

Use and Exploration of Students' Native Language

In schools throughout the world students who speak a language other than the one used as a medium for teaching and learning bring these languages as potential resources. This section describes three projects in the United States that included components where the language of the students was used or explored to further their language and literacy learning. The projects illustrate that the possibilities are varied. Educators can extract ideas that fit their educational context and feel reassured that – against common sense beliefs – the use and exploration of students' languages do not get in the way of students learning the school language (Brisk, 2006; Baker & Wright, 2017). On the contrary, in the process of acquiring a second language, multilingual learners use their current knowledge and language practices to acquire the new language. Freedom of language choice to express themselves enables students to actively participate in new literacy practices by using all of their linguistic resources, and validates students' meaning making practices and their bilingual identities (Manyak, 2006). Furthermore, exploration of the ways the students' languages and the one they are learning function helps enhance metalinguistic awareness, an important aspect of literacy learning (Cenoz & Gorter, 2011). Consequently, incorporating students' linguistic resources in the analysis of the features of multilingual students' languages impacts their language and literacy development (Ossa Parra & Proctor, 2021). For students whose language has been disparaged by society and its educational system, the study of the features and use of their language brings about specific knowledge of the language and an improved attitude toward it (Smitherman, 2017).

The following three projects take advantage of the students' languages in different ways given the languages, goals, and contexts. An urban multilingual school using SFL genre pedagogy for writing instruction integrated newcomer Spanish speaking students to the upper elementary grades (ages 8–10/11). To facilitate full participation of these students, teachers converted their classrooms into bilingual environments, where both languages were used and resources were provided in both languages (Brisk & Ossa Parra, 2018). Except for one teacher who had taken Spanish in high school, the others were English speakers. Emergent bilingual students were encouraged to use Spanish at all times to fully participate in the class activities. They used it to do research, discuss topics, write assignments, and share their work with the whole class. The teachers took advantage of a variety of supports such as other bilingual students, the ESL teacher who was fluent in Spanish, bilingual researchers working in the school, and Google translator. The teachers, however, never relinquished their responsibility of ensuring that these students understood the material and tasks and participated in the learning. When students worked in groups, the teachers checked with the group to make sure the student was fully engaged. They called on them to share opinions and ideas and their written products. Sometimes they validated their ideas by having the whole class repeat the idea expressed in Spanish or stopped the class to listen when one of these students wanted to share. If the teachers did not understand, they persisted by using Google translator or a bilingual speaker. Encouraging the use of students' language resources to engage in grade level content and literacy learning resulted

in students' full participation and uninterrupted literacy development, while at the same time, they made big strides in learning the new language (Brisk & Ossa Parra, 2018; Brisk & Kaveh, 2020).

Another project geared to develop literacy among Spanish speakers is the CLAVES curriculum developed to promote reading (Proctor et al., 2020). Within this project a set of translanguaged lessons were developed to teach semantics, syntax, and morphology. Bilingual texts were used to discuss topics (immigration and workers' rights), key vocabulary in both languages was explored, morphemes (-ful and -less as compared to -ado/ada, ido, oso/asa), and syntactic features such as placement of adjectives and use of subject pronouns in both languages were contrasted. Students completed each cycle with a discussion around a key question raised by the text, followed by writing an argument related to the issue. Ossa Parra and Proctor (2021) show in detail how students discussed, using the language(s) of their choice, the morphological and syntactic differences between the languages. The ability to choose the language to participate benefited the students by allowing for the show of expertise regardless of students' English ability, by enhancing their linguistic awareness and understanding, and by facilitating further development of the new language.

Yet another approach to using students' language was included as part of the Antiracist Black Language Pedagogy developed to explore and take action in relation to political, historical, attitudinal, and linguistic aspects of Black Language (Baker-Bell, 2020a). One of the aspects of this project was for students to learn the features of Black Language and explore its use in their communities.

The teacher started the exploration of Black Language by first distinguishing "language" (a rule governed form of verbal communication) from "slang" (a temporary use of terms, especially by youth). This distinction was needed because in earlier activities students had referred to their language as "slang." To engage students in these concepts, the teacher showed them a worksheet with two people. Above the first one was a speech bubble expressing the types of prejudices toward Black Language that characterizes it as slang and incorrect or broken English. The bubble for the second person expressed how linguists and educators – quoting them – have defined Black Language and distinguished it from slang. A third blank bubble offers space for students' own thoughts. The latter showed the beliefs students held due to the societal negative attitudes to which they had been exposed.

This opening activity was followed by the actual exploration of the language features and their function. Students were shown a table with syntactic, semantic, phonological, and rhetorical features of Black Language and were asked to discuss them and discover their function. They were encouraged to use their knowledge as speakers of the language. (See detailed description of these features in Baker-Bell, 2020a, pp. 76–79.) The last activity for this aspect of the Antiracist Black Language Pedagogy project was for students to observe and document over the weekend their language uses. Students were surprised at how many people in their community use Black Language. One student recognized that her parents used Black Language while they did not approve of the "slang."

The three projects described in this section demonstrate that the language of the students has an important place in education and consequently should be embraced rather than rejected in school contexts. Teachers with or without knowledge of the languages have different types of possibilities for how they can incorporate them in the curriculum but there is never an excuse not to do it.

Exploration of Contextual Factors

Contextual factors contribute to students' development in positive or negative ways (Brisk, 2006; Spolsky, 1978). Both students and teachers benefit from understanding the impact of these factors and acting to address them (Baker-Bell, 2020a; Brisk et al., 2004; Freire & Macedo, 1987). Exploring contextual factors provides opportunities not only to learn about them but to develop language and literacy. Two projects, Antiracist Black Language Pedagogy and Situational Context Lessons, illustrate how the exploration of contextual factors embedded in ELA and Social Studies curricula facilitate literacy development while addressing important issues in the lives of minoritized students.

Antiracist Black Language Pedagogy focuses on the language, and its variations, spoken by African Americans in the United States. Baker-Bell (2020a) describes in detail six units that cover: Black Language and Identity; Language, History, and Culture; Study of the Grammatical and Rhetorical Features of Black Language; Language, Race, and Power; Language, Agency, and Action; and Developing a Language of Solidarity. These units of study provide activities that explore the attitudes and misconceptions about Black Language, share with students the work of researchers and educators who have studied the language and its historical development, and draw from students their reflections as a result of acquiring this new knowledge. Moreover, after students have learned about the context and features of Black Language, they are encouraged to take action. Baker-Bell recommends a variety of activities to promote linguistic justice such as social media campaigns, public service announcements, letters to administrators and politicians, and workshops. She also suggests producing children's books and graphic novels to promote linguistic justice for young children.

Similarly, the Situational Context Lessons explore the contextual factors that affect multilingual students (Brisk et al., 2004). Multilingual students often blame themselves for issues caused by contextual factors out of their control. One way to give them control is to have them research and analyze these factors objectively, relate them to their experiences, and search for potential solutions. Brisk et al. (2004) describe in detail units related to linguistic, economic, social, cultural, and political factors that plague multilingual populations. A 5th grade bilingual teacher implemented with her class lessons related to language proficiency and use; bilingualism and career opportunities and social mobility; demographics and language; comparing education systems and cultural conflicts; and the impact of U.S. foreign relations and the treatment of particular immigrants. After setting a clear objective, students conducted research, carried out activities with their families and communities, and read carefully chosen books that supported acquiring knowledge and writing reports, graphs, brochures, and other materials related to the objective of the lesson. Students reflected on how their findings related to their own experiences, and, when possible, discussed potential solutions.

Both the Antiracist Black Language Pedagogy and the Situational Context Lessons greatly impacted students and teachers by dissecting the contextual factors that affect students and their communities and by providing meaningful ways to carry out demanding activities that promoted the development of students' language and literacy.

Explicit and Gradual Instruction of New Aspects of Language and Literacy: SFL Genre Pedagogy Units of Writing

Explicit instruction on the features of text structure and language supports the continuous development of language and literacy expected in children's schooling experience. Careful analysis of the features of texts with full student engagement and with strategies geared for students' success can make a difference in students' advancement and motivation. The goal is not to increase the division among groups of students but to "democratizing the outcomes of education systems" (Rose & Martin, 2012, p. 4). Approaches such as Reading to Learn (Rose & Martin, 2012) and SFL Genre Pedagogy are examples of explicit practices.

From the collaboration of SFL linguists and educators in Australia emerged SFL genre pedagogy, where the content of writing instruction is informed by genre theory and SFL (Martin & Rose, 2008) and the instructional strategies by the Teaching and Learning Cycle (TLC) (Callaghan & Rothery, 1988; Rothery, 1996). The TLC is an approach to writing instruction that seeks to provide the necessary scaffolds for students of any background to access the school curriculum, without sacrificing its intellectual strength (Gibbons, 2008). Teachers build students' linguistic and disciplinary content knowledge through four stages: negotiation of field or developing content knowledge, deconstruction of text, joint construction of text, and independent construction of text. During the negotiation of field, students develop content knowledge. Teachers guide students through

Table 3.2 Books and Articles Illustrating the TLC

Genre	Grade Level	Citation
All genres	K-5	Brisk (2015)
All genres	High school	Derewianka & Jones (2016)
Autobiography	3 rd grade	Brisk et al. (2021)
Biography	3 rd grade	Pavlak (2013)
Report and Explanation	5 th grade science	Hodgson-Drysdale & Rosa (2015)
Fictional Narratives	7 th & 8 th grades	Humphrey & Feez (2016)
Argument	High School ELA	Khote (2018)

deconstruction or a close analysis of mentor texts. Teachers collaborate with students in their class to construct texts jointly based on what they have learned through the deconstruction of mentor texts. With all of the knowledge and experience acquired through deconstruction and joint construction of a text, students can then create their own independent writing. Modification of the TLC added steps to the cycle (added steps in *italics*). The full modified cycle includes development of content knowledge, deconstruction of text, *joint planning using graphic organizers and conferencing*, joint construction of text, *group and/or individual construction*, *joint revision*, and *peer and/or individual revision*. Language is developed throughout the cycle.

The genre units are sensitive to content and grade level. In these units, students produce written projects after thorough exploration of the content and the features of the genre, including the purpose, stages or text structure, and key language features that help accomplish the purpose of the genre. The disciplinary content leads teachers to choose the appropriate genre. For example, historical genres help explore Social Studies topics while Reports and Explanations give opportunity to learning Science concepts. A middle school teacher found procedures very helpful for understanding math problems and concepts. Arguments help students explore current events and social issues. Personal recounts – in early grades – and fictional narratives – upper elementary through high school – are appropriate genres for Language Arts.

After determining the disciplinary context and planning its instruction, teachers plan lessons to introduce the purpose and stages of the genre, through activities guided by the TLC. Language features are introduced at different points in the unit, as early as when developing the content and purpose, and continued to be practiced throughout the various lessons of the unit. Full descriptions of projects that illustrate this pedagogy are found in the literature (see Table 3.2 for a sample).

Critical View of School Language and Curricular Choices

A critical perspective explores such issues as language of power, correctness, appropriateness, choice of readings, cultural content of the lessons, especially English and history but also relevant in science and math. In practice, students can profit from taking a critical view of both content and language (see articles in *Theory into Practice*, vol. 59, 2020).

Khote (2018) created lessons for his high school English Language Arts class with students of different linguistic backgrounds using SFL genre pedagogy and encouraging students to use any of their languages in their discussions. He chose the argument genre because it permitted students to raise their points of view. In collaboration with the students, they decided on the topics to explore. They read a variety of internet resources and critically discussed them, bringing in their own experiences

on the topics. In addition, they deconstructed published arguments to analyze how authors used language to project an authoritative voice and contrasted these texts to a persuasive essay that they had written for a district-wide written assessment. They realized that their essays, although persuasive, were made less assertive by the use of first and second person. Students understood that they were free to make language choices but as a result the effect on the audience was different.

These students gained a greater understanding of persuasive writing by exploring the content and realizing the power of the writer in putting forth a point of view on topics that affected them and their families. They also developed the language they needed to create their own authoritative arguments to defend their own interests.

Concerned with society's negative attitude toward Black Language, Baker-Bell (2020b) devised a lesson for 9th graders on looking critically at Black Language and English. She showed students two paragraphs that described exactly the same high school event, one written in Black Language and the other in English. She did not mention the distinction in the languages and asked the students to read the paragraphs, draw an image or cartoon that reflected each, and write a paragraph about the language and the speakers of each. The class had a group discussion of what they had written about each language and which words were connected with each. For example, *smart*, *good*, *proper* were used in connection with English and *slang*, *bad*, *ghetto* in connection to Black English. This activity showed the students and teacher that the students had acquired the negative attitudes that society has toward their language. A study of Black English, described earlier, followed this critical view of the languages to help students change their perspective toward Black English. It is essential that students and teachers do not see Black Language as English that needs correction but as a meaning making language with its own lexicon, grammar, and phonology (Rickford, 1999).

Similarly, Accurso and Mizell (2020) propose to critically analyze the genres and content of school texts and those of the community, teaching students to use both when creating their own pieces. For example, students may encounter the topic of slavery in history texts written in one of the historical genres but there are also letters and diaries that bring the perspective of the communities subjected to slavery. Critical examination of both can bring to light not only different views of the events but also how different people use different genres to record them.

Although this section on practice divided examples of instruction into three categories, combining all of them is the ideal for reaching minoritized students. Overtly exploring contextual factors that affect students' lives, making explicit the disciplinary genres and language, and using a critical perspective in the examination of content and language, helps students' language and literacy development. As these practices connect with students' life experiences and knowledge, they help affirm their identity and scrutinize ways that society views their language, culture, and history in order to create a new nourishing reality for themselves.

Conclusion

Regardless of the label or perspective on the notion of academic language, one thing is certain: students need nurturing as they mature and continue their language and literacy development. This support is essential as they encounter increasingly abstract and unfamiliar concepts of the disciplines taught in school. Development means encouraging growth of what students already know and needs to be deeply connected to it. Students' content and linguistic knowledge is a precious tool in the development of new knowledge and not something that gets in the way. Teaching students of a different cultural and linguistic background cannot be addressed as fixing a deficiency. However, because these students have encountered this negative attitude, teaching them also means helping them grow a healthy attitude toward themselves, their language and culture. It also means expanding this positive view to teachers and students of the dominant culture.

References

- Accurso, K. & Mizell, J. D. (2020). Toward an antiracist genre pedagogy: Considerations for a North American context. *TESOL Journal*. <https://doi.org/10.1002/tesj.554>
- Australian Curriculum Assessment and Reporting Authority (ACARA). (2012). The Australian Curriculum. Retrieved February 23, 2021, from www.australiancurriculum.edu.au.
- Bailey, A. L. (2007). *The language demands of school: Putting academic English to the test*. Yale University Press.
- Bailey, A. L. (2020). The discourse of explicitness: Mathematics explanatory talk and self-assessment by Spanish-speaking emergent bilingual students in elementary classrooms, *Theory into Practice*, 59(1), 64–74. DOI: 10.1080/00405841.2019.1665416
- Baker, C. & Wright W. E. (2017). *Foundations of bilingual education and bilingualism* (6th ed.) Multilingual Matters.
- Baker-Bell, A. (2020a). *Linguistic justice: Black language, literacy, identity, and pedagogy*. Routledge.
- Baker-Bell, A. (2020b). Dismantling anti-black linguistic racism in English language arts classrooms: Toward an anti-racist black language pedagogy, *Theory into Practice*, 59(1), 8–21. DOI: 10.1080/00405841.2019.1665415
- Blair, A. (2016). Academic uses of language (re)defined: A case of emergent bilinguals engaging in languages and literacies in and outside of school. *Linguistics and Education*, 35, 109–119. doi:10.1016/j.linged.2016.07.003
- Brisk, M. E. (2006). *Bilingual education: From compensatory to quality schooling*. (2nd ed.) Lawrence Erlbaum Associates.
- Brisk, M. E. (2015). *Engaging students in academic literacies: Genre-based pedagogy for K-5 classrooms*. Routledge.
- Brisk, M. E. (2021). *Language in writing instruction: Enhancing literacy in grades 3-8*. Routledge.
- Brisk, M. E., Burgos, A., & Hamerla, S. (2004). *Situational context of education: A window into the world of bilingual learners*. Lawrence Erlbaum Associates.
- Brisk, M. E. & Kaveh, Y. M. (2020). Mainstream teachers for successful multilingual classrooms: The case of a school that embraced a genre-based pedagogy to teach writing. In S. Hammer, K. M. Viesca, & N. L. Cummins (Eds.), *Teaching content and language in the multilingual classroom: International research on policy, perspectives, preparation and practice* (pp. 145–167). Routledge.
- Brisk, M. E. & Ossa Parra, M. (2018). Mainstream classroom as bilingual environments: How SFL training develops language responsive teachers. In R. Harman (Ed.), *Critical systemic functional linguistics: Promoting language awareness and social action among K-12 students and teachers* (pp. 127–151). Springer.
- Brisk, M. E., Tian, Z., & Ballard, E. (2021). Autobiography writing instruction: The journey of a teacher participating in a systemic functional linguistics genre pedagogy professional development. *Systems*, 97, 102429.
- Butt, D., Fahey, R., Feez, S., & Spinks, S. (2012). *Using functional grammar: An explorer's guide*. Palgrave/MacMillan.
- Caldas, S. J. & Caron-Caldas, S. (2000). The influence of family, school, and community on bilingual preference: Results from a Louisiana/Quebec case study. *Applied Psycholinguistics*, 21(3), 365–381.
- Callaghan, M. & Rothery, J. (1988). *Teaching factual writing: A genre-based approach*. Sydney, Australia: Metropolitan East Disadvantaged Schools Program.
- Cenoz, J. & Gorter, D. (2011). Focus on multilingualism: A study of trilingual writing. *The Modern Language Journal*, 95(3), 356–369. <https://doi.org/10.1111/j.1540-4781.2011.01206.x>
- Chamot, A. U. & O'Malley, J. M. (1986). *A cognitive academic language learning approach: An ESL content-based curriculum*. National Clearinghouse for Bilingual Education.
- Chen, Y. (2007). Equality and inequality of opportunity in education: Chinese emergent bilingual children in the English mainstream classroom. *Language, Culture, and Curriculum*, 20(1), 36–51. DOI: 10.2167/lcc325.0
- Christie, F. (2012). *Language education throughout the school years: A functional perspective*. Wiley-Blackwell.
- Christie, F. & Derewianka, B. (2008). *School discourse: Learning to write across the years of schooling*. Continuum.
- Coffin, C. (2006). *Historical discourse: The language of time, cause and evaluation*. Continuum.
- Cummins, N. L. (1989). Language and affect: Bilingual students at home and at school. *Language Arts*, 66(1), 29–43.
- Common Core State Standards Initiative. (2010). Retrieved February 14, 2021, from www.corestandards.org
- Cummins, J. (1979). Linguistic interdependence and the educational development of bilingual children. *Review of Educational Research*, 49(2), 222–251.
- De Oliveira, L. C. & Dodds, K. (2010). Beyond general strategies for English language learners: Language dissection in Science. *Electronic Journal of Literacy Through Science*, 9. <http://ejlts.ucdavis.edu>, pp. 1–14.
- De Oliveira, L. C. & Civil, M. (Eds.). (2020). *Teaching mathematics to English language learners: Preparing pre-service and in-service teachers*. Palgrave MacMillan.
- Derewianka, B. & Jones, P. (2016) *Teaching language in context* (2nd ed.) Oxford University Press.
- DiCerbo, P. A., Anstrom, K. A., Baker, L. L., & Rivera, C. (2014). A review of the literature on teaching academic English to English language learners. *Review of Educational Research*, 84(3), 446–482. <https://doi.org/10.3102/0034654314532695>

- Fang, Z. (2006). The language demands of science reading in middle school. *International Journal of Science Education*, 28(5), 491–520. DOI:10.1080/09500690500339092
- Fang, Z. & Schleppegrell, M. J. (2008). *Reading in secondary content areas: A language based pedagogy*. University of Michigan Press.
- Flores, N. & Schissel, J. L. (2014). Dynamic bilingualism as the norm: Envisioning a heteroglossic approach to standards-based reform. *TESOL Quarterly*, 48, 454–479.
- Freire, P. & Macedo, D. (1987). *Literacy: Reading the word and the world*. Bergin & Garvey.
- Gándara, P. & Hopkins, M. (2010). *Forbidden language: English learners and restrictive language policies*. Teachers College Press.
- García, O., Flores, N., & Spotti, M. (2017). *The Oxford handbook of language and society*. Oxford University Press.
- Gibbons, P. (2008). “It was taught good and I learned a lot”: Intellectual practices and ESL learners in the middle years. *Australian Journal of Language and Literacy*, 31(2), 155–173.
- Gibbons, P. (2009). *English learners, academic literacy, and thinking*. Heinemann.
- Gottlieb, M. & Ernst-Slavit, G. (2014). *Academic language in diverse classrooms: Definitions and contexts*. Corwin.
- Heath, S. B. (1983). *Way with words: Language, life and work in communities and classrooms*. Cambridge University Press.
- Hersi, A. A. (2005). Educational challenges and sociocultural experiences of Somali students in an urban high school. *NABE: Journal of Review of Research and Practice*, 3, 125–143.
- Hersi, A. A. (2011). Immigration and resiliency: Unpacking the experiences of high school students from Cape Verde and Ethiopia. *Intercultural Education*, 22(3), 189–202.
- Hodgson-Drysdale, T. & Rosa, H. (2015, February). Go with the flow: Fifth grade students write about the flow of energy and matter through an ecosystem. *Science and Children*, 52(6), 32–37.
- Humphrey, S. & Feez, S. (2016). Direct instruction fit for purpose: Applying a metalinguistic toolkit to enhance creative writing in the early secondary years. *Australian Journal of Language and Literacy*, 39(3), 207–219.
- Jensen, B. & Thompson, G. A. (2020) Equity in teaching academic language—an interdisciplinary approach. *Theory into Practice*, 59(1), 1–7. DOI:10.1080/00405841.2019.1665417
- Kaveh, Y. M. (2018). Family language policy and maintenance of Persian: The stories of Iranian immigrant families in the northeast, USA. *Language Policy*, 17(4), 443–477.
- Kaveh, Y. M. & Sandoval, J. (2020). ‘No! I’m going to school, I need to speak English!’: Who makes family language decisions? *Bilingual Research Journal*, 43(4). DOI: 10.1080/15235882.2020.1825541
- Khote, N. (2018). Translanguaging in systemic functional linguistics: A culturally sustaining pedagogy for writing in secondary schools. In R. Harman (Ed.), *Critical systemic functional linguistics: Promoting language awareness and social action among K-12 students and teachers* (pp. 153–178). Springer.
- MacSwan, J. & Rolstad, K. (2003). Linguistic diversity, schooling, and social class: Rethinking our conception of language proficiency in language minority education. In C. B. Paulston & G. R. Tucker (Eds.), *Sociolinguistics: The essential readings* (pp. 329–340). Blackwell.
- Manyak, P. C. (2006). Fostering biliteracy in a monolingual milieu: Reflections on two counter-hegemonic English immersion classes. *Journal of Early Childhood Literacy*, 6(3), 241–266.
- Marks, G. & Mousley, J. (1990). Mathematics education and genre: Dare we make the process writing mistake again? *Language and Education*, 4(2), 117–130.
- Martin, J. R. & Rose, D. (2008). *Working with discourse: Meaning beyond the clause*. Continuum.
- Menyuk, P. & Brisk, M. E. (2005). *Language development and education: Children with varying language experience*. Palgrave MacMillan.
- Moore, J. & Schleppegrell, M. J. (2020). A focus on disciplinary language: Bringing critical perspectives to reading and writing in science. *Theory into Practice*, 59(1), 99–108. DOI: 10.1080/00405841.2019.1685337
- NGSS Lead States. (2013). *Next Generation Science Standards: For states, by states*. The National Academies Press. www.nap.edu/catalog/18290/next-generation-science-standards-for-states-by-states
- Ossa Parra, M. & Proctor, C. P. (2021). Translanguaging to understand language. *TESOL Quarterly*. DOI: 10.1002/tesq.3011
- Pavlak, C. M. (2013). “It is hard fun:” Scaffolded biography writing with English learners. *The Reading Teacher*, 66, 405–414. DOI:10.1002/TRTR.1142
- Proctor, C. P., Silverman, R. D., Haring, J. R., Jones, R. L., & Hartranft, A. M. (2020). Teaching bilingual learners: Effects of a language-based reading intervention on academic language and reading comprehension in grades 4 and 5. *Reading Research Quarterly*, 55(95), 122. https://doi.org/10.1002/rrq.258
- Rickford, J. R. (1999). *African American vernacular English: Features and use, evolution and educational implications*. Blackwell.
- Rose, D. & Martin, J. R. (2012). *Learning to write, reading to learn: Genre, knowledge, and pedagogy in the Sydney School*. Equinox.

- Rothery, J. (1996). Making changes: Developing an educational linguistics. In R. Hasan & G. Williams (Eds.), *Literacy in society* (pp. 86–123). Longman.
- Scarcella, R. (2003). *Academic English: A conceptual framework*. The University of California Linguistic Minority Research Institute. Technical Report 2003-1. <https://eric.ed.gov/?id=ED531333>
- Schleppegrell, M. J. (2004). *The language of schooling: A functional perspective*. Lawrence Erlbaum Associates.
- Schleppegrell, M. J. (2007). The linguistic challenges of mathematics teaching and learning: A research review. *Reading & Writing Quarterly*, 23(2), 139–159. DOI: 10.1080/10573560601158461
- Schleppegrell, M. & Achugar, M. (2003). Learning language and learning history: A functional linguistics approach. *TESOL Journal*, 12, 21–27. <https://doi.org/10.1002/j.1949-3533.2003.tb00126.x>
- Smitherman, G. (2017). Raciolinguistics, “mis-education,” and language arts teaching in the 21st century. *Language Arts Journal of Michigan*, 32(2), 4–12.
- Spolsky, B. (1978). American Indian education. In B. Spolsky & R. L. Cooper (Eds.), *Case studies in bilingual education* (pp. 332–361). Newbury House Publishers.
- Teachers of English to Speakers of Other Languages (TESOL). (2006). *PreK-12 English language proficiency standards*. Author.
- Thompson, G. (2004). *Introducing functional grammar* (2nd ed.) Hodder Education.
- Turkan, S., De Oliveira, L. C., Lee, O., & Phelps, G. (2014). Proposing a knowledge base for teaching academic content to English language learners: Disciplinary linguistic knowledge. *Teachers College Record*, 116, 030308, 1–30.
- Uccelli, P., Galloway, E. P., Aguilar, G., & Allen, M., (2020). Amplifying and affirming students’ voices through CALS-informed instruction, *Theory into Practice*, 59(1), 75–88, DOI: 10.1080/00405841.2019.1665413=
- Valdés, G. (2004). Between support and marginalisation: The development of academic language in linguistic minority children. *International Journal of Bilingual Education and Bilingualism*, 7(2–3), 102–132.
- Veel, R. (2000). Learning how to mean—Scientifically speaking: Apprenticeship into scientific discourse in the secondary school. In F. Christie & J. R. Martin (Eds.), *Genre and institutions: Social processes in the workplace and school* (pp. 161–195). Cassell.
- WIDA Consortium. (2020). *2012 amplification of the English language development standards Kindergarten-Grade 12*. Board of Regents of the University of Wisconsin System.
- Zwiers, J. (2008). *Building academic language: essential practices for content classrooms, grades 5-12*. Jossey-Bass.

Children’s Books Used to Extract Language Examples

- Andrews, J. & Wallace, I. (2003). *Very last first time*. Groundwood Books.
- Bower, B. & Lobdell, J. (2001). *History alive!: America’s past*. Teachers Curriculum Institute.
- Low, A. (1985). *Greek gods and heroes*. Simon & Schuster.
- Patent, D. H. (2003). *Slinky scaly slithery snakes*. Walker & Company.
- Supplee, C. (1996). *Everyday science explained*. National Geographic Society.

English for Academic Purposes

Christine M. Tardy

EAP is an area of second language teaching and learning which includes “language research and instruction that focuses on the communicative needs and practices of individuals working in academic contexts” (Hyland & Shaw, 2016, p. 1). EAP scholarship encompasses exploration of instructional practices (including approaches, curriculum, and materials), as well as the texts and textual practices that are common in academic settings. The roots of EAP can be found in English for specific purposes (ESP) (see Chapter 5), EAP’s “theoretically and pedagogically eclectic parent” that is “committed to tailoring instruction to specific rather than general purposes” (Hyland & Hamp-Lyons, 2002, p. 2).

Academic English is taught at all levels of education, though published scholarship in EAP has tended to focus on post-secondary contexts (see, for example, Riazi et al., 2020). (Chapter 3 in this volume offers an overview of academic English in K-12 settings.) ESP scholars focused on supporting overseas students in the United Kingdom first formed a professional community in 1972, with that community becoming more formalized as the British Association of Lecturers in English for Academic Purposes (BALEAP) in 1989. In 2002, EAP scholarship became so prominent within ESP that the *Journal of English for Academic Purposes* was established. This expansion of EAP since the 1980s can be attributed at least in part to growth in three related areas: international students studying abroad in English-dominant countries, English-medium education around the world, and English as the primary language of research publication.

This chapter shares an overview of EAP, intending to identify key developments and trends in the field, as well as current controversies and potential future directions. Because EAP is a large, interdisciplinary, and international area of second language teaching and learning, it is impossible to share an overview that all EAP scholars might see as representative of the field. The perspective I share here is partly a reflection of my educational and teaching background and my current context, which have largely been based in U.S. higher education with some years teaching ESP and EAP abroad. I encourage readers who are interested in EAP to refer to *The Routledge Handbook of English for Academic Purposes* (Hyland & Shaw, 2016) for a more comprehensive overview of the field.

Important Traditions and Developments in EAP

Before reviewing some of the important traditions and developments in EAP, it is useful to identify some of the key principles and concepts of the field. Hyland and Shaw (2016) identify four key principles of EAP:

- *Authenticity*: Instructional materials and activities should resemble real-world language practices.
- *Groundedness*: Classroom practices and materials are grounded in research, and research is grounded in classroom concerns.
- *Interdisciplinarity*: EAP is theoretically and methodologically eclectic.
- *Relevance*: Classroom instruction must be relevant to learners; toward this aim, EAP takes seriously the work of identifying learner needs and understanding relevant language use.

Central concepts within EAP include *genre*, *discipline*, *discourse community*, *audience*, *communicative purpose*, *authenticity*, and *needs* (Hyland, 2016b; Hyland & Shaw, 2016). Together, these principles and concepts point to a pedagogical approach that prioritizes language and practices tied to specific contexts, communities, and uses.

English for General or Specific Academic Purposes

Given EAP's roots in ESP, it is understandable that *specificity* plays some role in understanding the goals of and traditions in EAP. Broadly speaking, both EAP and ESP recognize that language is various in its functions and forms and that learning a language involves learning the specific functions and forms that are of importance to the learners. The key principles and concepts of EAP together demonstrate the importance of understanding language use to be shaped by its specific uses in authentic contexts as it carries out specific goals for users. While a general English classroom may be structured around general vocabulary (e.g., colors, travel, jobs, time of day) or grammar structures (e.g., verb tenses, prepositions), an EAP classroom is typically structured around the language practices and forms that are used to carry out academic activities (e.g., lecture notetaking, academic vocabulary, source use in academic writing). The relevant practices and forms are identified through research of the specific academic context and the learner population.

One long-standing tension within EAP relates to *how specific* these practices and forms should be. Should instruction focus on the very particular practices and forms that the learners might encounter, or should they attempt to teach broader content that students might apply across contexts? The former approach is often referred to as English for specific academic purposes (ESAP) and the latter as English for general academic purposes (EGAP) (Blue, 1988, cited in Hyland, 2002). Hyland (2016b) describes the two approaches to EAP as less a dichotomy and more a continuum: "a dilemma rather than a conflict" (p. 17).

EGAP might include more general academic skills such as notetaking, skimming and scanning, or summarizing. EGAP is, not surprisingly, more common in contexts in which students themselves are less specialized (e.g., preparatory undergraduate education or, in the U.S., early undergraduate education). In these settings, the students in a given classroom may be studying in humanities, social sciences, and STEM disciplines, where the specific language and genres can differ widely (see, for example, Hyland, 2000). Additionally, some have argued that EAP instructors' lack of discipline-specific content knowledge (in most cases) make it inappropriate for them to teach disciplinary practices and forms to students (e.g., Spack, 1988, 1997). ESAP takes a somewhat different stance: disciplinary experts rarely hold the kind of conscious understanding of language use in their discipline (or related metalanguage) that would allow them to teach such specific patterns to students. The EAP instructor, however, can ground their teaching and materials in existing research on academic texts

and practices and can help students explore and discover conventional and important patterns of use in the classroom. Advocates of ESAP also stress that differences in disciplinary practices (and accompanying language use) make it even more important for students to see how such practices are related to epistemological frames and how university participation is marked by “border-crossing” (Hyland, 2002, p. 390).

In most cases, the decision to take more of an EGAP or ESAP approach is heavily influenced by the institutional context and the more immediate needs and goals of the students. For example, in a writing class for doctoral students writing dissertations, an ESAP approach makes good sense: the students want to develop their knowledge of a very specific genre in which some of the features also vary by discipline. On the other hand, students in an intensive or preparatory English program are often grouped together in classes with those from different disciplines and perhaps even different degree levels (e.g., undergraduate and graduate students may be classmates). In these cases, it would be impossible for a teacher to identify specific genres and discourse communities on which to ground instruction, so focusing on broader areas (such as summarizing or notetaking) is understandable.

Needs Analysis

Needs analysis is the primary tool for identifying what to teach in an EAP classroom. Numerous taxonomies detail the components that should be studied in a needs analysis, but in general, a needs analysis systematically collects information about what the learners currently know, what they need to know to be successful in the target situation, and what they want to know (Benesch, 1999; Dudley-Evans & St. John, 1998; Hutchinson & Waters, 1987). Within those broad categories, however, there are a lot of areas that might be considered, such as:

- Information about the larger context, including the kinds of language-related activities the learners will encounter and carry out.
- Information about the institutional context and any constraints on the course itself.
- Insight into common language features in the forms of discourse that students will use.
- The learners’ motivations for attending the course and/or participating in the academic context.
- Various stakeholders’ goals for the course and the learners.
- Insight into the power relations and possibilities for student negotiation and engagement within the learning context.

As in any kind of research, it is important to gather perspectives on these areas from numerous stakeholders (e.g., students, instructors, administrators) and through different forms of data (qualitative and quantitative, interviews, surveys, observations, language/text samples, etc.). As Braine (2012) notes, many needs analyses rely heavily on surveys and questionnaires, but such perspectives can be limited to what people *think* are important needs; if possible, a needs analysis should also collect examples of target activities, perhaps carried out by both learners and more experienced participants. In many ways, a well constructed needs analysis resembles a well designed empirical study in trying to collect information systematically and from multiple perspectives and sources.

A strong needs analysis can form the foundation for EAP course design. Ideally, a large-scale needs analysis is conducted before a course is first taught and can therefore inform the goals and objectives, curriculum, course syllabus, materials, etc. Decisions about textbooks or production of course materials, for example, should be informed by findings from a needs analysis. But needs analysis should also be ongoing since learning contexts are never static; continual changes may relate to shifts in areas like student population, educational policies, teacher background, class size, and modality of instruction. In this way, needs analysis is fundamental to course renewal and methodological updating as well (Bocanegra-Valle, 2016).

Register and Genre Analysis

Given the focus on specific, rather than general, language, research that describes and analyzes target forms and functions of language has been a particularly vibrant area of EAP. Detailed analyses of language are used to inform course goals and activities, and are often crucial for the development of course materials. Much discourse analysis in EAP has analyzed language in terms of genres or registers.

Genre is a category of discourse that is defined by its action or the goal it aims to carry out (Swales, 1990). Common genres in academic contexts vary somewhat by educational level, region, and institution, but may range from lower-stakes online discussion posts and lab reports to high-stakes proposals, dissertations, and research articles. Because of their shared goals, texts within a genre tend to use similar linguistic and rhetorical features—that is, writers make choices that help them carry out their goals in ways that are preferred or expected within the community of users. Because they are shaped by the communities that use them, genres are considered to be “socially recognised ways of using language” (Hyland, 2007, p. 149). As such, texts within many genres share conventions for language, content, organization, and design. In many academic contexts, writers are expected to show familiarity with these conventions. At the same time, we find variation within genres as no two texts in a genre are identical, and writers sometimes can choose how closely to adhere to convention. A genre’s flexibility or openness to variation depends on its functions and users, with some genres displaying high variability (e.g., an academic homepage) and others being more rigid (e.g., a grant proposal) (Tardy, 2016).

Genre analysis includes a set of methods for describing various conventions of a genre and understanding why those features are conventional, how they may vary, and/or how users may differ in carrying out the genre. Genre analysis can examine features of texts (e.g., lexicogrammatical features, rhetorical moves), comparison of the same genre across communities of users, genre change over time, the interconnected networks of genres, and critique of genres and their related power structures (Tardy & Swales, 2014). In EAP, considerable attention has been given to genre analysis of research articles and dissertations, so that there is now a strong understanding of some of the common textual and rhetorical conventions of these high-stakes genres. Yet genre analyses have also explored genres as diverse as abstracts, book reviews, letters of recommendation, three-minute thesis, and research group blogs. The insights from genre analysis research can inform curricular choices and materials development in EAP classrooms.

Alongside genre, register has been another central concept in EAP, influencing research and curriculum development. The distinctions between register and genre are sometimes fuzzy, in part because of varying definitions and theoretical frameworks. One definition, often adopted in corpus-based analysis, describes register as “a variety associated with a particular situation of use (including particular communicative purposes)” (Biber & Conrad, 2009, p. 6). In a systemic-functional linguistics (SFL) perspective, register is a configuration of field, tenor, and mode, together making up context of situation (Martin & Rose, 2008). (Field refers to the subject matter, tenor to the relationship between the readers and writers, and mode to whether the text is more spoken- or written-like.) Register analysis has explored registers as broad as newspapers, spoken language, fiction, and academic language and as narrow as personal emails or e-forum postings (Biber & Conrad, 2009).

In contrast to genre analysis, register analysis typically draws on large corpora for analysis. Some examples include the Michigan Corpus of Academic Spoken English (MICASE), the Corpus of Contemporary American English (COCA), or the British Academic Written English Corpus (BAWE). Some of these corpora are quite extensive (COCA, for example, includes over one billion words of text from speech, fiction, magazines, newspapers, academic journal articles, TV and movie subtitles, and blogs) while others are more focused (MICASE includes under two million words of text taken from a range of spoken interactions carried out at the University of Michigan).

Both genre and register analysis are types of discourse analysis, and their focus on understanding how language is used in particular settings aligns them well with the goals of EAP. They do differ in some important ways as well. Genre analysis has tended to focus on written texts, while register analysis has been somewhat broader in exploring both written and spoken language. Further, many genre analyses focus heavily on the community of users (often referred to as the discourse community) and how their goals, values, and practices shape the conventions of a genre, whereas register analysis tends to focus somewhat more on the setting or context. Finally, genre analysis frequently considers the rhetorical structure of a text (often referred to as rhetorical moves), and how this structure helps writers carry out their goals; register analysis focuses almost exclusively on linguistic features. Genre and register studies can also complement one another. Gardner (2012), for example, analyzed student-written reports in the BAWE corpus using genre analysis to explore the rhetorical structure of such texts and register analysis to understand how linguistic features elucidate context of situation. In more recent years, EAP research has also moved from discourse studies focused solely on text to those following a more ethnographic approach and examining the *context* of academic practices in more substantial ways (Paltridge & Starfield, 2016).

Exploratory, Awareness-Raising Pedagogy

EAP instruction has drawn heavily on findings from discourse studies that shed light on the nature of the language used in specific contexts and for specific functions. Yet, most contemporary EAP instruction does not simply teach the forms of language identified through research studies. Instead, EAP pedagogy emphasizes a discovery-oriented approach, teaching students tools and strategies for exploring linguistic and rhetorical patterns on their own. This approach has origins in Swales' (1990) early descriptions of genre-based pedagogy. The goal of genre-based pedagogy is to raise students' rhetorical consciousness about the genres they encounter and about the situated nature of textual practice (that is, how texts are shaped by the communities who use them and the contexts in which they are used). Through systematic exploration of how genre conventions and variations help writers achieve their goals, students gain a heightened understanding of how texts respond to social situations. Toward this aim, students are taught to analyze text samples of a genre in terms of various lexicogrammatical patterns, rhetorical moves, content choices, and other features, drawing their attention to how certain conventions and ways of using language carry out writers' aims. This inductive approach draws on the second language acquisition principle of *noticing* (Schmidt, 1990), in which conscious attention focused on a specific pattern or aspect of language is thought to enhance learning. In genre-based pedagogy, teachers guide students through well scaffolded, exploratory tasks that are designed to raise such consciousness. A genre-based approach has become so common in EAP that Flowerdew (2015) has described Swales' (1990) early description of the approach as "basically [laying] out the framework for ESP pedagogy as we know it today" (p. 111) and Wingate (2012) states that "[t]he Swalesian approach is central to the discipline of EAP" (p. 27).

Similar to genre-based pedagogy, corpus-based teaching engages students in exploration of language in target genres or registers. For example, students may be presented with corpus data (such as graphs or concordancing lines) and extrapolate patterns of use, or they may actively analyze a corpus (either a large-scale public corpus or a mini corpus constructed of their own target texts) to learn more about language use. Students may use public corpora (such as MICASE or COCA, mentioned earlier) or they may create their own more targeted corpora. Classroom-based corpus analysis allows students to identify patterns within relatively large collections of language-in-use, while genre analysis tends to deal with a much smaller number of (usually written) texts. Additionally, corpus analysis tends to focus on the lexicogrammatical level (analyzing words and/or grammatical structures), and genre analysis often also examines rhetorical features like "moves" (parts of a paper that serve different functions) and explicitly links language choices to features of audience, purpose, and setting.

Because of these slightly different emphases, genre- and corpus-based teaching are complementary and can easily work together in an EAP classroom.

Academic Literacies and Critical EAP

With its focus on researching and teaching students' specific language forms, EAP has been critiqued for its pragmatic approach that unquestioningly accepts and (by default) reinforces existing power structures. While an awareness-raising approach to EAP pedagogy tends to be very text-focused, in recent years EAP researchers and practitioners have also attended to the practices and sociopolitical dynamics of academic language and literacy, influenced by two related traditions: academic literacies and critical EAP.

Academic literacies is a distinct approach to EAP, and the two are often positioned in opposition to one another, yet they have several points of convergence as well. For instance, academic literacies and EAP share an overarching goal of supporting students in succeeding in academic contexts, they aim to demystify the often invisible expectations of academic literacy, they have emphasized the situated nature of academic texts and practices, and they highlight the importance of language in academic work (Lillis & Tuck, 2016). At the same time, academic literacies challenges more assimilationist or accommodationist approaches that situate students' language and literacy as "problems" or "deficits" that need to be remedied. The pluralization of *literacies* highlights academic reading and writing "as diverse and situated in specific disciplinary contexts, but also as ideologically shaped, reflecting institutional structures and relations of power" (Lillis & Tuck, 2016, p. 30). Research in this theoretical framework often centers on student identities and the practices (rather than products) of text production and uses ethnographic methods to do so. Such research also adopts an ideological stance, in which an emphasis on identifying and learning privileged academic conventions is augmented by an interest in:

- a) locating such conventions in relation to specific and contested traditions of knowledge making;
- b) eliciting the perspectives of writers (whether students or professionals) on the ways in which such conventions impinge on their meaning makings;
- c) exploring alternative ways of meaning making in academia, not least by considering the resources that (student) writers bring to the academy as legitimate tools for meaning making...

(Lillis & Scott, 2007, p. 13)

This ideological stance is also taken toward pedagogy, where it is assumed that it is not just students, but also gatekeepers, who should be agile and flexible with regards to privileged norms (Lillis & Tuck, 2016).

Sharing with academic literacies this emphasis on transformation (rather than acceptance) of existing structures and norms, critical EAP interrogates structural hierarchies and normative practices. Benesch (2001) explains that:

- [c]ritical EAP allows ESL teachers and students to examine externally imposed demands and negotiate their responses to them, by addressing the following questions: Who formulated these requirements and why? Should they be fulfilled? Should they be modified? What are the consequences of trying to change current conditions? What is gained by obeying, and what is lost?
- (p. 53)*

A goal of critical EAP, then, is for students to "participate more democratically as members of an academic community and in the larger society" (Benesch, 2001, p. 57). Critical EAP comes out of

the tradition of critical pedagogy, drawing heavily on the work of Paolo Freire and Michel Foucault, as well as feminist critiques of critical pedagogy. While critical EAP calls for a critique of normative practices, however, it still values the academic demands that students face (Helmer, 2013). Toward this goal, Benesch (2001) re-frames the key concept of needs analysis as “rights analysis.” The goal of rights analysis is not simply to understand the gap between where students are and the institutional expectations, but rather to consider “rights, in addition to *needs, wants, lacks*, and other terms found in the needs analysis literature” (p. 102). Rights analysis presumes that institutional structures can limit students’ agency and rights as learners, and it allows for the questioning of how such constraints might be challenged or reshaped.

Both academic literacies and critical EAP offer important theoretical considerations for EAP practitioners, though their pedagogical manifestations have been more limited (Macallister, 2016; Wingate, 2012).

Curriculum and Materials Development

In EAP, curricular decisions grow out of needs analysis and are also informed by the kinds of discourse analysis research described earlier. Typically, EAP curricula are tied closely to the needs identified within the local institutional setting. For example, an EAP dissertation-writing course may draw on insights from research on dissertation writing, but it also must take into account local conditions: How much time per week do students have to devote to the class? Should the course be required or optional? Who will be eligible? Will classes be discipline-specific or multidisciplinary? Will grades or university credits be connected to the class? All of these issues impact the choices of course goals, content, and structure.

Curricular decisions also take into account the role of the teacher and learner, which may differ in an EAP classroom compared to a general English course. In English for specific academic purposes (ESAP) classrooms, or in very advanced EAP classrooms, students may be working with language and content that is highly specialized and unfamiliar to the teacher. The teacher’s role is to identify learner needs, develop and adapt materials, and become familiar with the specialized (often discipline-specific) language and literacy practices that the students are learning (Cheng, 2018; Flowerdew & Peacock, 2001). The role of the EAP student is often to become an independent learner, continuing to develop their specialized academic language practices beyond the classroom (Flowerdew & Peacock, 2001). As a result, EAP classrooms often engage students in actively investigating their other academic spaces to understand the language and literacy practices and expectations. (See Johns [1997] for an extended example of an EAP approach to engaging students in exploring the socioliterate practices of academic contexts.)

Materials and tasks play a foundational role in meeting students’ needs in an EAP classroom. EAP practitioners often advocate giving special attention to the authenticity of both materials and tasks. Such authenticity may, for example, be reflected in the choice of texts that students read or view and the creation of tasks that engage students in practices similar to what they may carry out in academic settings. Because of the specific, needs-driven nature of EAP classrooms, many teachers find shortcomings in mass-produced EAP textbooks, many of which draw more on intuition about academic language use than on research findings (Harwood, 2005), and instead develop their own materials and tasks. Many EAP teachers enjoy the creative and needs-specific nature of materials and task development, but this endeavor can also pose challenges, as “authentic” materials may not always be accessible to students due to their linguistic level or required content knowledge. Teachers can also spend a considerable amount of time searching for the “perfect” texts to work with—sometimes to no avail (Swales, 2009). In response to these challenges, some teachers favor adapting texts and materials, especially for students with lower levels of proficiency (Stoller, 2016).

Transfer of Learning

A foundational goal of EAP is for students to be able to apply what they learn in an EAP classroom to other academic settings. It is generally believed that such transfer of learning will happen as long as the language and practices taught are relevant, but in more recent years scholars have taken up this question empirically by carrying out numerous studies of transfer.

Literature on learning transfer often draws on work in education, in which transfer is said to occur when “when learning in one context or with one set of materials impacts on performance in another context or with another set of materials” (Perkins & Salomon, 1994, p. 6452). We can distinguish between different kinds of transfer, such as *near transfer* (occurring between similar contexts) and *far transfer* (occurring between more distinct contexts), and *low road transfer* (in which a learner can apply a routinized or automatized skill or practice) and *high road transfer* (in which a learner must consciously abstract knowledge). In general, research suggests that far transfer and high road transfer are more challenging for learners.

Until the last decade or two, research that focused specifically on the act (or even success) of learning transfer in EAP was fairly limited. Though this has become a fairly active area of study in recent years, it is still somewhat plagued by the challenges involved in observing or measuring learning transfer. In a valuable meta-analysis of 41 studies on transfer in EAP settings, James (2014) found that transfer can occur in different EAP contexts, that it can involve different kinds of learning, from discrete skills (e.g., vocabulary) to more general knowledge (e.g., writing strategies), and that even the more challenging far transfer can occur.

Some scholars have argued that transfer itself is a problematic construct, as it implies that learners take knowledge from one context and bring it, in whole, to another. Re-framing “transfer” as “adaptive transfer” (DePalma & Ringer, 2011) or “recontextualization” (Cheng, 2018) offers an alternative way to conceptualize how learners do not simply *re-use* but rather *adapt* and *reshape* their existing knowledge to new activities and environments. DePalma and Ringer (2011), focusing specifically on writing, define adaptive transfer as “the conscious or intuitive process of applying or *reshaping* learned writing knowledge in order to help students negotiate new and potentially unfamiliar writing situations” (p. 135, emphasis added). Case studies of individual writers in graduate-level EAP writing classes, for example, have found that writers can adapt their knowledge to new settings and genres, though this process is not guaranteed (Cheng, 2018; Tardy, 2009). Metacognitive strategies—such as reflection on learning and application of learning—have been suggested as a pedagogical aid to helping students reshape their knowledge as needed in new contexts (see, for example, James, 2014; Negretti & McGrath, 2018).

Current Controversies in EAP

Debate and controversy are inherent to academic disciplines, and a number of areas have garnered some disagreement within the field of EAP. The debates discussed here are by no means comprehensive but provide a glimpse into some of the livelier areas of discussion. Readers will likely note a theme that runs through many of these controversies is questioning the pragmatic or normative nature of EAP instruction.

Assimilationist and Pragmatic Ideologies of EAP

In the early decades of EAP, interrogations of the approach (identifying “target” language structures and teaching those to students) centered primarily on how narrowly focused teaching of academic English should be (Hyland, 2002; Johns & Dudley-Evans, 1991; Spack, 1988). In the 1990s, however, scholars began voicing critiques of EAP’s narrow focus on learning and

replicating target structures—structures that reflect existing power relations and serve to exclude and marginalize some from academic spaces. Benesch (1993) called attention to the pragmatism of EAP, arguing that it reflected an accommodationist ideology, “an endorsement of traditional academic teaching and of current power relations in academia and in society” (p. 711). Pennycook (1997) argued that the “discourse of pragmatism” (p. 254) in EAP makes it easy for practitioners to place larger political and cultural questions outside the scope of their work. Adopting a “critical pragmatism,” Pennycook contended, allows for openness to pluralization of norms of academic writing and ways of knowing, and it offers a space for questioning the role of English in academic spaces worldwide.

In contrast, Allison (1996) challenged the validity of these critiques, highlighting the varied ways in which EAP has responded to local constraints and led to curricular and relational changes that benefit students. Hyland (2002) has suggested that a more discipline-specific approach to EAP in fact offers opportunities for making visible “the complex ways in which discourse is situated in unequal social relationships and how its meanings are represented in social ideologies” (p. 393). In general, it is probably fair to say that EAP has become more critical in its research and practices in the 21st century, with a more prominent awareness of the sociopolitical nature of our work compared to earlier decades (Hyland & Hamp-Lyons, 2002). Still, tensions related to how critical EAP should be—or whether an approach like EAP can ever be critical enough—remain.

Plurality of Norms in EAP

Current manifestations of the debate over EAP’s pragmatic or accommodationist approach center more firmly on the role of “target” structures or academic norms in EAP instruction. A major shift in TESOL since the start of the 21st century has been wide recognition of the diversity of English and the legitimacy and value of its global and local varieties, and this recognition has important implications for EAP.

Scholarship in World Englishes played a large role in raising awareness of such diversity within TESOL more broadly. A pioneer in this area of study, Braj Kachru (1992) identified three “circles” of English use, including the Inner Circle (consisting of countries where English is the dominant language), Outer Circle (where English plays an official role in some spheres of activity, typically through the legacy of colonialism), and Expanding Circle (where English is a common foreign language). Though these circles cannot account for the multiplicity in contexts and uses of English today (many of which fall outside of national borders), Kachru’s argument that the codified and systematic global variations of English are just as legitimate as those in the Inner Circle raised important questions for the teaching of English around the world. Is there a space for the plurality of Englishes within EAP, with its focus on dominant academic norms and practices?

For many years, EAP scholars have studied the diverse linguistic and rhetorical approaches of global EAL users (especially writers), originally under the tradition of contrastive rhetoric (Kaplan, 1966) and now as intercultural rhetoric (Connor, 2016). Some have gone beyond *describing* these diverse norms and argued vociferously for acceptance of them, noting that valuing such diversity allows for new voices in a community, “enabl[ing] change, reform, and progress in the discourses of that community” (Canagarajah, 2002, p. 40). This perspective has developed under the paradigm of translingualism, in which language boundaries are considered fluid and a plurality of norms is valued (Canagarajah, 2013). Additionally, some in EAP have focused on the inequities involved in English’s dominance in academic settings. Swales (1997), for example, lamented the ways in which English has gobbled up “the other denizens of the academic linguistic grazing grounds” (p. 374), as powerful academic genres—such as the research article—have turned to English as a preferred language. Given these inequities and the diverse ways in which global users of English use language in academic settings, some have emphasized the value of having EAP students *explore* (if not produce)

diverse approaches to academic genres, as a means of raising their rhetorical awareness of what is possible, by whom, and with what consequences (Tardy, 2016).

Scholars have also begun to study more systematically the English used in interactions in which at least some of the interlocutors use EAL. This field of study, known as English as a lingua franca (ELF), often examines the linguistic features of these interactions and eschews the continued focus on seeing native-English speakers' use as the norm or target for learners. ELF research, including ELF in academic settings, has focused primarily on spoken rather than written English, though recent research has begun to explore academic writing (Mauranen et al., 2016).

Jenkins (2014, cited in Tribble, 2017) sees EAP as encompassing three main approaches: *conforming approaches*, exemplified by genre approaches; *challenging approaches*, illustrated through critical EAP and academic literacies; and the *paradigm-changing approach* of ELFA (English as a lingua franca in academic settings). Tribble (2017) problematizes the equation of genre approaches with conforming approaches (see discussion earlier as well), but does note the need to consider “the extent to which the notion of *native writing* has any value for those involved in research or teaching in English for Academic Purposes Writing Instruction” (p. 40). In contrast, Tribble argues (similar to Swales, 2004) that the distinction of expert/novice (or expert/apprentice) is a more meaningful one in EAP. Whether the ELF or translanguaging paradigms will continue to stand apart from EAP or be brought into a more coherent framework within EAP—as suggested by McIntosh et al. (2017)—remains an active question.

Writing for Publication

Attention to the research of and instruction in writing in English for publication has increased over the years, evidenced by the growth in research on the topic and, most recently, the emergence of a journal dedicated to its focus (*Journal of English for Research Publication Purposes*). While EAP has long focused on the research article genre, it has moved from text-focused inquiry to an inclusion of process-focused inquiry. Studies in the 1990s began to also consider the social and political contexts in which research publication in English occurs, as well as the publication process itself. Scholars, for example, have highlighted the inequities facing “periphery” and EAL scholars in accessing scholarship and making it through the gatekeeping structures which privilege dominant English users and norms (Canagarajah, 1996; Flowerdew, 1999; Lillis & Curry, 2010).

In recent years, controversies have emerged regarding the extent to which biases in publishing discriminate specifically against EAL users. Hyland (2016a), for example, took a notable stand on this issue arguing that biases in academic publishing are overly attributed to authors' language backgrounds. Instead, he argued, factors like isolation (experienced primarily by scholars in less developed countries) and experience or expertise are more influential than language in the publishing process. This position, however, is controversial, with others emphasizing that linguistic bias is a reality that many EAP students experience (e.g., Flowerdew, 2019).

Multimodality and New Genres

EAP research has tended to focus on linguistic features or rhetorical moves in the genres of focus—that is, on the written or oral (verbal) text—and these “genres of focus” have typically been high-stakes academic genres like research articles. Yet, with the rapid development of technology, we have seen an expansion of genres used by academics, particularly in digital genres. When Hyland and Hamp-Lyons (2002) described this emerging issue at the start of the 21st century, they wrote of new genres like “Powerpoint, email, ICQ and postings on electronic lists” (p. 7). Today's emerging genres differ in that they do not simply bring with them new modalities but also new audiences. For example, today's academics routinely write research articles and create visual slide presentations, but they also

may create video or graphical abstracts, animated data displays, academic podcasts, research group websites, or microblog informational posts. These new ways of communicating can also assist researchers in a growing need to communicate their work to the general public and to provide more open access to their research, a demand increasingly made by funding agencies (Luzón & Pérez-Llantada, 2019). At the same time, given the significant social challenges which academic research can inform (e.g., climate change, infectious disease, the rise in “fake news”), more public-facing genres (which tend to be multimodal) offer academics a means for increasing the social impact of their work.

This proliferation of new genres poses several potential challenges for the field of EAP. First, it expands the genre repertoire in academic settings, a change that may impact EAP instruction. At present, many of these new genres are used primarily by academic researchers, but as they become more common, they may become part of undergraduate education as well, much as PowerPoint slides have. Additionally, given the multimodal nature of many emerging academic genres, EAP practitioners may find themselves wrestling with how multimodal their instruction should be.

EAP as a field is still more firmly focused on verbal language, and the role of multimodality in EAP instruction is still a subject of some debate. While some have made strong arguments in favor of a more multimodal view of language (especially L2 writing) instruction (e.g., Belcher, 2017; Hafner, 2015), others have maintained that language should remain the primary focus (e.g., Qu, 2017). To be clear, few in EAP today would probably argue that there is no place for engaging students in multimodal communication in the EAP classroom; the debate is less about *whether* to attend to multimodality non-linguistic aspects of instruction and more about *how* or *how much* to do so. A related challenge is the role of technology in EAP classrooms, and specifically how teachers might be best supported in developing technology-enhanced instruction (Lawrence et al., 2020).

Future Directions of EAP

This chapter has provided a broad overview of the diverse and international field of English for academic purposes. Given the scope of the field, the snapshot here is necessarily simplified, but it hopefully gives readers a sense of the history of the field, some enduring and emerging tensions within it, and current questions and challenges that researchers and practitioners face. It should be noted that academic settings themselves are undergoing changes around the world, prompted by globalization, student mobility, financial constraints, and emerging technologies. Higher education in many countries has struggled during the COVID-19 pandemic, with changes in international student enrollment and instructional modality, and in some cases massive budget shortfalls. These shifts will most certainly affect EAP in local settings but will also impact the field in the coming years. In the future, we will see EAP continue to evolve as it embraces new genres and technologies; addresses issues of linguistic diversity and inequity; and faces a changing academic landscape.

References

- Allison, D. (1996). Pragmatist discourse and English for academic purposes. *English for Specific Purposes*, 15(2), 85–103.
- Belcher, D. D. (2017). On becoming facilitators of multimodal composing and digital design. *Journal of Second Language Writing*, 38, 80–85.
- Benesch, S. (1993). ESL, ideology, and the politics of pragmatism. *TESOL Quarterly*, 27(4), 705–717.
- Benesch, S. (1999). Rights analysis: Studying power relations in an academic setting. *English for Specific Purposes*, 18(4), 313–327.
- Benesch, S. (2001). *Critical English for academic purposes: Theory, politics, and practice*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Biber, D. & Conrad, S. (2009). *Register, genre, and style*. Cambridge: Cambridge University Press.
- Blue, G. (1988). Individualising academic writing tuition. In P. Robinson (Ed.), *Academic writing: process and product* (pp. 95–99). ELT Documents 129.

- Bocanegra-Valle, A. (2016). Needs analysis for curriculum design. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 560–576). Routledge.
- Braine, G. (2012). Twenty years of needs analyses: Reflections on a personal journey. In J. Flowerdew & M. Peacock (Eds.), *Research perspectives on English for academic purposes* (pp. 195–207). Cambridge: Cambridge University Press.
- Canagarajah, A. S. (1996). “Nondiscursive” requirements in academic publishing, material resources of periphery scholars, and the politics of knowledge production. *Written Communication*, 13(4), 435–472.
- Canagarajah, A. S. (2002). Multilingual writers and the academic community. *Journal of English for Academic Purposes*, 1(1), 29–44.
- Canagarajah, A. S. (2013). *Translingual practice: Global Englishes and cosmopolitan relations*. New York: Routledge.
- Cheng, A. (2018). *Genre and graduate-level research writing*. Ann Arbor: University of Michigan Press.
- Connor, U. (2016). Intercultural rhetoric. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 270–282). New York: Routledge.
- DePalma, M.-J. & Ringer, J. M. (2011). Toward a theory of adaptive transfer: Expanding disciplinary discussions of “transfer” in second-language writing and composition studies. *Journal of Second Language Writing*, 20, 134–147.
- Dudley-Evans, T. & St. John, M. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge: Cambridge University Press.
- Flowerdew, J. (1999). Writing for scholarly publication in English: The case of Hong Kong. *Journal of Second Language Writing*, 8, 123–145.
- Flowerdew, J. (2015). John Swales’s ideas on pedagogy in *Genre Analysis: A view from 25 years on*. *Journal of English for Academic Purposes*, 19, 102–112.
- Flowerdew, J. (2019). The linguistic disadvantage of scholars who write in English as an additional language: Myth or reality. *Language Teaching*, 52(2), 249–260.
- Flowerdew, J., & Peacock, M. (2001). The EAP curriculum: Issues, methods, and challenges. In J. Flowerdew & M. Peacock (Eds.), *Research perspectives on English for academic purposes* (pp. 177–194). Cambridge: Cambridge University Press.
- Gardner, S. (2012). Genres and registers of student report writing: An SFL perspective on texts and practices. *Journal of English for Academic Purposes*, 11, 52–63.
- Hafner, C. A. (2015). Remix culture and English language teaching: The expression of learner voice in digital multimodal compositions. *TESOL Quarterly*, 49, 486–509.
- Harwood, N. (2005). What do we want EAP teaching materials for? *Journal of English for Academic Purposes*, 4, 149–161.
- Helmer, K. A. (2013). Critical English for academic purposes: Building on learner, teacher, and program strengths. *Journal of English for Academic Purposes*, 12, 273–287.
- Hutchinson, T. & Waters, A. (1987). *English for specific purposes: A learner-centered approach*. Cambridge: Cambridge University Press.
- Hyland, K. (2000). *Disciplinary discourses: Social interactions in academic writing*. New York: Longman.
- Hyland, K. (2002). Specificity revisited: How far should we go now? *English for Specific Purposes*, 21, 385–395.
- Hyland, K. (2007). Genre pedagogy: Language, literacy, and L2 writing instruction. *Journal of Second Language Writing*, 16(3), 148–164.
- Hyland, K. (2016a). Academic publishing and the myth of linguistic injustice. *Journal of Second Language Writing*, 31, 58–69.
- Hyland, K. (2016b). General and specific EAP. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 17–29). New York: Routledge.
- Hyland, K. & Hamp-Lyons, L. (2002). EAP: Issues and directions. *Journal of English for Academic Purposes*, 1, 1–12.
- Hyland, K. & Shaw, P. (2016). Introduction. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 1–13). New York: Routledge.
- James, M. A. (2014). Learning transfer in English-for-academic-purposes contexts: A systematic review of research. *Journal of English for Academic Purposes*, 14, 1–13.
- Jenkins, J. (2014). *English as a lingua franca in the international university: The politics of academic English language policy*. Abingdon: Routledge.
- Johns, A. M. (1997). *Text, role, and context: Developing academic literacies*. Cambridge: Cambridge University Press.
- Johns, A. M., & Dudley-Evans, T. (1991). English for specific purposes: International in scope, specific in purpose. *TESOL Quarterly*, 25(2), 297–314.
- Kachru, B. (1992). *The other tongue: English across cultures*. University of Illinois Press.
- Kaplan, R. B. (1966). Cultural thought patterns in intercultural education. *Language Learning*, 16(1), 1–20.

- Lawrence, G., Ahmed, F., Cole, C., & Johnston, K. P. (2020). Not *more* technology but *more* effective technology: Examining the state of technology integration in EAP programmes. *RELC Journal*, 51(1), 101–116.
- Lillis, T. & Curry, M. J. (2010). *Academic writing in a global context: The politics and practices of publishing in English*. New York: Routledge.
- Lillis, T. & Scott, M. (2007). Defining academic literacies: Issues of epistemology, ideology and strategy. *Journal of Applied Linguistics*, 4(1), 5–32.
- Lillis, T. & Tuck, J. (2016). Academic literacies: A critical lens on writing and reading in the academy. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 30–43). Routledge.
- Luzón, M. J. & Pérez-Llantada, C. (2019). *Science communication on the internet: Old genres meet new genres*. Amsterdam: John Benjamins Publishing Company.
- Macallister, C. J. (2016). Critical perspectives. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 283–294). New York: Routledge.
- Martin, J. R. & Rose, D. (2008). *Genre relations: Mapping culture*. London: Equinox.
- Mauranen, A., Hynninen, N., & Ranta, E. (2016). English as the academic lingua franca. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 44–55). New York: Routledge.
- McIntosh, K., Connor, U., & Gokpinar-Shelton, E. (2017). What intercultural rhetoric can bring to EAP/ESP writing studies in an English as a lingua franca world. *Journal of English for Academic Purposes*, 29, 12–20.
- Negretti, R. & McGrath, L. (2018). Scaffolding genre knowledge and metacognition: Insights from an L2 doctoral research writing course. *Journal of Second Language Writing*, 40, 12–31.
- Paltridge, B. & Starfield, S. (2016). Ethnographic perspectives on English for academic purposes research. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 218–229). New York: Routledge.
- Pennycook, A. (1997). Vulgar pragmatism, critical pragmatism, and EAP. *English for Specific Purposes*, 16(4), 253–269.
- Perkins, D. N. & Salomon, G. (1994). Transfer of learning. In T. N. Postlethwaite & T. Husen (Eds.), *The international encyclopedia of education, Vol. 11* (pp. 6452–6457). Oxford: Pergamon.
- Qu, W. (2017). For L2 writers, it is always the problem of the language. *Journal of Second Language Writing*, 38, 92–93.
- Riazi, M., Ghanbar, H., & Fazel, I. (2020). The contexts, theoretical and methodological orientation of EAP research: Evidence from empirical articles published in the *Journal of English for Academic Purposes*. *Journal of English for Academic Purposes*, 48, 100925.
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11, 129–158.
- Spack, R. (1988). Initiating students into the academic discourse community: How far should we go? *TESOL Quarterly*, 22, 29–51.
- Spack, R. (1997). The acquisition of academic literacy in a second language: A longitudinal case study. *Written Communication*, 14, 3–62.
- Stoller, F. L. (2016). EAP materials and tasks. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 577–591). New York: Routledge.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Swales, J. M. (1997). English as tyrannosaurus rex. *World Englishes*, 16(3), 373–382.
- Swales, J. M. (2004). *Research genres: Explorations and applications*. Cambridge: Cambridge University Press.
- Swales, J. M. (2009). When there is no perfect text: Approaches to the EAP practitioner's dilemma. *Journal of English for Academic Purposes*, 8, 5–13.
- Tardy, C. M. (2009). *Building genre knowledge*. West Lafayette, IN: Parlor Press.
- Tardy, C. M. (2016). *Beyond convention: Genre innovation and academic writing*. Ann Arbor: University of Michigan.
- Tardy, C. M. & Swales, J. M. (2014). Genre analysis. In K. P. Schneider & A. Barron (Eds.), *Pragmatics of discourse* (pp. 165–187). Berlin: de Gruyter.
- Tribble, C. (2017). ELFA vs. genre: A new paradigm war in EAP writing instruction? *Journal of English for Academic Purposes*, 25, 30–44.
- Wingate, U. (2012). Using academic literacies and genre-based models for academic writing instruction: A 'literacy' journey. *Journal of English for Academic Purposes*, 11, 26–37.

English for Specific Purposes

Classroom Needs Analysis

James Dean Brown

Purpose

Over the years, I have published a number of books and articles that discussed or focused on *need analysis* (NA) (see Brown, 1995, 2005, 2009, 2012, 2016a; McKay & Brown, 2015). All except that last citation with McKay covered NA in language programs where groups of teachers of the same course could work together on figuring out their students' core needs. However, McKay and Brown (2015, pp. 44–66) focused more narrowly on NA for individual classrooms and teachers, albeit for *English for international purposes*. In this chapter, I will zero in on the issues involved in individual teachers doing NA, but for any second language classroom.

Important Developments in NA

How Does NA Fit into L2 Teaching?

Needs analysis is a phrase that gets bandied about widely in the literature, particularly in discussions of curriculum or syllabus design—typically in relationship with English¹ for specific purposes (see, e.g., Brown, 1995, 2016a; Hutchinson & Waters, 1987; Long, 2005; and West, 1994). But what is *needs analysis*, and how is it different from *needs assessment*? For all intents and purposes, the two phrases mean the same thing, and since I will use NA as my abbreviation throughout this chapter, you can choose whichever you like best. Richards and Schmidt (2011, p. 389) provide a fairly simple definition for NA:

...the process of determining the needs for which a learner or group of learners requires a language and arranging the needs according to priorities. Needs assessment makes use of both subjective and objective information

(eg data from questionnaires, tests, interviews, observation)...

My much more elaborate definition of NA in Brown (1995) may have gone overboard in the other direction:

the systematic collection and analysis of all subjective and objective information necessary to define and validate defensible curriculum purposes that satisfy the language learning requirements of students within the context of particular institutions that influence the learning and teaching situation.

(p. 36)

I simplified that definition in Brown (2016a): “the systematic collection and analysis of all information necessary for defining and validating a defensible curriculum” (p. 4). Unfortunately, understanding that definition requires knowledge of two key bits of jargon:

- A *defensible curriculum* is teaching that most of the stakeholders in the learning process (teachers, students, administrators, parents, etc.) in a particular context can live with.
- The *necessary information* is any quantitative, qualitative, or mixed-methods information that can be used for defining, shaping, and bolstering the defensible curriculum.

NA defined that way can prove useful at classroom, program, provincial, national, or even international levels. However, my experience is that the larger the scale of the NA, the less it will succeed in revealing defensible needs for any specific group of students like those in your classroom. In contrast, an informal teacher-conducted NA for a specific classroom of students is more likely to accurately reflect the needs of the students involved.

Is Classroom NA a New Idea?

The citations in the previous section provide a list of some of the NA articles and books published in our field. Unfortunately, very few publications have focused on NA for teachers concerned about the needs of small groups of students. Seedhouse (1995, p. 60) provides “an example of how needs data were collected, interpreted, and translated into materials design” for a single course. And Brown (1995) supplies a number of examples of NAs done for particular courses (though not specific classes). Even among the relatively few publications focused on what teachers could do in their classrooms, those that do exist fail to appear in international journals, and are instead published in local journals (e.g., Kırkgöz, 2011; Trevisol, 2020; for other examples, see those cited in Table 2.1 in Brown, 2016a, p. 33). In addition, those NAs that are published often have self-conscious, defensive, and minimizing titles that include phrases like *pilot research* or *case study*.

Why You Should Do NA in Your Classroom

As mentioned earlier, this chapter takes the view that classroom-level NA can and should be a valuable and useful part of every teacher’s toolkit. Regrettably, language teachers around the world are underpaid, overworked, and all too often underappreciated. Quite reasonably, then, they tend to resist any proposal—like this chapter—that requires more work on their part with no payoff for them or their students. Here I argue that NA activities will pay off for you and your students in a number of ways:

1. Like most teachers, you probably recognize that each group of students is different, even in a course that you have taught many times. Thus, you no doubt spend at least some time wondering what your students need to learn above and beyond what you typically teach in the course. This is called NA—be it ever so informal. Why not make your NA efforts more systematic?
2. Based on our teaching experience, we often think that we know what our students are interested in, why they want to learn the language, and what language learning is, but honestly, we do not because we cannot see things from their perspectives. We fail to recognize that by definition we are older than them and perhaps out-of-date in their view.
3. Much of what happens in many English language classrooms is *general English* or what has snidely been referred to as *teaching English for no obvious reason*, or TENOR (Carver, 1983, p. 131). Such purposeless language teaching has been widely criticized. Fortunately, the very

act of doing NA inevitably gives purpose to the teaching and learning of even so-called general English (e.g., Seedhouse, 1995).

4. Anyone who has ever learned another language knows that managing to reach native or near-native proficiency is a decades long project (usually taking many thousands of hours of practice). For most language learners, this presents what McKay and Brown (2015, p. 45) call “the impossible dream of speaking fluent English.” In a typical course of say 45 semester hours, only a small fraction of the language can be taught. Thus, using NA to effectively select and organize any language course is essential for setting narrower, more realistic, and achievable goals.
5. Using any information that you get from your discussions/interviews/questionnaires about your students’ needs, you can better serve your students by providing (a) clearly defined and delimited learning points and (b) language and examples that will actually be interesting and useful in their lives during and after they leave school.
6. Even with a well-designed course, a teacher may encounter problems. NA can be used to investigate and solve such problems. See for example Seedhouse (1995) who sets out to solve a problem by specifying and defining the psychosocial needs of the students in his particular class through NA (p. 64). As in action research (Burns, 2010), you should consider examining any problems you are having and shape your NA so it will help solve those problems.
7. In this chapter, I supply prototype items/questions that you can easily adapt to your situation. This should provide you with a starting point and minimize the amount of work you will actually have to do in your NA.
8. Once you have created your own discussion/interviews/questionnaires, you will be able to use them again year after year. Such efforts can pay off for the rest of your career.
9. Your NA will involve students in their own learning, and they will enjoy, even like, being consulted.
10. When it’s all over, you should get a sense of satisfaction from having done just a bit extra to meet the needs of your particular group of students.

Preliminary Considerations in Classroom NA

Before starting the NA process, you may want to think about what NA tools to use, sources of NA information to consider, and NA data to examine.

Deciding What NA Tools to Use

You may be surprised at how many tools you have readily available for gathering NA information. While there are many more tools that can be used in NA (for a complete discussion of your options, see Brown 2016a, pp. 63–86), you should consider at least the following four because they are readily available, relatively practical, and easy to integrate into normal teaching:

1. Class discussions/brainstorming on what topics interest students, language points they think are important, classroom activities that they find useful, etc.
2. Interviews with a few students or former students on the same sorts of issues as #1.
3. Closed-response questionnaire items (e.g., checklists or the 1, 2, 3, 4, 5 Likert items, etc.) to see how widely certain views are held.
4. Open-response questionnaire items (i.e., questions that students answer in writing) to allow for further possibilities you may have forgotten to include in closed-response items or to continue exploring specific issues.

You might be surprised at how much you can learn from your students using these four tools—especially once you have interpreted that information through the filter of your knowledge and experience.

Deciding What Sources of NA Information to Use

Eslami-Rasekh and Valizadeh (2004) highlighted the importance of considering different perspectives in an NA by examining “...students’ preferences in instructional activities, teachers’ awareness of students’ preferences, and the degree of discrepancy between them” (p. 8). In the next several subsections, I will examine how you can consider the students’ views while filtering them through your reflections on and reactions to those views.

Student Involvement

A number of researchers have stressed the importance of gathering NA information from students. However, Holme and Chalauisaeng (2006) take it one step further by arguing for the importance of involving the learners themselves as needs analysts in the NA process. That way, their energy can be enlisted, and they will become more invested in the whole process. One danger is that students are likely to focus on what they *want*, and as any teacher will tell you, what they want and what they need may be quite different things. One way to circumvent such a narrow focus on *wants* is to expand any interviews, discussions, or questionnaires that you develop to include alternate perspectives including the students’ background, abilities, priorities, behaviors and experiences, attitudes, opinions and values, feelings, knowledge, as well as problems and solutions they might suggest for those problems (for more on these perspectives, see Brown, 2016a, pp. 99–100).

Teacher Reflection

Your role is essential in NA because, as a teacher, you know much more than students about language learning and about classroom teaching. But like it or not, as a teacher you are usually older than your students. So, in a very real sense, you may not know what the students are interested in, why they want to learn the language, or what language learning means in an ever-changing field. One way to find out such things is called NA. At the same time, Holme and Chalauisaeng (2006) found that there is often a gap between what the “learner needs and student wants” (p. 406), and it is that gap that you are particularly qualified to fill through self-reflection, reflection on the course you are teaching, and reflection on the information that only students can provide in the NA.

Other Sources of NA Information

Depending on the situation in each classroom, other people may also serve as useful resources. For example, in some situations, other teachers, local administrators, parents, or politicians may prove important. But those sources of information should only be considered if they are important to understanding your students’ language learning needs or situational constraints on those learning needs.

In addition, various readily available documents may prove useful. A few to consider include at least: any relevant literature in the field, institutional mission statements, applicable textbooks, and/or syllabuses, and student learning outcomes (SLOs)² already defined for the particular course. These sorts of documents may have already taken first steps in analyzing the needs of students who may be similar to yours. However, careful examination and selection will be necessary before such information will be useful and relevant for your students.

Interactions Between Sources of Information

The various categories of information listed in the previous three subsections may at first appear to be discrete, but in fact they often interact. For example, the documents you examine may help you to think of questions to ask students during interviews or discussions. Similarly, views expressed in interviews or discussions with students may help you to develop a questionnaire which in turn may aid in determining how widely those views are held among your students.

Deciding What NA Information to Examine

Many teachers mistakenly believe that NA should reveal what students need to learn in terms of *the language forms that they need to study*. Certainly, as I argued first in Brown (1995), any NA must account for *language needs*, that is, the linguistic elements like grammar, vocabulary, and pronunciation, but also other important components of language like spoken grammar, connected speech, etc. (see for example, Brown, 2004, or Brown & Crowther, In press). However, NA should also include *situational needs*, that is, conditions and constraints in the teaching situation that may need to be included (e.g., resources, politics, and other institutional considerations, etc.).

Steps to Consider Taking in Your NA

NA will likely work better if you systematically follow at least the following five main steps.

Step 1: Keeping Up with the Literature

One of the true constants in language teaching is that the literature is constantly changing and adding to our ways of thinking about what and how we teach in the classroom. Structural to situational to communicative to task-based approaches are all very different general approaches to teaching and learning that I have experienced or used in my years in the profession, not to mention all the other more specific aspects of the field that keep evolving. Thus, the professional lens that you bring to bear on NA will depend on when and how you have learned languages, when and where you did your teacher training, and how you have taught. Nonetheless, keeping up with the literature can help you to stay current and energized. Indeed, since you are reading this chapter, you are doing just that. Keeping up with the literature can also better arm you to review and select from among the available textbooks, given that they too are constantly evolving to keep up with current thinking in language teaching.

Step 2: Starting with Class Discussions and Interviews

One good way to start gathering your own NA information is through *brainstorming* with your students in class *discussions*. While this is a relatively efficient way to gather information from all the students in one session, remember that anything students say in class is only what they are willing to say in front of other students. To complement these discussions, consider also conducting a few private *interviews* with key students because they might be willing to say things in private that they would not say in front of the whole class. In deciding who to interview, you may want to select different types of students with regard to gender, language backgrounds, majors, proficiency levels, etc. (whichever of these might seem important to you in the context of your class). One important reason for starting with discussions and interviews is to figure out what the key issues and questions are that you should be addressing in your NA. Thus, seeking different types of information at this stage is a good idea.

Step 3: Integrating NA into the Class Schedule

As mentioned earlier, students can also serve as information gatherers. For example, in order to find out what materials and information might be interesting to students in a graduate-level writing course for science majors, I asked the students to do the following three tasks and write about them in the journals that they turned in every Friday: *week one*—find out and report what style manual is used for publishing in your major field (unlike the humanities with the MLA manual and social sciences with the APA manual, I had discovered that the sciences and engineering have many style manuals) and, if possible, borrow or order a copy; *week two*—interview a professor in your field about what it means to write in your field and report at least three key points; and *week three*—locate, copy, turn in three journal articles in your field, and report three important features that you noticed across all three articles.

I always suspected that what they learned from those three exercises about writing in their special areas of study may have been more useful to them than the rest of my course. More importantly, I was gathering useful NA information and involving them in the NA process. Note that by having them turn in three articles I was also supplying myself with samples of writing from various sciences to use later in class as examples and materials.

Step 4: Using Questionnaires to Find Out How Widely Student Views Are Held

Based on what you have learned from all of the information described in the previous subsections, you will probably wonder how many of your students hold the views that you found using qualitative methods. The statements and questions in this section (and the Appendices to this chapter) are meant to serve as resources that you can select from to simulate classroom NA discussions, to plan or design NA interviews, and to create questionnaires. There are far too many examples to include all or even a majority of them in your NA activities. Hence they are categorized by topic to help you decide which you might want to include. These ideas were adapted from Holme and Chalauisaeng (2006), McKay and Brown (2015), Seedhouse (1995), Wan Mahzan et al. (2020), and from my personal experience doing NA.

Notice that some of the following examples are statements and others are questions. Obviously, statements can easily become questions and vice versa. For example, *I like to communicate with people from other countries* can easily be changed to *How much do you like to communicate with people from other countries?* Naturally, the choice is yours, but note that statements tend to lend themselves better to the closed-response 1, 2, 3, 4, 5 Likert sorts of items than do questions, and conversely, the question format often works better in discussions, interviews, and open-ended questionnaire items.

The checklist format shown in Table 5.1 (which would normally have more than four items) is easy for students to respond to but hard to analyze in the sense that all students are not answering all questions, or rather they are answering each item as a sort of black-and-white Yes/No question.

Table 5.1 Example Checklist Format with a Few Ideas Focused on Reasons for Learning English

<i>The three most important reasons I am studying English are to:</i>	<i>Check only two</i>
1. Speak to foreign people	
2. Work with foreign tourists	
3. Participate in international business	
4. Understand other cultures	

Table 5.2 Example Likert Item Format with a Few Ideas for Student Attitudes Items

Directions: Carefully read each statement and then circle the number that represents your attitude toward each one (SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; and SA = Strongly Agree)

Statements	SD	D	N	A	SA
1. I want to learn English as close to the native-speaker level as I can.	1	2	3	4	5
2. I feel sure I can learn English near to the native-speaker level.	1	2	3	4	5
3. I want to attend a college or university after high school.	1	2	3	4	5
4. I don't know why I am studying English.	1	2	3	4	5

Life is rarely black and white like that, and this format leaves little room for gray. Consequently, I have rarely used this checklist format and have not been happy with the results when I have.

Likert items provide a more useful format, as shown in Table 5.2—more useful because most students will respond to all items and there is room for gray (D, N, and A) on each item (for much more on Likert items, see Brown, 2000, 2011).

Note first that for each item in Table 5.2, I have assigned numbers 1, 2, 3, 4, and 5 for the categories SD, D, N, A, and SA with the high number corresponding to the high degree of agreement and lowest number to the lowest degree of agreement. Doing so will help with the analysis of these items later by framing them as numerical quantities. The reasons for converting to quantitative analysis for these sorts of items will be explained in Step 5 later.

Note also that going from *strongly disagree* to *strongly agree* is only one way to frame such items. As you will see in Table 5.3, it can be effective to set up your items to distinguish degrees of *usefulness* (none to much), *enjoyment* (none to much), or any other categories that fit what you are trying to learn in your NA.

Finally, notice that the items in Table 5.2 are framed as full sentences, they could also have begun with an introductory phrase followed by separate items that start with an infinitive as shown in Table 5.1. For other examples using that format, see Appendix A.

Another way to frame such questions is with an introductory phrase followed by a list of clauses following *because*:

I am studying English because:

1. English is an important language worldwide.
2. I enjoy learning English.
3. my friends are studying English.
4. my parents want me to know English.

I have also found it informative to ask students for their views (from two perspectives) about the different activities I have used with them in class in the format shown in Table 5.3.

For additional ideas on classroom activities that you might want to include in a questionnaire like Table 5.3, see Appendix B.

Table 5.3 Example Likert Item Format with a Few Ideas for Student Attitudes Items

Usefulness		Activities	Enjoyment	
None	Much		None	Much
1	2 3 4 5	Pair work	1	2 3 4 5
1	2 3 4 5	Group work	1	2 3 4 5
1	2 3 4 5	Singing songs	1	2 3 4 5

Open-ended items can also be very useful in NA for exploring various issues. You can use a format where the students are asked to complete a statement as follows (be sure to leave space for them to write after each one):

Complete the following statements in your own words:

1. When I finish school, I will use English regularly to:
2. When I finish school, I want to work as a:
3. My favorite classroom activities are:
4. My least favorite classroom activities are:
5. The most important thing for a teacher to do in class is:
6. The one thing a teacher should never do in class is:

Or you might ask more directly by using questions as follows:

Answer the following questions in your own words:

7. Why are you studying English?
8. What way of learning a language works best for you?

Both approaches can be useful, but if you use both, it is probably a good idea to group them together as I did so students do not get confused by going back and forth between formats.

These open-ended formats are especially good for early discussions, brainstorming, interviews, or to probe further at the ends of sections in a questionnaire. The results are relatively hard to analyze, but open-ended questions are more likely than closed-response formats to produce new information that you did not expect.

There are many other topics you might want to include in your discussions, interviews, and questionnaires. You might want to consider topics like the students' views on their problems in learning English, attitudes toward learning the language, general goals in life, goals after language study, roles as students in class, and teacher's role in class (for ideas for items in each of these topic areas, see Appendix C).

Step 5: Analyzing NA Information

Gathering discussion, interview, and open/closed-response questionnaire information is a good first step. But in NA, "...the crux of the matter is how one interprets the data collected, and what one does with it. When you receive a pile of questionnaires back, how do you convert them in practical terms into courses or materials?" (Seedhouse, 1995, p. 60). Indeed, the Seedhouse article provides a good example "of how needs data were collected, interpreted, and translated into materials design" (p. 60).

Analyzing Your Qualitative Information

At this point, you may have a pile of notes from discussions and interviews, or from open-ended items on questionnaires. The first step in analyzing such information is to put everything that is related to one question or issue together in one place. Then read through that set of information looking for salient or interesting features or interesting patterns in the responses while circling or underlining and/or taking notes on what you are finding. Then, repeat the process while constantly changing the focus of what you are looking for. For example, the first time through, you might look for general patterns, then the second time, for ways students are agreeing with each other, then the third time for ways they are disagreeing, and so forth. Later in the process, it may also help to ask yourself specific questions that can lead you to reflect on what your specific students' views mean. Consider, for example, asking yourself questions like the following:

1. Who are my students? How old are they and what grade are they in?
2. How much time per week are they in English class? How many hours can they be expected to do homework per week?
3. What are their mother tongues? How similar is the writing system, vocabulary, and grammar of their L1 to English?
4. How much exposure to English do they get outside of class?
5. How many class hours have they studied English before coming to my class?
6. How positive are their attitudes toward English studies?
7. How willing are they to communicate in class?
8. What are their interests outside of class?

Be sure to keep careful notes on any interesting features or patterns you notice, as well as your answers to the these questions (for much more on qualitative analysis of survey data, see Brown, 2001, Chapter 5).

Analyzing Your Quantitative Information

One easy way to analyze your questionnaire results is to think of them in terms of the numbers the students have chosen. One way to do this is to tally the number of students who chose each option (e.g., 1, 2, 3, 4, and 5) for each item. You can use an extra copy of your questionnaire to do this as shown in Table 5.4.

Table 5.4 Example of Tally for Likert Items for Student Attitudes Items (based items in Table 5.2)

Directions: Carefully read each statement and then circle the number that represents your attitude toward each one (SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; and SA = Strongly Agree)

<i>Statements</i>	<i>SD</i>	<i>D</i>	<i>N</i>	<i>A</i>	<i>SA</i>
1. I want to learn English as close to the native-speaker level as I can.	1 1	2 2	3 4	4 15	5 8
2. I feel sure I can learn English near to the native-speaker level.	1 14	2 8	3 6	4 1	5 1
3. I want to attend a college or university after high school.	1 6	1 4	1 2	1 8	1 8
4. I don't know why I am studying English.	1 6	2 7	3 5	4 5	5 6

In Table 5.4, you will find example tallies for items 1 to 4 for 30 students written in bold script. Take a good hard look at the patterns of responses to see what you can learn from them. For example, when I look at the tally for item 1, it tells me that most of the students ($15 + 8 = 23$, or over two-thirds) agree or strongly agree that they want to learn English to a native-speaker level, though 4 students do not seem to know or have no opinion and 3 disagree or strongly disagree ($1 + 2 = 3$). Since I know this is an impossible dream for most of them, I may choose to have a discussion with them about how daunting the task of language learning is as well as why and how we need to break it up into bite-sized pieces for each course.

For item 2, the pattern seems to be in the opposite direction toward most students disagreeing or strongly disagreeing, so apparently they do not feel confident that they can achieve the dream that many expressed in item 1. This information can also feed into a class discussion of the same issue.

Item 3 could be interpreted as indicating that you have two groups of students: 10 ($6 + 4 = 10$) who do not intend to go on to higher education, 16 ($8 + 8 = 16$) who do, and 2 who are not sure. This can tell you many things but consider some possibilities: you could decide to provide different instruction to these two groups or provide instruction suitable for the non-university group to both groups and then supplement with English for academic purposes for the university-bound group. In any case, the results indicate to you that people have different purposes/needs for English, and you may want to figure out a way to deal with that issue by modifying what you cover or by discussing it with your students.

Item 4 is odd because the responses are so evenly spread. I realized almost immediately, when looking at this item, that the wording may have caused confusion among the students, that is, the negative wording of the statement which combines with the negative nature of disagreeing or strongly disagreeing may make this double-negative item hard to process for some people. I would probably ignore these responses this time around and chalk it up as a learning experience. I would also learn to avoid negative statements in the future and make a note to change this particular statement to positive the next time I use the questionnaire. For example, *I know why I am studying English* would probably work better. Notice also that only 29 ($6 + 7 + 5 + 5 + 6 = 29$) of the 30 students were included in the tally for item 4, so one person did not respond, perhaps again because of confusing wording.

Other ways to examine such items numerically include calculating the average answer for each item (by adding up the responses and dividing by the number of responses). This sort of analysis can be facilitated by using a computer spreadsheet like Microsoft Excel if you are comfortable with that type of software, but such software is not absolutely necessary (for much more on quantitative analysis of survey data, see Brown, 2001, Chapter 4).

After your quantitative analysis, it may be a good idea to step back and look for patterns across the items by again asking yourself certain questions. For example, at this stage, you might be able to consider such questions as these:

1. Why are my students studying English?
2. What skills will my students need to use in the future?
3. Are they likely to use English for personal communication or for academic purposes, or both?

All of your analyses (qualitative and quantitative) together can also help you answer crucial questions like these:

1. What topics should I include?
2. What activities should I use?
3. How much of the material can I cover?
4. How fast can I teach this material to these students?

Looking at the Whole Picture

Answering NA questions like those in the previous two subsections can help you rethink and revise your syllabus, student learning outcomes, materials, and assessment procedures (see Brown, 2016a, chapter 6 for ideas on how to do this). However, recognizing that different data sets will likely tell you different things, you may want to continue combing through your results looking for connections between those sets. Or comparing groups of people may be revealing. Sometimes subsets of students (like the high and low proficiency ones) will *disagree* with each other. Or your point of view and those of your students will sometimes *agree*, but other times you and your students may *disagree*. For example, if you think singing in English every week for 10 minutes is useful and worthwhile, and the students *agree*, you will have considerable support for keeping that in your teaching. However, if you think pair work is useful and consistent with your task-based approach, but your students *disagree* (say on the questionnaire), you will need to consider what that means. Perhaps the disagreement is trying to tell you that you need to change your ways, or more likely, that you need to sell this pair work activity better by regularly explaining to the students why it is good practice for their productive language use.

You may also find information in one data set that helps you to *clarify* or *elaborate* your thinking about something you observed in another set (a sort of *ah ha* moment, or *now I see*). Or you may find *examples* in one data set (say of students who explained how pair work practice has helped them function in the real world) that help you to understand/explain something you found elsewhere in your results. Hence looking across your different sets of data may be revealing in ways that are valuable above and beyond looking straight ahead at the results. Those are all features and benefits of *mixed-methods research* (for more on this, see Brown, 2014, 2015, 2016b).

One last point, here, it is important not to sit back and relax after doing an NA, thinking that it is done once and for all. As Kaewpet suggests, “Learner needs should be analysed on an ongoing basis because they are likely to change over time, depending on contextual and human affective variables...” (2009, p. 214).

Conclusion

Naturally, any decisions on whether or not to change what you are doing in your classroom based on NA information will be up to you. However, the very acts of considering your own beliefs, examining contextual factors, and reflecting on the views of students will probably inspire you to make changes and do so rationally. Such NA activities may also lead to useful discussions with colleagues and students based on your new information. Equally important, if you make any changes and explain them to your students, they will feel as though they were listened to and respected.

From another angle, NA can be considered a form of assessment with feedback that helps you decide what and how your students should be learning. As such, NA will quite naturally be directly connected to other forms of assessment in that one outcome of NA should be new course SLOs—ones that express what you want your students to be able to do by the end of your course. In turn, assessing those SLOs will help you monitor student progress and provide them with feedback (Brown, 2012, 2019). Furthermore, Wilinkiewicz-Górniak (2019) explicitly stresses the value of using formative assessment for positive feedback and ongoing needs analysis. And Bouzidi (2009) agrees: “Most importantly, a needs analysis should take place at every stage—before, during, and after a course” (p. 15).

What form language instruction takes will depend on you. Nonetheless, you will benefit from knowing what your students are thinking because: (a) they are different from your previous students, (b) they may have ideas that you would never consider, (c) they are probably younger and different from you, (d) they may have some strange ideas that you should know about so you can grapple with them, and (e) they will appreciate being consulted.

Teaching language for no obvious purpose is widely recognized as being too grammar oriented, too repetitive, and too general, as well as inefficient and unprofessional. NA can provide the information you will need to find *purposes* for language learning related to what you and your students feel is important. Your part in all of this is to use your professional training, knowledge, and experience to take the NA information you have gathered, analyze it, and turn what you learn into instruction (i.e., SLOs, materials, classroom activities, and assessment procedures) that will ultimately achieve those *purposes* and turn them into focused language learning.

Appendix A: Additional Example Items on Why Students Are Studying English

I am studying English so that I can:

1. Communicate with English speaking friends.
2. Access higher education.
3. Gain status and prestige.
4. Access international information.
5. Get better grades.
6. Pass the English examination.
7. Travel to other countries.
8. Get a better job.
9. Understand pop songs in English.
10. Understand television or films in English.
11. Understand English language books.
12. Surf the Internet.

Appendix B: Additional Example Items for Classroom Activities

- Class discussions
- Conversation practice
- Doing crossword puzzles
- Doing homework
- Extensive reading
- Grammar drills
- Learning vocabulary
- Playing video games
- Reading on the Web
- Task-based activities
- Teacher lectures
- Using computers
- Watching videos
- Working alone

Appendix C: Additional Topics for Discussions, Interviews, and Questionnaires

Here, I will suggest additional topics that you might want to cover and provide a few examples for each. These can be covered in open- or closed-response items.

Problems with English could effectively be formatted as Likert 1 2 3 4 5 (No problem to Neutral to Big problem) items, as follows:

To what degree are the following areas of English problems for you?

1. Pronunciation
2. Speaking
3. Listening (to native-speakers)
4. Reading
5. Writing

Another area that you might be interested in is the students' *attitudes toward learning the language*. These and the following items could be addressed with Likert 1 2 3 4 5 (Strongly disagree to Strongly agree items) as follows:

1. I find learning English enjoyable.
2. I admire English speaking cultures.
3. I like sports in the UK and USA.
4. I like English because it is easy to learn.

Consider also asking students about their *general goals in life* as in:

1. I want to go to college or university after I graduate from high school.
2. I will probably start working right after high school.

Or with more focus on goals after language study:

1. When I complete school, I will use a lot of English.
2. I want to learn English as near to native-speaker level as I can.
3. I will need English for my job after school.
4. I need English to study at a university abroad.

Or even, asking about their views on the *roles of students in class* as in:

1. I prefer speaking only English in class.
2. I prefer speaking both English and my native language in class.
3. I prefer sitting silently and listening attentively in class.
4. I am willing to speak up and practice aloud in English class.

Or their views on the *roles of teachers in class* with items like the following:

English teachers should:

1. use native-speaker English models in class
2. use only English in class
3. correct all of my speaking errors
4. correct all of my writing errors

Notes

- 1 Much needs analysis literature is about *English* language needs. Thus, I will often refer to English, but the same principles apply to the teaching and learning of any language.

2 *Goals, aims, objectives, behavioral objectives, learning objectives, instructional objectives, and more recently student learning outcomes (SLOs)* have had many names over the years and have long served to define and document what we want students to be able to do by the end of a given course. For the sake of simplicity and because the distinctions among these labels are not important to the arguments in this chapter, I will simply refer to them as *SLOs* throughout.

References

- Bouzidi, H. (2009). Between the ESP classroom and the workplace: Bridging the gap. *English Teaching Forum*, 47(3), 10–19.
- Brown, J. D. (1995). *The elements of language curriculum: A systematic approach to program development*. Boston: Heinle and Heinle.
- Brown, J. D. (2000). Statistics Corner. Questions and answers about language testing statistics: What issues affect Likert-scale questionnaire formats? *Shiken: JALT Testing & Evaluation SIG Newsletter*, 4(1), 18–21. www.jalt.org/test/bro_7.htm
- Brown, J. D. (2001). *Using surveys in language programs*. Cambridge: Cambridge University.
- Brown, J. D. (2004). Promoting fluency in EFL classroom. In T. Newfield (Ed.), *Conversational fluency: Ideology or reality: Proceedings of the JALT Pan-SIG Conference, Kyoto, Japan, 2003*. Tokyo: Japan Association for Language Teaching. www.jalt.org/pansig/2003/HTML/Brown.htm
- Brown, J. D. (2005). Second language studies: Curriculum development. In K. Brown (Ed.), *Elsevier encyclopedia of language and linguistics* (2nd ed., completely new). Oxford: Elsevier.
- Brown, J. D. (2009). Foreign and second language needs analysis. In M. H. Long & C. J. Doughty (Eds.), *The handbook of language teaching* (pp. 269–293). Malden, MA: Wiley-Blackwell.
- Brown, J. D. (2011). Statistics Corner. Questions and answers about language testing statistics: Likert items and scales of measurement. *Shiken: JALT Testing & Evaluation SIG Newsletter*, 15(1), 10–14. www.jalt.org/test/bro_34.htm
- Brown, J. D. (2012). EIL curriculum development. In L. Alsagoff, S. McKay, G. W. Hu, & W. A. Renandya (Eds.), *Principles and practices for teaching English as an international language* (pp. 147–167). London: Routledge.
- Brown, J. D. (2014). *Mixed methods research for TESOL*. Edinburgh, UK: Edinburgh University Press.
- Brown, J. D. (2015). Mixed methods research. In J. D. Brown & C. Coombe, (Eds.), *Cambridge guide to second language research* (pp. 78–84). Cambridge: Cambridge University Press.
- Brown, J. D. (2016a). *Introducing needs analysis and English for specific purposes*. New York: Routledge.
- Brown, J. D. (2016b). Statistics Corner. Questions and answers about language testing statistics: Characteristics of sound mixed methods research. *Shiken Research Bulletin*, 20(1), 21–24. http://teval.jalt.org/sites/teval.jalt.org/files/20_01_21_Brown_Statistics_Corner.pdf
- Brown, J. D. (2019). Assessment feedback. *The Journal of AsiaTEFL*, 16(1), 334–344.
- Brown, J. D. & Crowther, D. (In press). *Shaping students' pronunciation: Teaching the connected speech of North American English*. New York: Routledge.
- Burns, A. (2010). *Doing action research in English language teaching: A guide for practitioners*. New York: Routledge.
- Carver, D. (1983). Some propositions about ESP. *The ESP Journal*, 2, 131–137.
- Eslami-Rasekh, Z. & Valizadeh, K. (2004). Classroom activities viewed from different perspectives: Learners' voice and teachers' voice. *TESL-EJ*, 8(3), 1–11.
- Holme, R. & Chalauisang, B. (2006). The learner as needs analyst: The use of participatory appraisal in the EAP reading classroom. *English for Specific Purposes*, 25, 403–419.
- Hutchinson, T. & Waters, A. (1987). *English for specific purposes: A learning-centred approach*. Cambridge: Cambridge University Press.
- Kaewpet, C. (2009). A framework for investigating learner needs: Needs analysis extended to curriculum development. *ResearchGate*. www.researchgate.net/publication/237267088
- Kırkgöz, Y. (2011). A blended learning study on implementing video recorded speaking tasks in task-based classroom instruction. *TOJET: The Turkish Online Journal of Educational Technology*, 10(4), 1–13.
- Long, M. H. (Ed.) (2005). *Second language needs analysis*. Cambridge: Cambridge University.
- McKay, S. L. & Brown, J. D. (2015). *Teaching and assessing EIL in local contexts around the World*. New York: Routledge.
- Richards, J. C. & Schmidt, R. (2011). *Longman dictionary of language teaching and applied linguistics* (4th ed.). Oxon: Routledge.
- Seedhouse, P. (1995). Needs analysis and the general English classroom. *ELT Journal*, 49(1), 59–65.
- Trevisol, J. R. (2020). A needs analysis questionnaire for the L2 classroom: Insights from a Brazilian study on tasks and technology. *Revista X*, 15(3), 126–145.

- Wan Mahzan, M. S., Alias, N. A., & Ismail, I. S. (2020). Investigating the needs of developing a digital vocabulary learning material for Malaysian indigenous learners in ESL classroom. *Journal of Nusantara Studies* 2020, 5(2), 282–302. <http://dx.doi.org/10.24200/jonus.vol5iss2pp282-302>
- West, R. (1994). Needs analysis in language teaching. *Language Teaching*, 27, 1–19.
- Wilinkiewicz-Górniak, L. (2019). The value of positive feedback and ongoing needs analysis in the process of formative assessment. *ResearchGate*: www.researchgate.net/publication/337647042

Teaching English to young learners

Sue Garton and Serdar Tekin

Introduction

Until relatively recently, teaching young learners (YLS) was seen as something of a neglected area of research (Copland & Garton, 2014) in spite of the very rapid spread of English language learning in primary schools since around the end of the 1990s. However, the last few years have seen a huge increase in scholarship in this area, with edited collections and monographs in areas such as policy (Enever, 2018), critical pedagogy (López-Gopar, 2016), teacher education (Zein & Garton, 2018), and assessment (Nikolov, 2016). There have also been a number of research-based collections covering a range of topics, such as Rich (2014), Bland (2015a), as well as theoretical books (Murphy, 2014; Pinter, 2011) and more practical approaches (Shin & Crandall, 2014), not to mention an entire Routledge Handbook dedicated to the area (Garton & Copland, 2018). The body of work in published articles has also increased exponentially, leading Ibrahim (2020) to refer to teaching young language learners as “a runaway train”. The challenge, therefore, in writing a chapter like this one is what to include and, perhaps more significantly, what to leave out.

We have necessarily had to be very selective and a number of decisions have guided our choice, which we explain in the following paragraphs. At the same time, this section serves to give some background information about the field.

Age: the first consideration is who we are considering as young learners in this chapter. The term “young learner” can potentially be applied to anyone under the age of 18. However, this is not particularly useful given the enormous differences in learning between a 5-year-old and a 17-year-old. Ellis (2014) argues for the importance of at least distinguishing between pre- and post-11–12 years old. Both Ellis (2014) and Valente (2019), writing on behalf of the IATEFL YLTSIG, propose a classification based on UNESCO’s (2012) International Standard Classification of Education (ISCED) which uses level of schooling, and we follow the same principle. Therefore, in this chapter, we focus on primary (or elementary) level, which will normally be from the ages of 5–6 to 11–12. In support of this position, Enever (2016, p. 353) goes as far as to suggest, rightly in our view, that the older age group, over 12, “should no longer be described as ‘young learners’ – at least, with regard to ELT.”

Context: as Enever (2016) notes, teaching young learners takes place in a wide variety of contexts. The first distinction is between those learning in private language schools and those in state classrooms. The amount of exposure to English also varies from contexts where English is the medium of instruction, through varying degrees of bilingual education, to those where children may

only receive one or two lessons a week of English instruction. Johnstone (2018) distinguishes three time allocation contexts:

1. Modest time, with between 1–4 hours a week dedicated to English (Enever, 2016);
2. Significant time, with 20–30% of the curriculum in English. This is often referred to as Content and Language Integrated Learning (CLIL) or Content-Based Instruction (CBI);
3. Substantial time, where 50–90% of the curriculum is in English. These are Early Partial Immersion, Early Bilingual Education or Early Total Immersion contexts.

(Johnstone, 2018, pp. 19–20)

In this chapter we focus primarily on state school classrooms and modest time contexts as, in spite of the growth in popularity in forms of bilingual education and especially CLIL in many parts of the world (Banegas & Hemmi, 2021; Butler, 2015), the majority of young learners are still learning through just a few hours a week in state schools.

Another aspect of context is the distinction between English learning inside and outside the classroom. There is a growing body of research looking at young learners' language use outside the classroom, especially in what Graves (2008) calls target-language removed contexts (see, for example, Jeon, 2014, Sayer & Ban 2014, 2018). However, for this chapter, we are focusing on the classroom context as that is still where most English learning takes place.

Garton and Copland (2018, p. 2) note that “[t]oday the young learner landscape is rich and varied” and covers a vast range of topics and issues as outlined earlier. However, there are areas that have been identified as needing further research (Copland & Garton, 2014) and in this chapter we have chosen to focus on three of those areas that are classroom-based and related: use of technology, young learner pedagogy, and classroom language use.

Technology use with YLs

With the recent developments in technology and its common use in daily life, it is undeniable that Information and Communication Technology (ICT) has had a great influence on learning and teaching in many contexts. Despite their limited availability in some settings, particularly in poorer countries (Enever, 2016; Garton et al., 2011), various types of technological devices are more and more prevalently used to teach English in English as a Foreign Language (EFL) and English as a Second Language (ESL) classrooms (and outside the classroom). These include computers, PowerPoints, audios, videos, digital images, games, interactive whiteboards (IWBs), etc. (Whyte & Schmid, 2018). In fact, IWBs are believed to offer a range of combined benefits of teaching materials such as television, computer, chalkboard, plain whiteboard (Hall & Higgins, 2005). Probably it is due to these benefits that many governments invest in the integration and development of ICT devices in schools, particularly IWBs, including China (Wu, 2012), Turkey (Aşık & Gönen, 2020), and England (Hall & Higgins, 2005).

It is considered that the use of different technological devices with YLs has positive impacts on many aspects. According to Butler et al. (2014), they can help teachers to attract learners' attention and motivate them via contextualized cues such as videos and other multimedia on IWBs. Similarly, in a more recent study, Taghizadeh and Yourdshahi (2020) report that children are more able to gain a higher level of spoken communication skills in ICT integrated classrooms. Sadeghi and Dousti (2013) also argue that ICT-integrated teaching could be considered as an effective and enjoyable way to teach English structures and grammar. They found that children in the ICT-integrated classrooms evidently outperformed their peers with whom teachers did not use technology to teach the same language points. However, interestingly, the length of technology use did not have an important effect on learners' grammar gain probably due to their limited concentration span. Computer games

were also found to be beneficial in teaching vocabulary to YLs, particularly low-level learners by Vasileiadou and Makrina (2017). The researchers argue that such games significantly increase learners' motivation and promote language learning.

Providing an overview of use of digital games in language education, Butler (2018) argues that serious games, the ones particularly designed for educational purposes, can be used as an effective means of teaching English as long as they are meticulously integrated and implemented in the process by teachers. In a similar vein, Liu and Song (2021) emphasize that online games in ELT should be suitable for learners' level and age, and intrigue their interest in order to enable "flow" in language learning, which is "characterised by intense concentration and involvement that bring about high levels of performance on a task" (ibid., p. 2). As a more contemporary way of teaching a language, Cowie and Sakui (2020) suggest the use of videos both in face-to-face and remote education. However, rather than just watching the videos made for language education, they recommend creating new ones through a smartphone, which is becoming more accessible nowadays and a free software (e.g. Flipgrid, VoiceThread, and Padlet). Teachers can use them to give instructions at the whole course level and in individual activities, make explanations on a particular language point, give individual feedback on learners' work and act as a role model by demonstrating different language skills. Probably the best part of this is that learners have the chance to pause, rewind, slow down, and watch it again later if they need to. Learners can also create videos to report on language skills, particularly speaking, and send these to their teachers and friends.

Considering the previously mentioned benefits, research shows that both teachers and learners mostly have positive attitudes towards the use of technology in English learning and teaching (e.g. Chen et al., 2021; Hall & Higgins, 2005; Taghizadeh & Yourdshahi, 2020).

Challenges and implications for practice

However, there are several issues to take into consideration in utilizing ICT in language teaching such as teachers' ICT skills, lack of technical support, and limited availability of ICT in some contexts. Lack of teacher skills in technology is an important point that is probably the most often expressed in various studies (e.g. Aydin, 2013; Hall & Higgins, 2005; Taghizadeh and Yourdshahi, 2020; Yáñez & Coyle, 2011). Despite the previously mentioned teachers' positive perceptions of use of technology in English classes, some teachers have little knowledge about ICT tools, which might cause them to feel less confident with teaching. In this respect, teachers' pedagogical knowledge and technical knowledge to use technology in YL English classes should be improved by providing them with professional development sessions. These should be regular trainings rather than one-off ones in order to keep up with continuously developing technology. Moreover, since an ICT-integrated way of teaching requires teachers to have new approaches and perspectives, different from traditional ways, it would be useful to shape pre-service teacher training accordingly, a point also emphasized by Aşık et al. (2020) and Yáñez and Coyle (2011). This could be done through teaching how to use various ICT tools as a teaching source and helping the trainees to have a creative and critical way of thinking towards the technological tools that have the potential to enhance learning for YLs.

Despite the increasing number of studies in use of technology in ELT, we believe that more studies are needed to have a better understanding of ICT-integrated English teaching to children. In this way, it would be possible to fully exploit the potential of technology, integrate it into L2 classes more effectively, and hence enhance teaching English to YLs.

Young learner pedagogy

Whilst advice on effective pedagogy in young learner classrooms abounds, Copland and Garton (2014) and Butler (2015) both note the lack of empirical research, and it seems particularly important

to see whether that is still the case today. Young learner pedagogy can cover a very wide range of classroom approaches and activities, but one constant is the call for holistic approaches with frequent advocacy for the use of songs, stories, games, and drama. However, there has been little focus on these activities and how effective they are. In this section, we therefore take the principles of age-appropriate pedagogy and holistic approaches to give an overview of empirical research into the use of songs, stories, and drama in the YL classroom. We have excluded games as the term covers such a wide range of classroom activities. Moreover, much recent research specifically focusing on games tends to study either games and technology, which is covered in the previous section, or online gaming outside the classroom, which is beyond the scope of this chapter (but see, for example, Butler et al., 2014; Jeon, 2014).

Songs, stories, and drama are all advocated as important age-appropriate activities for the YL classroom and for good reasons. They are all examples of embedded language learning (Bland, 2015b) and they all draw on the characteristics of second language acquisition in younger learners, such as greater reliance on oral language and on concrete rather than abstract concepts (Nguyen 2021), non-analytical processing of language and fewer inhibitions (Bland, 2015b). They all fulfill the conditions that have been identified as important for successful child language learning, such as giving exposure to rich language input; representing authentic forms of communication; potentially introducing new cultures to children; and making lessons entertaining, thus increasing motivation and engagement (Shin & Crandall, 2014). They are all claimed to have affective, cognitive, and linguistic benefits for young learners of English (Ma'rifat, 2017), while Ibrahim (2020) notes that such holistic approaches encourage critical reflection and deep learning.

Songs, stories, and drama can cover a multitude of different materials and activities in the YL classroom. For example, songs might include chants and rhymes; they might be invented for the purpose of language learning, or be traditional songs for English-speaking children. Stories may be invented for language learning, written for English-speaking children or by the learners, paper-based or digital, told by the teacher or by the children. Such variety represents a complication when attempting any consideration of research findings as studies can be of very different activities.

At first glance, it would seem that the calls for more empirical research into effective pedagogy have only been partially heeded at best. Davis's (2017) review of research into songs in the YL classroom covered only nine articles and these included studies of learners in pre-school. On the other hand, there continue to be numerous recent articles that present theoretical justifications for the use of songs, stories, and drama in the young learner classroom, together with practical suggestions for teachers (see, for example, Mejjini, 2016; Millington, 2011 for songs; Shin & Crandall, 2014; Mourão, 2015 for stories; Bland, 2015b for drama). Yet it seems fundamental to verify how these activities are used in classrooms and how effective such practices are.

Where empirical research has been carried out, many are quasi-experimental studies, or based on classes set up specifically for research purposes. There are very few studies carried out in natural classroom settings (see later for details). Davis (2017) excluded some studies from his review as they gave insufficient information about implementation and/or the assessment tools used. We found the same issue and had to exclude a number of studies, although we have included some articles even where there are question marks over the rigour of the research, or where some detail is lacking, as there are potentially interesting implications that, at the very least, indicate avenues for further research.

Songs

Songs are considered one of the most useful activities in the YL classroom to develop pronunciation and listening skills, vocabulary, and language patterns (Coyle & Gómez Gracia, 2014), yet empirical studies into their use are scarce. Although concerned with pre-school children, we include Coyle

and Gómez Gracia's (2014) study here, partly because of the lack of other sufficiently detailed empirical studies about songs, and partly because their study showed interesting findings that are likely to be relevant to older young learners too. Moreover, their pre-school classes of 5–6-year-olds would be Grade 1 in other contexts.

Concerned specifically with vocabulary learning, Coyle and Gómez Gracia's (2014) study of 25 children in a semi-private school in Spain used pre- and post-tests to ascertain both receptive and productive vocabulary learning via songs. The research was carried out over three 30-minute classes as part of the children's regular classes. They found an overall statistically significant increase in receptive vocabulary between the pre- and post-tests, but not for productive vocabulary. Interestingly, they also found that many children increased their vocabulary recall after one month, indicating that children may need "off-line" time to process language input. They also noted that teachers' actions and use of onomatopoeias, generally considered to support learning, also hinder learning if they distract from the target language. Finally, the researchers found a great deal of variation amongst individual children, something that is generally not focused on in research studies.

Whilst not focused explicitly on effectiveness, research into teachers' attitudes and opinions about pedagogical activities like songs is useful because it tells us something about whether and how such activities are likely to be used in the classroom, and what challenges there might be. One example in this area is Şevik (2011) who looked at teachers' opinions about using songs in the YL classroom in southern Turkey. Based on questionnaire data, he found that teachers had positive attitudes towards using songs. They believed that songs were motivating and pedagogically useful, especially for developing listening skills and vocabulary, but that they had problems in finding appropriate songs to use and many were unsure about how to use them in the classroom. The teachers also did not know how to gauge the effectiveness of songs on language development. Almutairi and Shukri (2016) carried out a similar study in Saudi Arabia using a slightly adapted version of Şevik's (2011) questionnaire. As in Şevik's (ibid.) study, the teachers showed positive attitudes towards using songs in the YL classroom and saw them as a valuable tool for both skills (listening and speaking) and vocabulary development, and for motivation. However, this group of teachers also felt that there was a lack of resources and that using songs in class was culturally inappropriate. In spite of that, the majority said they use songs as much as possible, although their use did not appear to be very frequent.

In a rare example of a study based on classroom observation, Ma'rifat (2017) carried out a case study into a grade one class in a private primary school in Indonesia using observation, interviews, and written documents. The teacher in this study used songs as part of a classroom routine (good morning and good-bye songs), to enhance engagement and motivation, and explicitly to elicit and teach vocabulary. Moreover, Ma'rifat's (ibid.) study indicated that the children found songs enjoyable and that they helped them to understand vocabulary. Although lacking in detail, Ma'rifat's study is the only one we found that actually focuses on classroom practice and it offers some valuable indications as to how teachers might actually be using songs in class.

Stories

As Kalantari and Hashemian (2016) note, most research on the use of stories with young learners has been carried out in the field of first language literacy and this would appear to still be the case.

Kalantari and Hashemian's (2016) own study is one of the few empirical studies into the use of stories and focuses on the use of stories to improve vocabulary learning. Carried out in a private language school with 60 children aged between 10 and 14 in Iran, researcher-prepared stories were used with the explicit aim of teaching vocabulary. Stories were added to lessons from the class coursebook in an experimental group, while a control group just followed the book. The researchers carried out pre- and post-tests in both groups and found a significant improvement in post-test scores of both the control and the experimental group, but the experimental group outperformed the control

group. The authors also claim that the use of stories increased children's interest, but this was based on informal teacher/researcher observation.

A very different focus is found in Brunsmeier and Kolb's (2017) study. They were interested in the use of story apps and their potential to promote independent reading in children. The study took place with a group of 3rd and 4th grade (8–11-year-old) German children during their extra-curricular English Book Club. The researchers were particularly interested in which features of the story apps were beneficial to the children. Brunsmeier and Kolb (*ibid.*) identified four key aspects that supported the YLs in their understanding: audio narration, animation and sound, vocabulary support, and reader participation and co-creation (*ibid.*, p. 8). Features which required the child to interact with the story were seen as particularly useful. However, these features only supported learning if they contributed to the meaning of the story, otherwise they hindered understanding, a finding similar to that of Coyle and Gómez Gracia's (2014) study on songs. Brunsmeier and Kolb (2017) conclude that agency is an important concept in the experience of story apps, but participation has to have an effect on the development of the story or children can be distracted.

Agency is also important in Yanase's (2018) study. While not strictly based on classroom pedagogy, Yanase (*ibid.*) reports on how she introduced a story-based syllabus to develop reading and listening in a group of 8–11-year-olds in a language school. She also used elements of negotiated syllabus (Breen & Littlejohn, 2000) to give the young learners some control over their own learning. The children chose both which books to read and which pre-story and post-story activities to do. Yanase (2018) found that, after some initial hesitation, the children participated with enthusiasm, and she concluded that rapport amongst the children improved and a democratic atmosphere was established in class. Yanase (2018) noted that children as young as eight can be "active agents" of their own learning.

Drama

Bland (2015b, p. 220) describes drama as "a magical box of tools; the more you take out of it, the more you find inside for future use". Drama also covers a wide range of activities, from short warm-up activities to dramatic performances that are developed over weeks. Many positive effects of the use of drama have been identified, such as increased motivation, engagement, and confidence (Rew & Moon, 2013). Drama in the YL classroom can take many forms. Bland (2015b) distinguishes between scripted and unscripted drama, while Alasmari and Alshae'el (2020) list role-play, mine, simulation, improvisation, and dramatized story-telling as examples of drama.

Alasmari and Alshae'el (2020) and Rew and Moon (2013) both carried out studies into the effectiveness of drama in the YL classroom, using pre- and post-tests to measure the effects on language learning. Alasmari and Alshae'el's (2020) study was with 46 sixth graders (10–12 years old) from two classes in Saudi Arabia, while Rew and Moon's (2013) research was with 49 Korean children from two grade four classes. Both studies were quasi-experimental with pre- and post- tests, but while Alasmari and Alshae'el (2020) had a control group, Rew and Moon (2013) did not. Moreover, while Alasmari and Alshae'el (2020) used a fairly standard pre-test and post-test of multiple-choice questions focusing mainly on grammar and vocabulary, Rew and Moon (2013) were interested in the extent to which the children learned the words and expressions in the script they acted out.

Alasmari and Alshae'el's (2020) study was carried out over an eight-week period during which the experimental group used three sketches prepared for the research and based on the children's coursebook. The control group just followed the book. Alasmari and Alshae'el (*ibid.*) do not give details as to what was done in the classes, although they do refer to teachers using mainly role-play, with some simulation. The researchers found that both groups made statistically significant progress, but the progress of the experimental group was significantly higher. The classroom observations also showed increased oral fluency, an increase in learner talk, and greater interaction between the

teacher and the children. However, the researchers identified a number of challenges: there was much use of Arabic both with the teacher and amongst the children themselves, noise levels were high, and some disengagement was observed as not all the children were assigned roles. They conclude that drama is useful in language learning, but some thought needs to go into its use to be able to maximize the benefits.

Unlike other studies which tend to focus on effects on general English proficiency, Rew and Moon (2013) were interested in whether children learnt the expressions they were exposed to in a drama activity. Using a short-scripted play, the children took part in drama activities for one hour a week over eight weeks. A gap-fill pre-test and an identical post-test were administered to check the children's knowledge of expressions from the play, while a second post-test was carried out to see if they could transfer the expressions to other contexts. The researchers found a statistically significant improvement in the scores after the eight-week intervention and this was greater for higher proficiency students. However, out of the 37 expressions tested, the number that the children knew was relatively low in both the pre- and post-test. Interestingly, in the second post-test, the children were able to produce about half of the 11 expressions tested, but this was in what Rew and Moon (*ibid.*) call an "all or nothing phenomenon": they either produced a perfect expression or nothing at all. It seems likely that the children had memorized the expressions as chunks, so when asked to produce just one word in a gap-fill sentence, this may have been more difficult for them than producing the whole expression, even in a new context. Rew and Moon (*ibid.*) concluded that drama is a useful activity, but they expressed a note of caution.

Combining activities

Whilst all the studies mentioned focus on a particular activity, the classroom procedures, where these are detailed, tend to combine activities. Thus, for example, Kalantari and Hashemian's (2016) study was explicitly about the effect of stories, but the implementation also involved playing vocabulary games and role-play through memorization, effectively combining stories, games, and drama. Other studies are more explicit in their focus on the way in which activities can combine together to support language learning and three studies are of particular interest here. Serrurier-Zucker and Gobbé-Mévellec (2014) looked at using picture books as the basis for drama, while Chou (2014) studied how games, songs, and stories combine in promoting vocabulary development and increasing motivation; Kaminski (2019) was interested in the effects of multimodal texts and focused on songs, chants, and stories.

Kaminski's (2019) research took place in Germany with grade 3 and 4 children (8–10 years old). Her observations of the children learning the weather through multimodal stories and songs showed that the children attempted to join in verbally and non-verbally with both the story and the song. Even when the teacher asked them to focus on the actions and not repeat the words for both the story and the song, the children continued to do both. It appears that actions and words were inseparable for the children and Kaminski (*ibid.*) interprets this as evidence of high levels of engagement. Moreover, learners responded to all modes of input, were happy with partial understanding, constructed meaning from what they saw, and their verbal contributions increased.

Chou (2014) studied 72 grade 2 (age 8) to grade 5 (age 11) children in Taiwan. A special intensive course was set up, based on five famous international festivals. The target language was six words and two marker (model) sentences for each festival. Each class was based on a story about the festival, explicit teaching of the target language, three games to practice, and songs. On the basis of observations and self-assessment questionnaire, Chou (*ibid.*) concluded that children across all four grades responded positively to the classes, although the way they reacted to the songs and stories varied. For example, children in the lower two grades were more likely to imitate the teacher's actions during the song. They were also more inclined to listen to the story, while the children in the higher grades

tended to interact more with the teacher, for example, asking questions. The children improved their test scores across all the grades in the post-test, but the type of test item influenced the results, with children at higher grades performing better on more cognitively demanding test types. This is an important insight for future studies both for research design and for the need to recognize the influence that the test may have on results.

Finally, Serrurier-Zucker and Gobbé-Mévellec (2014) used picture books as a starting point for drama to increase motivation and oral communication. Their study was with 39 10–12-year-olds in France and involved both English and Spanish classes. They developed two units of six lessons, each dramatizing a picture book, moving from telling the story to acting it out in a performance. Questionnaire results showed that the children greatly enjoyed the classes. They liked being able to move around and they felt it was easier to learn the language. The teachers found the experience challenging but were positively surprised by the ability of the children to learn their lines. The researchers observed a general increase in confidence in using English, and the teachers confirmed that the children's oral abilities had improved.

Challenges and implications

Given that there is still a real lack of rigorous research studies into the effectiveness of young learner pedagogy, it is difficult to draw any implications for teaching practice here, but we can draw some conclusions for research.

There are a number of possible reasons for the lack of research. The few studies that do exist are often carried out in private schools. It seems likely that access to state schools is more difficult, with permission from the authorities often hard to obtain. Ethics approval may also be more difficult to obtain. Moreover, teachers may be under pressure to follow the curriculum and have less time and fewer opportunities to work with researchers in interventionist studies. Most of the studies discussed here are interventionist, based on lessons set up specially for research purposes, often outside normal class time. The lack of classroom-based studies may be due to the fact that teachers do not routinely use songs, stories, and drama in their classrooms. Garton et al. (2011) found that only 42% of respondents in their study reported using stories every lesson or often. Although the figures were higher for songs (67%) and for role-play (61%), it may still be difficult to find teachers using these activities to take part in research.

Many of the studies cited earlier show some methodological weaknesses. In particular, quasi-experimental studies using pre- and post-tests often use discrete-item, grammar, and vocabulary tests to assess holistic activities so there is a mismatch between intervention and measurement. As Chou (2014) notes, the way learners are tested will heavily influence the results. Moreover, individual variation (Coyle & Gómez Gracia, 2014), age/grade (Chou, 2014), and proficiency (Rew & Moon, 2013) are all factors which it would seem could influence the effectiveness of the use of activities. The role that these factors play certainly needs more research.

Many studies offer too little detail about what actually took place, particularly in experimental classes. Classrooms are extremely complex places and without knowing exactly what song, story, and drama activities were carried out, how and what was happening alongside them, we cannot be sure of the effect of a particular activity. We call on researchers to ensure that sufficient detail is given to afford a better understanding of the research that was carried out.

In spite of the limitations, the findings of the few studies available are potentially intriguing, particularly around the way in which young learners appear to learn in chunks (and are able to transfer these chunks to new contexts [Rew & Moon, 2013]), and the delayed recall noted by Coyle and Gómez Gracia (2014). More research is needed but overall, indications are that the use of holistic activities in the YL classroom has positive effects on both language learning and motivation. Further research is necessary, particularly into how such activities might work in the overall ecology of the

language classroom, but also into how to encourage teachers to make more use of songs, stories, and drama in their classrooms.

Languages in the YL classroom

Just as Alasmari and Alshae'el (2020) regarded the frequent use of L1 as a challenge for L2 use in dramas in the YL classroom, language choice in ELT classrooms has been subject to much debate for a long time. The debate has mostly been influenced by the various approaches and methods in vogue at a particular time, such as Grammar Translation Method, Direct Method, and Communicative Language Teaching (for a more detailed discussion, see Hall & Cook, 2012).

Despite the ongoing debate on this issue, it appears that the pendulum has lately moved from exclusive L2 use to the use of both languages in L2 teaching and learning in academic circles at least (Tekin & Garton, 2020). The main idea suggests that using both languages facilitates L2 learning/teaching in many aspects and therefore can or should be judiciously used where a need arises (Butzkamm, 2003; Hall & Cook, 2012; Littlewood & Yu, 2011).

Once referred to as codeswitching, this term has several drawbacks such as its emphasis on the separation of languages, viewing use of L1 as a deficient language skill in L2 classes, and regarding the L2 as the norm in language education (Garcia & Lin, 2017). Due to such drawbacks, nowadays “translanguaging” is a more accepted term to describe the use of more than one language to teach L2 (ibid.). Translanguaging is a flexible use of multiple languages for both teachers and learners to draw on all their linguistic resources (Copland & Ni, 2018). In this regard, languages are all considered as valuable and contributing to the language learning process in a different way. In order to explain the complementary role of both L1 and L2, Creese and Blackledge (2010, p. 108) state that “each language is used to convey a different informational message, but it is in the bilingualism of the text that the full message is conveyed.” They observed several benefits of bilingual language teaching in complementary schools in the UK such as keeping the pedagogic tasks moving, using simultaneous literacies to engage students, and negotiating meaning among learners.

Since translanguaging suggests a dynamic and flexible use of languages depending on several general contextual factors and immediate context, there can be no consensus about guidelines for when, how, and how much each language should be used in the YL classroom (Tekin & Garton, 2020). Factors specific to each teaching/learning setting such as class size, teachers' motivation, proficiency level and teaching experience, learners' motivation, age, and proficiency level will determine language use. It is difficult to have a general theory or framework for translanguaging, so several researchers argue that we should leave the decision to teachers who know best about their teaching contexts and affecting factors (Copland, 2018; Edstrom, 2009; McMillan & Rivers, 2011; Tekin & Garton, 2020). We explore these issues with specific reference to young learners in this section.

YLS' characteristics and classroom language use

Language use is a contentious issue regardless of the teaching context. However, it becomes even more complicated with YLs due to additional classroom variables arising from their characteristics as children. YLs are different from older learners in many ways (Moon, 2005; Pinter, 2017), but for the sake of brevity, we explain only a few in the following paragraphs.

In terms of motivation to learn English, YLs lack instrumental motivation. Due to lack of feeling the need for learning English for external reasons such as passing an exam or getting a promotion in their future job, it is difficult to extrinsically motivate them in English classes. They may not find the relevance of learning English particularly in EFL settings where they rarely meet English out of school. Instead, their desire to learn English mostly depends on how much they enjoy the lessons and get along with the teacher. At this point, translanguaging strategies could improve learners'

understanding when they have difficulty grasping the meaning in L2, help them make sense of what is going on in the lesson, and hence enjoy it more. Scrivener (2012) gives several specific examples, the relevance of which might change depending on the contextual factors. He argues that translanguaging could be a useful aid to explain difficult vocabulary items or grammar points which are difficult to teach through demonstration and explanation in L2, to deal with students' affective needs, and to individually support low-level students.

There are several recent empirical studies revealing the benefits of translanguaging in YL classrooms (Copland & Yonetsugi, 2016; Oga-Baldwin & Nakata, 2014; Scheffler & Dominska, 2018; Tekin & Garton, 2020). Comparing two native English teachers working in Japanese primary schools (one knew Japanese while the other did not), Copland and Yonetsugi (2016) found that the bilingual teacher used translanguaging efficiently to enhance learners' understanding including checking understanding, doing revision, supporting learners' pronunciation, engaging them in the class by motivating, and providing extra support for less able students. In contrast, the other teacher faced some problems because of lack of L1 knowledge including giving up trying to understand learners, ignoring their L1 contributions, and misunderstanding them. In a study with five teachers working in different state primary schools in Turkey, Tekin and Garton (2020) also found that translanguaging was an important component of the language classes for all participant teachers who used L1 for eight main functions such as giving instructions, providing feedback, asking questions, explaining different aspects of English, and developing interpersonal relations with learners. Teachers believed that learners were more able to understand L2 and engage in the activities in a bilingual environment.

Another characteristic of YLs that is potentially related to language use is their interest in meaning rather than form during the learning process (Cameron, 2003; Enever, 2015; Pinter, 2017). Thus, as noted in the previous section, children are able to grasp L2 in meaningful contexts as long as they make sense of what is going on and interpret it based on their limited world knowledge. In order to make the context more meaningful and comprehensible for the learners, the use of translanguaging could be regarded as a justifiable choice in L2 teaching. In this regard, Copland (2018) suggests the use of translanguaging for learners to draw on their L1 and L2 knowledge, and therefore understand and produce L2 structures by making sense of the context. Shin (2006) similarly encourages YL teachers to teach L2 bilingually rather than in an L2-only way in order not to move away from the focus of the lesson by spending excessive time to make a difficult word or expression comprehensible in L2. This could also be useful to save time and focus on the learning objectives in L2 particularly in contexts where there is limited L2 teaching time.

There is also some empirical evidence showing that translanguaging helps YLs to better understand L2 (e.g. Copland & Yonetsugi, 2016; Macaro & Lee, 2013; Song & Lee, 2019). Macaro and Lee (2013) conducted a comparative study with 12-year-old young learners and older learners (tertiary level) in order to investigate their attitudes towards teachers' language choice. It was found that older learners were more in favour of L2 instruction probably because of higher proficiency and previous learning experience. However, L1 was preferred by the YLs who were concerned about lack of understanding teachers' L2 use. They stated that they felt more comfortable when both L1 and L2 were allowed and therefore were more willing to communicate and engage in the activities. The results also revealed that they had cognitive overload stemming from exclusive L2 use. Similarly, Song and Lee's (2019) study revealed how effective translanguaging was on learners' performance in English. Following assigning learners to two different groups (translanguaging and L2 only classes) and applying pre- and post-tests, the researchers found that learners with L1/L2 use outperformed the others in L2 only classes in terms of vocabulary acquisition. It shows that translanguaging helped learners to better comprehend new L2 vocabulary items and do well in the post-test.

Moreover, despite some learners learning English at younger ages in the world, there are a considerable number of students who are at the very beginning of their English journey in primary

schools. They might view learning an L2 as what Brooks-Lewis (2009, p. 224) describes “entering the alien territories”; therefore, exposing them exclusively to an L2 might cause them to become anxious and discouraged from learning English. Meeting learners’ affective needs is important particularly because of their young age and often emphasized by several researchers (Copland, 2018; Tekin & Garton, 2020). In this regard, it could be a good practice to consider a transition period during which both teachers and learners can freely use translanguaging for learners to get familiarized with L2. The level of translanguaging can be adjusted in time as learners become more competent in L2.

A great majority of people are bilingual in the world and draw on more than one language in daily life (Canagarajah, 2013; Crystal, 2003). Considering this, classroom contexts should be similar to the outside world, where using more than one language is an everyday reality. As Copland (2018) puts it, rather than viewing L1 as something to be avoided, translanguaging should be “normalized” in L2 learning/teaching rather than viewing the exclusive L2 use as the norm, which is still the case in many parts of the world.

Implications for practice

While we are optimistic about translanguaging due to its facilitative role in many aspects, we believe that contextual factors are paramount in deciding how it should be implemented. These are both global and context-specific factors including learners’ motivation and level, class size, focus of the lesson, and teaching hours. Since teachers are best placed to be aware of their learners and context, we should leave the decision to them. However, they should be able to make informed decisions and develop their own principles depending on specific contexts. For this reason, it is important to offer them awareness-raising training to use either language with clear rationale in their mind. Several ways could be used to do it such as action research (Burns, 2010) and peer observation (Bailey, 2006).

It would also be a good practice to help teachers to adopt reflective teaching, which is in one sense looking back to teaching practice, recalling events, and critiquing own teaching (Eröz-Tuğa, 2013). In this way, they can be aware of their language choice by reflecting on and examining how, when, and why L1 is used in L2 classes to develop a better understanding of their way of teaching in terms of language use and improve it accordingly. A good example of self-reflection on L1 use in L2 classes is provided by Edstrom (2009).

Conclusions

Teaching young learners is a rapidly growing and evolving field in both EFL and ESL contexts. There is a lot to consider on this issue but, because of limitations of space, we have chosen to focus on three areas in this chapter that had been identified as important in the literature. These are use of technology, young learner pedagogy, and classroom language use, and we believe that they are *sine qua non* in YL ELT education.

We have found a number of recent studies on the use of technology and on classroom language use, offering interesting findings from various contexts. They also provided teachers with useful implications for classroom practice. However, despite suggestions for the use of effective pedagogy with young learners such as songs, stories, and dramas, studies into the effectiveness of particular pedagogies remain scarce. It is possibly partly due to difficulties in designing and implementing research, and possibly due to the lack of use of such pedagogies in actual classrooms. Much remains to be done in this area. Future research could usefully focus on exploring how effective are the pedagogical approaches used by the teachers with young learners. It would enable us and teachers (particularly inexperienced ones) to be aware of what to pay attention to or avoid in the application of these approaches.

References

- Alasmari, N. & Alshae'el, A. (2020). The effect of using drama in English language learning among young learners: A case study of 6th grade female pupils in Sakaka City. *International Journal of Education and Literacy Studies*, 8(1), 61–73.
- Almutairi, M. & Shukri, N. (2016). Using songs in teaching oral skills to young learners: teachers' views and attitudes. *International Journal of Linguistics*, 8(6), 133–153.
- Aşık, A. & Gönen, S. İ. K. (2020). On-site technology use in language classrooms through the eyes of the pre-service teachers: A qualitative study. *ELT Research Journal*, 9(2), 194–218.
- Aşık, A., Köse, S., Yangin Ekşi, G., Seferoğlu, G., Pereira, R., & Ekiert, M. (2020). ICT integration in English language teacher education: Insights from Turkey, Portugal and Poland. *Computer Assisted Language Learning*, 33(7), 708–731.
- Aydin, S. (2013). Teachers' perceptions about the use of computers in EFL teaching and learning: The case of Turkey. *Computer Assisted Language Learning*, 26(3), 214–233.
- Bailey, K. M. (2006). *Language teacher supervision: A case-based approach*. Cambridge University Press.
- Banegas, D. & Hemmi, C. (2021). *International perspectives on CLIL*. Palgrave Macmillan
- Bland, J. (Ed.). (2015a). *Teaching English to young learners: Critical issues in language teaching with 3-12 year olds*. Bloomsbury Publishing.
- Bland, J. (2015b). Drama with young learners. In J. Bland (Ed.), *Teaching English to young learners. Critical issues in language teaching with 3-12 year olds* (pp. 219–238). Bloomsbury Publishing.
- Breen, M. P. & Littlejohn, A. (2000). *Classroom decision-making: Negotiation and process syllabuses in practice*. Cambridge University Press.
- Brooks-Lewis, K. A. (2009). Adult learners' perceptions of the incorporation of their L1 in foreign language teaching and learning. *Applied Linguistics*, 30(2), 216–235.
- Brunsmeyer, S. & Kolb, A. (2017). Picturebooks go digital—the potential of story apps for the primary EFL classroom. *CLELE Journal*, (5/1).
- Burns, A. (2010). *Doing action research in English language teaching: A guide for practitioners*. Routledge.
- Butler, Y. G. (2015). English language education among young learners in East Asia: A review of current research (2004–2014). *Language Teaching*, 48(3), 303.
- Butler, Y. G. (2018). Gaming and young learners. In S. Garton & F. Copland (Eds.), *The Routledge handbook of teaching English to young learners* (pp. 305–319). Routledge.
- Butler, Y. G., Someya, Y., & Fukuhara, E. (2014). Online games for young learners' foreign language learning. *ELT Journal*, 68(3), 265–275.
- Butzkamm, W. (2003). We only learn language once. The role of the mother tongue in FL classrooms: Death of a dogma. *The Language Learning Journal*, 28(1), 29–39.
- Cameron, L. (2003). Challenges for ELT from the expansion in teaching children. *ELT Journal*, 57(2), 105–112.
- Canagarajah, S. (2013). *Literacy as a translingual practice: Between communities and classrooms*. Routledge.
- Chen, X., Shu, D., & Zhu, Y. (2021). Investigating in-service foreign language teachers' beliefs about using information and communication technology. *Asia Pacific Education Researcher*, 30(1), 59–70.
- Chou, M. H. (2014). Assessing English vocabulary and enhancing young English as a Foreign Language (EFL) learners' motivation through games, songs, and stories. *Education 3-13*, 42(3), 284–297.
- Copland, F. (2018). L1 in the primary classroom – some considerations. *IATEFL TEYL WorldWide*, 2, 56–60.
- Copland, F. & Garton, S. (2014). Key themes and future directions in teaching English to young learners: Introduction to the Special Issue. *ELT Journal*, 68(3), 223–230.
- Copland, F. & Ni, M. (2018). Languages in the young learner classroom. In S. Garton & F. Copland (Eds.), *The Routledge handbook of teaching English to young learners* (pp. 138–153). Routledge.
- Copland, F. & Yonetsugi, E. (2016). Teaching English to young learners: Supporting the case for the bilingual native English speaker teacher. *Classroom Discourse*, 7(3), 221–238.
- Cowie, N. & Sakui, K. (2020). Teacher and student-created videos in English language teaching. *ELT Journal*, cca054, 75(1), 1–6.
- Coyle, Y. & Gómez Gracia, R. (2014). Using songs to enhance L2 vocabulary acquisition in preschool children. *ELT Journal*, 68(3), 276–285.
- Creese, A. & Blackledge, A. (2010). Translanguaging in the bilingual classroom: A pedagogy for learning and teaching? *The Modern Language Journal*, 94(1), 103–115.
- Crystal, D. (2003). *English as a global language*. Cambridge University Press.
- Davis, G. M. (2017). Songs in the young learner classroom: A critical review of evidence. *ELT Journal*, 71(4), 445–455.
- Edstrom, A. M. (2009). Teacher reflection as a strategy for evaluating L1/L2 use in the classroom. *Babylonia*, 1(9), 12–15.

- Ellis, G. (2014). 'Young learners': Clarifying our terms. *ELT Journal*, 68(1), 75–78.
- Enever, J. (2018). *Policy and politics in global primary English*. Oxford University Press.
- Enever, J. (2016). Primary ELT. In G. Hall (Ed.), *The Routledge handbook of English language teaching* (pp. 353–366). Routledge.
- Enever, J. (2015). The advantages and disadvantages of English as a foreign language with young learners. In J. Bland (Ed.), *Teaching English to young learners: Critical issues in language teaching with 3-12 year olds* (pp. 13–29). Bloomsbury.
- Eröz-Tuğ̃a, B. (2013). Reflective feedback sessions using video recordings. *ELT Journal*, 67(2), 175–183.
- Garcia, O. & Lin, A. M. Y. (2017). Translanguaging in bilingual education. In O. Garcia, A. M. Y. Lin, & S. May (Eds.), *Bilingual and multilingual education* (pp. 117–130). Springer.
- Garton, S. & Copland, F. (Eds.). (2018). *The Routledge handbook of teaching English to young learners*. Routledge.
- Garton, S., Copland, F., & Burns, A. (2011). Investigating global practices in teaching English to young learners. *British Council*, 11(1), 35–68.
- Graves, K. (2008). The language curriculum: A social contextual perspective. *Language Teaching*, 41, 149–183.
- Hall, G. & Cook, G. (2012). Own-language use in language teaching and learning. *Language Teaching*, 45(3), 271–308.
- Hall, I. & Higgins, S. (2005). Primary school students' perceptions of interactive whiteboards. *Journal of Computer Assisted Learning*, 21(2), 102–117.
- Ibrahim, N. (2020). The qualitative and quantitative rise of literature on teaching English to young learners. *ELT Journal*, 74(2), 202–225.
- Jeon, S. A. S. (2014). The impact of playing commercial online games on young Korean EFL learners' L2 identity. In S. Rich (Ed.), *International perspectives on teaching English to young Learners* (pp. 87–103). Palgrave Macmillan.
- Johnstone, R. (2018). Languages policy and English for young learners in early education. In S. Garton & F. Copland (Eds.), *The Routledge handbook of teaching English to young learners* (pp. 13–29). Routledge.
- Kalantari, F. & Hashemian, M. (2016). A story-telling approach to teaching English to young EFL Iranian learners. *English Language Teaching*, 9(1), 221–234.
- Kaminski, A. (2019). Young learners' engagement with multimodal texts. *ELT Journal*, 73(2), 175–185.
- Littlewood, W. & Yu, B. (2011). First language and target language in the foreign language classroom. *Language Teaching*, 44(1), 64–77.
- Liu, H. & Song, X. (2021). Exploring “flow” in young Chinese EFL learners' online English learning activities. *System*, 96(1), 1–13.
- López-Gopar, M. E. (2016). *Decolonizing primary English language teaching*. Multilingual Matters.
- Macaro, E. & Lee, J. H. (2013). Teacher language background, codeswitching, and English-only instruction: Does age make a difference to learners' attitudes? *TESOL Quarterly*, 47(4), 717–742.
- Ma'rifat, D. (2017). A case study of using songs in teaching English vocabulary to young learners. *Journal of English and Education*, 5(1), 49–55.
- McMillan, B. A. & Rivers, D. J. (2011). The practice of policy: Teacher attitudes toward “English only”, *System*, 39(2), 251–263.
- Mejzini, M. (2016). Teaching children through songs, chants and rhymes. *European Journal of English Language Teaching*, 1(2), 104–112.
- Millington, N. T. (2011). Using songs effectively to teach English to young learners. *Language Education in Asia*, 2(1), 134–141.
- Moon, J. (2005). *Children learning English*. MacMillan.
- Mourão, S. (2015). The potential of picturebooks with young learners. In J. Bland (Ed.), *Teaching English to young learners. Critical issues in language teaching with 3-12 year olds* (pp. 199–218). Bloomsbury Publishing.
- Murphy, V. A. (2014). *Second language learning in the early school years: Trends and contexts*. Oxford University Press.
- Nguyen, C. D. (2021). The construction of age-appropriate pedagogies for young learners of English in primary schools. *The Language Learning Journal*, 49(1), 13–26.
- Nikolov, M. (Ed.). (2016). *Assessing young learners of English: Global and local perspectives*. Springer.
- Oga-Baldwin, W. Q. & Nakata, Y. (2014). Optimizing new language use by employing young learners' own language. *ELT Journal*, 68(4), 410–421.
- Pinter, A. (2011). *Children learning second languages*. Springer.
- Pinter, A. (2017). *Teaching young language learners*. Oxford University Press.
- Rew, S. & Moon, Y. I. (2013). The effects of using English drama on the learning of target expressions for primary school students. *Journal of Asia TEFL*, 10(4).
- Rich, S. (Ed.) (2014). *International perspectives on teaching English to young learners*. Springer.
- Sadeghi, K. & Dousti, M. (2013). The effect of length of exposure to CALL technology on young Iranian EFL learners' grammar gain. *English Language Teaching*, 6(2), 14–26.

- Sayer, P. & Ban, R. (2018). Research on learning English outside the classroom. In S. Garton & F. Copland (Eds.), *The Routledge handbook of teaching English to young learners* (pp. 441–457). Routledge.
- Sayer, P. & Ban, R. (2014). Young EFL students' engagements with English outside the classroom. *ELT Journal*, 68(3), 321–329.
- Scheffler, P. & Dominska, A. (2018). Own-language use in teaching English to preschool children. *ELT Journal*, 72(4), 374–383.
- Scrivener, J. (2012). *Classroom management techniques*. Cambridge University Press.
- Serrurier-Zucker, C. & Gobbé-Mévellec, E. (2014). The page is the stage: From picturebooks to drama with young learners. *Children's Literature in English Language Education*, 2(2), 13–30.
- Şevik, M. (2011). Teacher views about using songs in teaching English to young learners. *Educational Research and Reviews*, 6(21), 1027.
- Shin, J. K. (2006). Ten helpful ideas for teaching English to young learners. *English Teaching Forum*, 44(2), 2–13.
- Shin, J. K. & Crandall, J. (2014). *Teaching YLs English; From theory to practice*. USA: National Geographic Learning & Heinle Cengage Learning.
- Song, D. & Lee, J. H. (2019). The use of teacher code-switching for very young EFL learners. *ELT Journal*, 73(2), 144–153.
- Taghizadeh, M. & Yourdshahi, Z. H. (2020). Integrating technology into young learners' classes: Language teachers' perceptions. *Computer Assisted Language Learning*, 33(8), 982–1006.
- Tekin, S. & Garton, S. (2020). L1 in the primary English classroom: How much, when, how and why? *Iranian Journal of Language Teaching Research*, 8(3), 77–97.
- UNESCO Institute for Statistics. (2012). *International standard classification of education: ISCED 2011*. Montreal: UNESCO Institute for Statistics. Retrieved January 21, 2021, from <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>
- Valente, D. (2019). IATEFL YLTSIG Annual Web Conference. *ELT Journal*, 73(1), 111–112.
- Vasileiadou, I. & Makrina, Z. (2017). Using online computer games in the ELT classroom: A case study. *English Language Teaching*, 10(12), 134–150.
- Yanase, C. (2018). Getting children to be active agents of their own learning. In F. Copland & S. Garton (Eds.), *TESOL voices: Insider accounts of classroom life—young learner education* (pp. 51–58). TESOL Press.
- Yáñez, L. & Coyle, Y. (2011). Children's perceptions of learning with an interactive whiteboard. *ELT Journal*, 65(4), 446–457.
- Whyte, S. & Schmid, E. C. (2018). Classroom technology for young learners. In S. Garton & F. Copland (Eds.), *The Routledge handbook of teaching English to young learners* (pp. 338–355). Routledge.
- Wu, X. (2012). Primary English education in China. In B. Spolsky & Y. I. Moon (Eds.), *Primary school English language education in Asia* (pp. 1–22). Routledge.
- Zein, S. & Garton, S. (Eds.) (2018). *Early language learning and teacher education*. Multilingual Matters.

English as a lingua franca

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Introduction

The aim of this chapter is first to consider various definitions of English as a lingua franca (ELF) and explain why we have chosen the definition we have. We then describe how the use of English as a lingua franca is increasing world-wide. ‘English is certainly used more often as a lingua franca than it is used in encounters of, or with, first language speakers of English’ (Haberland, 2011, p. 939). We give examples of the naturally occurring use of English as a lingua franca, taken primarily from two corpora of ELF: the Vienna Oxford Corpus of International English (VOICE, 2013) (www.univie.ac.at/voice/ and <https://voice.acdh.oeaw.ac.at/index.xql>)¹ and the Asian Corpus of English (ACE) (<https://corpus.eduhk.hk/ace/>). Both these corpora are freely accessible at the URLs noted.² We then consider the implications of the increasing use of English as a lingua franca for language teaching and learning and review a selection of cases where an ELF-approach to English language teaching has been implemented. In this, we consider the obstacles that might hinder the implementation of an ELF-approach and conclude by considering the future potential of an ELF-approach to language teaching and learning.

What, then, is a lingua franca? UNESCO defined it as ‘a language which is habitually used by people whose mother tongues are different in order to facilitate communication between them’ (1953, p. 46). From this definition it could be inferred that native speakers of a language that happens to be a lingua franca can engage in lingua franca communication. Other definitions, however, exclude the native speaker. For example, when referring to the use of English as a lingua franca, Firth’s definition is ‘...the language and the setting where English is exclusively used by non-native speakers’ (1990, p. 269). Seidlhofer’s definition of English as a lingua franca, however, echoes UNESCO’s in including native speakers of English. She defines ELF as ‘any use of English among speakers of different first languages for whom English is the communicative medium of choice’ (2011, p. 7). We shall adopt Seidlhofer’s definition and thus do not rule out participants on the grounds that they are native speakers. Indeed, both the VOICE and ACE corpora include native speakers of English but only in interactions where they constitute the minority of participants. We note at this point that even the usefulness of the native-speaker concept itself is part of ongoing controversies in as much as it is often tied up with notions of monolinguals as ideal communicators and authorities on usage – while ELF is about how people operate in English as a virtual and real language resource regardless of when and how it became part of their communicative repertoires.

These definitions explain lingua francas in terms of their use, but do not tell us anything about what a lingua franca might actually look like. Is, for example, the use of English as a lingua franca

the same English as a native-speaker variety such as British or American? As we shall illustrate later, the answer to this question is ‘No, it isn’t’. We would argue that a lingua franca is less to do with where we are from and where we are on a map, but where we are with someone else, how we are contextualising each other and what our communicative resources and purposes are.

To determine, therefore, what English as a lingua franca actually is in terms of its linguistic properties is a difficult question to answer for the following reasons. English can be used as a lingua franca by any multilingual speaker of any language with any speaker of any language. The VOICE and ACE corpora include speakers of a vast range of different linguistic and cultural backgrounds. In one ELF interaction, a Thai might be conversing with an Indonesian and a Japanese. In another, a Pole might be conversing with a Bosnian and a Greek. The point is that ELF can be linguistically influenced by contact with the other languages of the speakers who use ELF (Schaller-Schwaner & Kirkpatrick, 2020). The unpredictable mix of languages and cultures in any ELF interaction makes ELF ‘inherently, chronically, irremediably variable’ and ‘inherently hybrid in nature’ (Firth, 2009, p. 163). This means that ELF is not a stable definable variety. It also means that, while having a largely monolingually English surface form, being potentially influenced by any of the languages in any ELF speaker’s repertoire, ELF is inherently multilingual (Canagarajah, 2013, Schaller-Schwaner & Kirkpatrick, 2020). This, of course, has significant implications for the teaching and learning of ELF and we discuss these next.

ELF in action

The collection of ELF corpora has illustrated the essential hybridity of and variation within ELF. Yet, in the early stages of setting up the VOICE corpus, some researchers felt that such a corpus could help describe ELF as a variety. This notion was soon abandoned as it became clear that ELF could not be codified in this way but has intermittently occupied researchers’ imagination from the perspective of language change and typology. Latinen has recently suggested ways of ‘broadening and deepening the study of grammatical variability in ELF’ (2020, p. 440). Nevertheless, two points can be mentioned. The first is that a small learner corpus led to Jenkins’ description of a phonological ‘lingua franca core’ (LFC), comprising sounds of English which, if mispronounced, caused intelligibility problems for fellow interactants (Jenkins, 2000). The main features of the LFC were summarised by Jenkins (2009) as being:

1. consonant sounds except voiceless/voiced TH and dark l
2. vowel length contrasts (eg pitch v peach)
3. restrictions on consonant deletion (in particular not omitting sounds at the beginning or middle of words)
4. nuclear (or tonic) stress production/placement

(p. 12)

Jenkins suggested consideration be given to focusing on these LFC features in the teaching of English rather than on using a native-speaker model as the learners’ target. But she was also careful to point out that the LFC was not a model to be slavishly imitated. In the case where the teacher and students have the same first language ‘in so far as we can speak of a model, the model is the bilingual teacher who has the core and local features in her repertoire’ (2009, p. 14).

The second point worth of note is that, notwithstanding the inherent variability within ELF, a number of non-standard morphosyntactic forms appear to be shared by speakers, no matter their first language. Such a repertoire of features might relate back to the question that has been the subject of long debate by scholars as to whether there are non-standard forms or vernacular universals that occur in all varieties of English (e.g. Chambers, 2004), or whether the variety is a first language,

second language or creole variety (e.g. Kortmann, 2010) or whether the speaker's first language (e.g. Ansaldo, 2009) is the most significant cause for these non-standard forms. We will not enter the debate in any depth here but report on one study using data from the Asian Corpus of English (Kirkpatrick & Subhan, 2014; Kirkpatrick, 2021). The hypothesis framing the study was that, as speakers of Indonesian and Malay do not mark for tense in their first languages, these speakers would tend not to mark for tense when using English as a lingua franca. In other words, the study aimed to test the hypothesis that a speaker's first language, the substrate, influenced the speaker's use of English. The hypothesis was investigated using a subset of ACE data which contained all the first language speakers of Malay and Indonesian. The findings did not support the hypothesis. In fact, the speakers marked tense almost always when in formal contexts where there were 152 instances of tense marking and only 7 where tense was not marked. Even in informal contexts, the speakers marked tense more often than not (152 instances of marking vs 100 instances of non-marking). In this study, at least, the relative level of formality, rather than the speakers' first language, appeared to be the key variable in whether the speakers used tense marking or not in lingua franca settings.

We now give some examples of the use of naturally occurring ELF from ACE,³ complemented by a few from other sources

Not surprisingly, the topics that Asian multilinguals tend to talk about using English as a lingua franca are centred around their own interests and are Asia-centric. The range of topics discussed include issues associated with Islamic finance, the maltreatment of ethnic minorities in Hong Kong, Thai–Myanmar border conflicts, the relative quality of different brands of rice, studying away from home, the importance of coffee to Vietnam(ese). A frequently discussed topic is the role of language and identity, as portrayed in item (1) that follows.

Here an ethnically Chinese Bruneian female (S2) is talking about her linguistic background and the role of different languages in her upbringing. The other participants are a Filipina (S1), a Thai male (S3) and a Vietnamese female (S4). SX indicates that it is not possible to determine who is speaking. SX-f means it is a female speaking, but not possible to determine which one.

(1)

S2: my first language when i fam- when i'm at home in the family are actually dialect chinese dialects i speak a few languages well i speak to my father in a different dialect i speak to my mother in a different dialect-kay so that is when i am at the age of one one to three one to four
SX-family

S3: chinese dialect

S1: growing

S4: mhm

S2: so two dialects growing at the same time and at the same time our neighbours spoke malay

S4: mhm

S3: mhm

S2: we live in an area where there were a lot of malays there were a lot of malays li- living in the area as well

S1: your mother's chinese

S2: my father's chinese my mother is chinese

S4: mhm

S2: erm so but we spo- i spoke dialect chinese: so i had so i grew up with a lot of languages around me

S1: that's interesting

S2: and i don't i don't actually remember

SX-f: (laughter)

S2: how i i only knew that i was drilled in grammar but erm i felt for a ve- very long time that even when i was i can still think back and i was in kindergarten i could understand the teacher

SX-f: okay

S1: uh-huh

S4: hm

S2: and she spoke erm english

SX-f: hm

S2: at that time so it wasn't a major difficulty because i was so small and so young

S1: eah yeah so what would you say is er what is your first language now

S2: definitely english now i mean english has become i think in english i

S3: English english

SX-f: (laughter)

S4: so you have so you have your mo- mother tongue father tongueSX-(laughter)

S2: in the language i use most

S1: neighbourhood tongue

(Kirkpatrick, 2021, pp. 65–66)

In this conversation, the Bruneian recounts her linguistic history. Her mother tongue (literally) is a dialect of Chinese but her father speaks a different dialect, which she also learned as a child. She also learned to speak Malay, as that was the language of the village community. On top of which, she learned English from kindergarten and Mandarin Chinese. She also provides a not untypical example of someone whose first language – in the sense of strongest language – has shifted. In this speaker's case her first language has shifted from her mother tongue – a Chinese dialect – to English. And here she is using English in its most common contemporary function – as a lingua franca – with speakers of other Asian languages.

Given the underlying multilingual nature of ELF communication, one might expect ELF to be characterised by code-mixing. As Mauranen has pointed out, 'Since ELF is typically used in situations where many language backgrounds come together, code-switching is a particularly appropriate resource to be drawn on' (2009, p. 6). Code-mixing certainly occurs in VOICE. Klimpfinger identifies 1542 instances of code-mixing involving some 22 languages. The most frequent language used in code-mixing is German with 1057 instances and the least, Danish, with one (2007, p. 42). She identifies a number of motivations for code-mixing. In the following example, the speaker adopts French to introduce a new idea:

And the last challenge is of course what we do, maybe more Belgian than French, which is *le troisieme cycle* third cycle

(2007, p. 50)

The next example comes from Cogo (2016). There are three interactants. M and P are both first language speakers of Spanish and H is a first language speaker of German. What is interesting is that both Spanish speakers use German and the German speaker uses a little Spanish. The German is in italics and the Spanish in bold.

P: ah OK OK yeah and then the *netto* fourteen one two so the position is important one two and then we have the euros and then we have the percentage but has another name says *usl ust ist steuer*

H: *was ist dis?*

P: *betrag betrag como*

M: **prefieres** No *betrag* is whole amount Pedro

H: ah OK
P: *betrag* is amount
H: amount OK

(2016, p. 72)

Cogo reports that P describes his use of translanguaging as a ‘German-Spanish way of speaking’ and notes that, at work, ‘it is quite common to play with linguistic resources’ (2016, p. 73).

These examples show that ELF is inherently multilingual. This is so, even if the surface form appears to be monolingual English. This is nicely exemplified by Pitzl where she illustrates how ELF users translate idioms from their first language into English (2016, p. 300). In this first example (taken from VOICE), a German speaker says ‘I think in that case, we should not wake up any dogs’. This idiom looks like a direct translation from German, but goes unremarked in the interaction. This idiom has counterparts in other languages, including the English idiom ‘Let sleeping dogs lie’. Another example is when a Polish speaker says, ‘Don’t praise the day yet’ (2016, p. 301). Pitzl explains that this looks like the adoption of the Polish idiom which translates as ‘Don’t praise the day before the sunset’ and closely resembles the German idiom of ‘You should not praise the day before the evening’. The use of these ‘borrowed’ idioms goes unremarked, but show the multilingual essence of ELF.

Surprisingly, however, code-mixing does not occur frequently in ACE. Possible reasons for this are that the majority of contributors to VOICE are first language speakers of Indo-European languages and many of these languages belong to the same language family. European languages thus share many cognates. A second possible reason for the occurrence of code-switching in VOICE is that Europeans learn, in addition to the relevant national language, at least one other European language at school, with most learning two (Di Sabato & Kirkpatrick, 2022). This means that Europeans are likely to be familiar with other European languages and this allows the use of code-mixing. In contrast, the great majority of contributors to ACE are first language speakers of Asian languages. The languages of Asia do not come from the same language family, but from a range of different language families, many of which have different scripts. At the same time, Asian school children do not learn other Asian languages at school, where English is the first foreign language taught (Kirkpatrick & Liddicoat, 2019). As a result, the contributors to ACE will not be as familiar with each other’s languages as the contributors to VOICE and thus will not code mix using languages which might be unfamiliar to other participants in the interaction. The key function of English as a lingua franca to act as a medium of communication between speakers of different first languages and, as we shall illustrate later, ELF users develop strategies to facilitate communication. Here we can note a fundamental difference between the use of English as a lingua franca and World Englishes. A variety of World English is used by people who share linguistic and cultural backgrounds. World Englishes both reflect the culture and lived experiences of its speakers and serve as markers of identity. Thus speakers of a variety of World English such as Filipino will naturally use words from Filipino languages when speaking Filipino English with each other. As McLellan (2010) has noted, World Englishes are, by definition, code-mixed varieties. English as a lingua franca, on the other hand, has communication with people from different linguistic and cultural backgrounds as its key function. Code-mixing will thus be dependent on the speaker feeling confident that their fellow interactants will understand. For example, in the excerpt (2) from ACE, S1 is a Malaysian female, S2 is female from Myanmar and S3 is a first language speaker of Arabic. The interaction took place in Malaysia.

(2)

S1: er:
S2: i think

S1: insya Allah friday

S2: another two yah

S1: his his

S3: she's going to kampung

S1: yah i'm going to kampung

Two points in this interaction are of particular interest. First, the Malay speaker uses the Arabic expression 'insya Allah' or God willing. As she is ethnically Malay she will, by definition, be Muslim. The second is that S3, the Arabic speaker, shows an ad hoc negotiation of interactional norms by using '*kampung*' the Malay word for village, a use that is accepted by the Malay speaker. This looks like code-mixing to establish rapport.

Speakers of English as a lingua franca are adept at adopting strategies to facilitate communication and mutual intelligibility (Bjorkman, 2011; Vettorel, 2019), meaning, in part, that they are able to achieve mutual understanding despite the possible presence of non-standard forms (Deterding, 2013). As we feel that the development of such strategies should be integral to any curriculum adopting an ELF-approach, we give further examples of these strategies in the next section. We start by illustrating strategies adopted by the listeners and then exemplify strategies adopted by the speakers (for a full account see Kirkpatrick, 2021). The examples are all drawn from ACE.

Strategies adopted by ELF users

Listener strategies

Lexical anticipation

In (3) a Bruneian female (S2) is in conversation with a Filipina (S1). S2 anticipates the words 'school' and 'income'. This not only shows she fully comprehends what the Filipina is saying, but also helps the flow of conversation in a cooperative way.

(3)

S1: and the parents are well educated whereas those coming from the public

S2: school

S1: really come from lower er

S2: income

S1: income families

Lexical repetition

In (4) the same two speakers continue the conversation. Here, the Filipina (S1) repeats the word 'better' and this shows she is following the conversation.

(4)

S2: these people who are from the government er the private school usually do better and they will continue doing better

S1: better

S2: better until...

Lexical suggestion

In (5) a Cambodian male (S1) is talking with a Singaporean female (S2). She suggests the word 'benefits' which he happily accepts.

(5)

S1: I will tell Cambodians I will them about about the advantages advantages of English and motivate them to learn English because I know the good things of English

S2: the benefits

S1: yeah, the benefit...

Lexical correction

In (6) the Singaporean female (S1) is in conversation with an Indonesian male (S2).

(6)

S2: now, I mean how many years do students have to sit

S1: stay

S2: to stay in the junior high school

When the Indonesian male uses the word 'sit', she provides the correct word 'stay'. Interestingly, the Indonesian speaker accepts this without qualm, further underlying the cooperative tenor of these exchanges.

The 'Let it Pass' strategy

The 'Let it Pass' strategy has been noted by several scholars (e.g. Firth, 1996, p. 243). Basically it involves allowing the speaker to carry on speaking even though the listener(s) may not have understood the message in the hope that the message will become clearer as the conversation proceeds. In (7) a Vietnamese (S1) is talking with a Thai (S2) and Bruneian (S3).

(7)

S1: On the first year, um ... those students um will be taught ('torch') all the basic er rules

S2: mmm

S1: Like ... I I mean this, for the er for the sub- for the grammar subject itself, it's not for interpreter skills.

S3: mmm

S1: so, er

Although neither the Thai nor the Bruneian understand the Vietnamese speaker's use of a non-standard form of the past tense of teach ('torch'), signaled by their muttering 'mmm', they do not interrupt the speaker but let him continue.

The 'Don't Give Up' strategy

In contrast to the 'Let it Pass' strategy, participants can adopt the 'Don't Give Up' strategy. In (8), which is necessarily an extended excerpt illustrating the strategy, four females, a Vietnamese (S1), a

Thai (S2), a Bruneian (S3) and a Malaysian (S4), are trying to identify the name of a dish which S1 is describing. They express communal delight when they finally discover the dish being described.

(8)

S1: uhm uhm I think that the Western people when they come to the come to Vietnam they like nam pho

S2: nam pho yeah

S1: pho it is very very traditional you know

S1: P H O (spelling it out)

S3 and S4: P H O (repeating the spelling)

S1: but you pronounce [it

S3: [what] is it actually?

S1: Pho, Pho

S4: No no no she is she is just saying what is the dish actually is it fish is it what what is it rice?

S1: ehn nam you know nam?

S3 and S4: nam nam

S1: yes there are many kinds of nam

S4: what is nam?

S1: it is some kind of

S4: made of pork?

S1: yes it's made of pork and some green bean no not green bean just some kind of

S2: bean sprout

S1: yes maybe bean sprout and er some noodle (er I mean) you mix eggs you er mix them (ehm) and you use er some kind of it is also made from rice round a little and you pack it (yeah) and then you put in the oil (eh huh) and fry them

S4: oh it must be very nice but minus the pork of course (laughter)

S3: put it in the packet and then you fry it

S1: no no no no not the package

S4: not the noodle

S1: You use them I mean the package here it is made of rice sorry made of rice it is er ehm always circle or square you

S4: is it something like

S1: only use only little and then you pack it so it is usu usually very small just yeah round

S4: maybe our version of popiah

S1: yeah popiah

All: popiah yeah popiah popiah [*loud laughter/shouting*]

S3 and S4: at least we find something that we know

The Request Repetition strategy

This is also in contrast to the 'Let it Pass' strategy. In (9), a Bruneian female (S2) directly requests the Singaporean speaker (S1) to repeat the message by signaling that she has not understood it. The relatively long pause also shows that she is unable to answer the question.

(9)

S1: But how did you manage to cope when you were taught English at the very later stage? (1.4 second pause)

S2: Pardon?

S1: How how are you all able to cope you know when in your during your time, you were taught English only at secondary level?

What we can determine from this excerpt is that S2 did not understand S1's question, but we cannot tell what caused the misunderstanding. Deterding (2013) developed the technique of going through ELF interactions with their speakers and asking them where they did not understand and what caused the misunderstanding.

The Participant Paraphrase strategy

This strategy is adopted when it becomes apparent to the other participants that the person to whom a specific request has been addressed does not understand it. In (10), a Singaporean (S1) addresses her question to a Laotian participant (S3). The third participant, a female from Myanmar (S2), on seeing that the Laotian has not understood the question, paraphrases it for her.

(10)

S1: do they] do they write essays do they write essays do the pupils do the pupils write compositions?

S2: can your students write an essay or paragraph writing {S2: eh hm} a composition?

S3: yes I think they can because er as I ask them to write er the story they can write and some mistake I think that's ok for them because they have never learned English before.

The strategies we have listed are those that can be adopted by listeners to ensure successful communication. Speakers can also adopt such strategies and we provide examples of these in the following sections.

Speaker strategies

The Speaker Paraphrase strategy

The same speakers who were involved in the immediately preceding example (10) are also the participants in (11). On this occasion, it is the Singaporean speaker herself (S1) who paraphrases her question when she realises the Laotian (S3) has not understood. S2 is the female from Myanmar.

(11)

S1: eh huh ehm do the do the children you know in er in your country those who come from a very poor families are they given financial assistance?

S3: ehm

S1: are they in in terms of money?

S3: ehm

S1: I mean does the government support them? (2) OK is there is there like you know those children who are very poor and their parents cannot afford to send them to school? (3) does the government actually given them assistance? (4)

S2: yeah the government will assist I think so your government will assist

S1: example you know like buying uniform for them or textbooks and paying for their school fees

S3: I th I think they don't do like that yes only the family or parents

S1: can afford

S3: yes afford them er for example in the er countryside some studen cannot learn because er it's hardly for them to er go to school

The Singaporean speaker patiently paraphrases her question no fewer than 4 times. The figures in brackets indicate the lengths of the pauses. It is also worth noting that the Myanmar participant also provides a paraphrase, again adopting the strategy of participant paraphrase or prompt here. A further point about this interaction is worth making, which is that on no occasion does the Singaporean indicate any impatience with the Laotian in having to paraphrase the question so often. This demonstrates the cooperative tenor of the interaction, a feature of ELF interaction noted by many scholars.

The Spelling out the Word strategy

On the rare occasion that the participants all appear completely flummoxed by the message the speaker is attempting to convey and when all listener strategies such as requests for repetition and so forth having failed, the speaker can adopt the strategy of spelling out the word, as exemplified in (12). A Laotian male (S1) is trying to describe the damage the 2004 tsunami caused in his country. The other participants are a female from Myanmar (S2), a Malaysian male (S3) and a Filipina (S4). After all else fails, the speaker finally resorts to spelling out the word and only then do the participants finally understand.

(12)

S1: you know at the time that ehm tsunami occurs there were some problem in my country

S2: what problem

S1: yeah we've got some problem we have big horns in in some areas

S3: horns? Sorry

S1: horn you know horn

S4: what horn

S1: yeah big horn

S3: (laugh) what

S4: what's a horn

S3: sorry

S1: H-O-L-E something like this

S3: holes?

S1: yeah

It is worth reiterating here that ELF users are able to reach mutual understanding despite the presence of non-standard forms. Often, these non-standard forms pass unremarked (as in the singular form of 'problem' in this excerpt). But when the non-standard form leads to incomprehension, as with S1's pronunciation of 'holes' here, the interactants adopt strategies to achieve understanding.

Make the Topic Explicit strategy

In (13) the participants have recently arrived in Singapore to undertake a professional development programme. An Indonesia female (S1) is asking the other participants what they think about the rooms with which they have been provided. The female from Myanmar (S2) mishears 'room' for 'food', and starts to talk about the food. After a while, the Indonesian interrupts her and reiterates the topic saying 'What I'm asking is about room...'

(13)

S1: what about your rooms?**S2:** er**S1:** you feel OK any [problems**S2:** I find the taste er quite ok but er like yours is I think er. the rice a little bit sticky in our country we don't er eat er rice as sticky as that rice here and then ehm how shall I say er and then vegetables er maybe er the same vegetables we eat in our country but er the price for them is also expensive I think because I prefer eating vegetables I prefer vegetables er than to meat er**S2:** OK what I'm asking is about **room** OK er do you feel cold?

As with all the examples provided here, the speaker shows no sign of irritation at being misunderstood. The examples dovetail with the findings of many other scholars who note, for example, 'the supportive and cooperative nature of interactions in ELF where meaning negotiation takes place at different levels' (Archibald et al., 2011, p. 3).

'Typically, ELF use is characterised by cooperation and ELF users share a commitment to ensure smooth communication and adopt a variety of communicative strategies to achieve this' (Kirkpatrick, 2021, p. 108). But ACE also has examples of high stakes contexts, such as the police station or the court room, in which ELF users become confrontational and seek to threaten each other's face rather than preserve it. This is not surprising as ELF is used in all conceivable contexts.

We have listed and illustrated these communicative strategies in some detail, as we believe they should be included in curricula that adopt an ELF-approach to the teaching and learning of English. As we have stressed, ELF is not a stable variety but inherently dynamic and variable so does not lend itself to being accounted for by prescriptive grammar-rule instruction and exercises to practice one form. Thus we talk about an ELF-approach to the teaching of English in which communicative strategies and ensuring mutual intelligibility assume more importance than fulfilling native-speaker norms. In the next section we discuss this in more detail.

An ELF-approach to the teaching and learning of English. What does this mean?

As we noted earlier, the fact that ELF is not a stable variety but characterised by boundless variation makes it impossible to classify or codify in ways that would lend themselves to being described in a traditional grammar or textbook. How then could ELF be taught? Many scholars suggest that, rather than attempting to teach ELF per se, student teachers and English language learners should be taught *about* ELF. The roles that English is increasingly playing in today's world should be part of English teacher education programmes. Where contextually appropriate, knowledge *about* ELF should be part of the English language curriculum. Seidlhofer and Widdowson have argued that 'the global learning of English needs to be based on its global use' and that this means that English as a lingua franca 'corresponds more closely to what is real for learners, and is a more realistic objective for them to achieve' (2018, p. 30). In a recent 'state-of-the-art' article for the journal *Language Teaching*, Rose, McKinley and Galloway agree and point out that there needs to be a shift of mindset so that what is taught in the classroom more accurately matches the way English is used outside of it (2020). In their article, they use the catch-all term 'Global Englishes' to refer to World Englishes, English as an international language (EIL) and English as a lingua franca. They suggest the shift in mindset needs to ensure that the following six perspectives inform the way English is taught:

1. increasing World Englishes and ELF exposure in language curricula
2. emphasising respect for multilingualism in ELT

3. raising awareness of Global Englishes in ELT
4. raising awareness of ELF strategies in language curricula
5. emphasising respect for diverse cultures and identity in ELT
6. changing English teacher-hiring practices in the ELT industry.

These proposals echo earlier suggestions made in Dewey's 'post-normative' approach which recommended the following strategies:

- Investigate and highlight the particular environment and sociocultural context in which English(es) will be used
- Increase exposure to the diverse ways in which English is used globally; presenting alternative variants as appropriate whenever highlighting linguistic form
- Engage in critical classroom discussion about the globalisation and growing diversity of English
- Spend proportionately less time on ENL forms, especially as these are not widely used in other varieties; and thus choose not to penalise non-native-led innovative forms that are intelligible
- Focus (more) on communicative strategies

(Dewey, 2012, pp. 163–164)

Marlina (2014) makes similar proposals which he summarises in the following way:

Teaching EIL or EIL pedagogy means the act of professionally guiding students from all Kachruvian circles to: (i) gain knowledge and awareness of the pluricentricity of English and the plurilingual nature of today's communication; (ii) inspire students to give equal and legitimate recognition to all varieties of English; and (iii) develop the ability to negotiate and communicate respectfully across cultures and Englishes in today's communicative settings that are international, intercultural and multilingual in nature.

(2014, p. 7)

Kirkpatrick (2018, 2021) has proposed an ELF-approach to the teaching of English in which he presents the following 5 principles:

Principle 1

The native speaker of English is not the linguistic target. Mutual intelligibility is the goal.

What is important is that users of English are able to communicate successfully with each other. Strategies for negotiating meaning are more important than adherence to native speaker norms.

Principle 2

The native speaker's culture is not the cultural target. Intercultural competence in relevant cultures is the goal. The curriculum should also show learners how to talk about their own cultures and values.

Principle 3

ELF speakers make appropriate ELF teachers. As the language learning goal is not to approximate native speaker norms, but to be able to interact successfully with fellow ELF users, it follows that a multilingual who is proficient in English and who has the relevant qualifications represents an appropriate teacher. Successful users of ELF are likely to be better equipped to adopt an ELF-approach.

Principle 4

Lingua franca environments provide excellent learning environments for lingua franca speakers. The great advantage of such sites for learners of English is, paradoxically, that the native speaker is absent. Students will find the linguistic environment less threatening and will feel more comfortable using English. Students training as English teachers would also benefit from experiencing lingua franca contexts.

Principle 5

Assessment must be relevant to the context.

Recent edited collections (e.g. Sifakis & Bayyurt, 2017; Sifakis & Tasantila, 2018; Zein, 2018; Grazzi, 2020) have cogently made the case for adopting an ELF-approach or philosophy in a wide variety of contexts from Turkey to Spain, from Brazil to Indonesia. In their wide-ranging review of pedagogical research into the teaching of Global Englishes, Rose et al. (2020) concluded that there was ‘powerful evidence’ for the benefits of adopting proposals of the type suggested earlier.

Yet, despite these proposals and research showing the benefits of adopting them in teacher education and language teaching, there remains a reluctance on the part of many teachers to adopt them for their own classrooms. In the next section of the chapter, we consider the possible reasons for this reluctance.

If an ELF-approach is so good, why don't more teachers adopt it?

Earlier we reviewed Marlina's work and his advocacy for the adoption of an EIL approach to the teaching of English. At the same time, however, he reported that teachers had concerns about adopting such an approach. He grouped these concerns using the acronym PESTS (2014, p. 9). P stands for teachers' concerns over the **P**racticality of adopting such an approach. How can teachers decide which aspects of the international uses of English to focus on? Would not making a single native-speaker target be a more efficient use of time? **E**fficient is therefore the ‘E’ of PEST. ‘ST’ represents **S**tandards. Students fear that an EIL-approach would harm their chances of learning ‘good’ English, a native-speaker variety. The final ‘S’ of PESTS stands for **S**implicity. Students fear that being exposed to many different varieties of English and the use of English as a lingua franca would confuse them.

Sadeghpour and Sharifian (2019) surveyed 56 English language teachers in Australia: 36 were first language speakers of English and the remainder spoke a wide variety of first languages. The great majority of the respondents had experience of teaching English outside Australia. The researchers found that, while the respondents felt knowledge about Global Englishes would be beneficial to them as teachers, they were hesitant about introducing the concept into their own classes. Echoing the concerns reported by Marlina earlier, they reported that the introduction of Global Englishes would confuse their students and that their students would feel short-changed if they were not taught a native-speaker model. Sadeghpour and Sharifian concluded ‘research studies in different contexts have shown that teachers are still teaching English as a monolithic language’ (2019, p. 254).

A further study that reflected students' preference for a native-speaker model was conducted in Thailand by Watson Todd and Pojanpunya (2020). This was a replication study of one that they had conducted in 2009. In investigating Thai students' comparative attitudes to native English speaking teachers (NESTs) and local English teachers (LETs), the original 2009 study sought answers to these four research questions:

- What are Thai university students' explicit attitudes towards NESTs and LETs?
- What are Thai university students' implicit attitudes towards NESTs and LETs?

- Is there a relationship between explicit and implicit attitudes towards NESTs and LETs?
- Is there a relationship between previous learning experiences with NESTs and attitudes towards NESTs and LETs?

The 2020 study added a further question, namely, ‘How do these findings differ from the 2009 findings?’

The researchers had hypothesised that, in the ten years or so between the two studies, Thai students’ attitudes would shift to being more favourably disposed towards the local English teachers. They posited two reasons for their prediction in this shift of attitudes: the first was their feeling that the substantial increase in the number of non-native speaking English tourists coming to Thailand during the intervening years would have made the students more familiar with the use of English as a lingua franca; and the second was that the setting up of the ASEAN Economic Community (AEC) in 2016, which allowed cross-ASEAN employment, meant that Thais would be in more frequent contact with workers from other ASEAN nations and thus with the subsequent use of English as a lingua franca employed by these workers. Interestingly, the results of the study did not support the hypothesis. The students surveyed in 2020 expressed a greater preference for NESTs than the 2009 cohort. The researchers gave two possible explanations for this shift in preference to NESTs. The first was that the 2020 students all had experience of being taught by a native English speaking teacher. The second was that ‘the social discourse around the AEC focused purely on improved English, not on who English would be used with’ (Watson Todd & Pojanpunya, 2020, p. 9). That is to say, the discourse made no mention of varieties of English and the use of English as a lingua franca; rather it concentrated solely on improving English and this was implicitly taken to mean adopting a native-speaker model. The authors concluded that the preference of students for a native-speaker model remains dominant. This preference was also summed up by a mature Chinese business student undertaking a business English course in China. He noted that

we have learnt ENL [English as a native language] for such a long time, probably since primary school. It is always good if someone can use English like native English speakers. It is a matter of ambivalence. ELF works well in the workplaces. I do not speak ENL and my Indian clients do not speak ENL. As long as we have high acceptance to each other’s non-standard use of English, we can communicate well and get the job done. It could be very weird if both of us speak English like Britons. I want to be identified as a Chinese when I speak English. However, ENL is socially preferred. No one has it but everyone wants it.

(Si, 2020, p. 229)

The relevance of ELF to teachers and learners may also depend on how multilingual a context or setting and their own experience is. In an institutional setting where multilingualism is appreciated and valued, teachers can develop their own and their students’ agency (Schaller-Schwaner, 2015) and there will be more room for ELF. A further factor which thus needs to be considered when investigating whether teachers are adopting a Global Englishes or English as a lingua franca approach to their teaching is the question of teacher autonomy. Kemaloglu-Er and Bayyurt (2019) argue that adopting an English as a lingua franca approach gives teachers autonomy. This may well be so, but in many English classrooms throughout the world, teachers simply do not have the autonomy to decide what to teach and how to teach it. Most have to stick rigorously to a curriculum that is set by the school, if not the Ministry of Education itself. Linked to autonomy is the notion of assessment. In the great majority of English classrooms, the assessment and the types of assessment are fixed by the relevant Ministry of Education. To succeed, students have to pass the assessments. Teachers then naturally teach to the assessments, as they want their students to do well in them. Until the ELF-approach can develop assessments that are accepted and respected by ministries and employers, the

adoption of the ELF-approach will be more piecemeal than across the board. Widodo and Fang (2019) support a Global Englishes approach as it represents an ‘ecological approach that recognises the use of language in different social and cultural domains in which different languages and cultures coexist’ (p. 194). Yet they note that the Global Englishes approach has been slow to tackle the problem of assessment and that assessment remains the most difficult hurdle for the approach to overcome. In discussing the issue of assessment of English as a lingua franca, Newbold (2018) argues that a native-speaker model is not a useful yardstick. He argues that ELF assessment must be ‘open, inclusive and flexible’ but does admit that this is easier said than done.

We would agree but note that the relative lack of teacher autonomy coupled with rigid set curricula and methods of assessment means that the widespread adoption of an ELF-approach will take some time.

Conclusion

As we noted earlier, using a lingua franca is less to do with where we are on a map, or where we are from, but where we are with someone else, how we are contextualising each other and what our communicative resources and purposes are. It is therefore what speakers bring to the encounter, their mutual context (ualisation), their purposes and communicative goals and repertoires as well as what action or product their use of specific linguistic resources constitutes that is decisive for determining whether or not or to what degree what speakers are doing together is English as a lingua franca.

ELF is a communicative mode and resource used in multilingual settings in which speakers have to or choose to converge on mainly one medium which one can recognise as English but which may not be anyone’s mother tongue. If one were to maintain the conceptual anchor of the native speaker, it might continue to be a definitional question to ask whether ELF includes native speakers of English, but what if any answer to this question were a conceptual fallacy? Without the traditional abstract notion of monolinguals as ideal communicators, but with instead looking at how people make English work as a shared multilingual resource and practice no matter when or how they learned what language, we might eventually navigate and negotiate and fill the conceptual gap that Seidlhofer posited in 2001.

Notes

- 1 In 2021, VOICE was moved to the Austrian Academy of Science’s Austrian Centre of Digital Humanities and Cultural Heritage Server. The VOICE CLARIAH project has undertaken to assure the continued availability of the corpus to students, teachers and researchers, see www.oeaw.ac.at/acdh/projects/voice-clariah/.
- 2 There is also an ELF corpus of academic English, ELFA. Information can be obtained at the following URL: www.helsinki.fi/en/researchgroups/english-as-a-lingua-franca-in-academic-settings.
- 3 We have removed the mark-up notations from all the examples we cite to make them ‘reader friendly’.
- 4 Types of teaching beyond generic language subject teaching, such as content and language integrated learning (CLIL) or specific-purpose language teaching, would hold promise, too, but are not considered here.

References

- Archibald, A., Cogo, A., & Jenkins, J. (Eds.) (2011). *Latest trends in ELF research*. Newcastle, UK: Cambridge Scholars Publishing.
- Ansaldo, U. (2009). The Asian typology of English: Theoretical and methodological considerations. *English World-Wide*, 30(2), 133–148.
- Bjorkmann, B. (2011). Pragmatic strategies in English as an academic lingua franca. Ways of achieving communicative effectiveness? *Journal of Pragmatics*, 43(4), 950–964.
- Canagarajah, S. (2013). *Translingual practice: Global Englishes and cosmopolitan relations*. London and New York: Routledge.

- Chambers, J. K. (2004). Dynamic typology and vernacular universals. In B. Kortmann (Ed.), *Dialectology meets typology: Dialect grammar from a cross-linguistic perspective* (pp. 127–145). Berlin: Mouton de Gruyter.
- Cogo, A. (2016). Conceptualising ELF as a translanguaging phenomenon: Covert and overt resources in a transnational workplace. *Waseda Working Papers in ELF* (5), 61–77.
- Deterding, D. (2013). *Misunderstandings in English as a lingua franca*. Berlin: de Gruyter Mouton.
- Dewey, M. (2012). Towards a post-normative approach: learning the pedagogy of ELF. *Journal of English as a Lingua Franca*, 1(1), 141–170.
- Di Sabato, B. & Kirkpatrick, A. (2022). Learning English and learning languages other than English in Asia and Europe: Current scenarios and debates. In E. Macaro & R. Woore (Eds.), *Debates in second language education* (pp. 32–51). London and New York: Routledge.
- Firth, A. (1990). Lingua franca negotiations: Towards an interactional approach. *World Englishes*, 9(3), 269–280.
- Firth, A. (1996). The discursive accomplishment of normality: On ‘lingua franca’ English and conversation analysis. *Journal of Pragmatics*, 26, 237–259.
- Firth, A. (2009). The lingua franca factor. *Intercultural Pragmatics*, 6(2), 147–170.
- Grazzi, E. (Ed.) (2020). An interdisciplinary approach to English as a Lingua Franca. *Status Questionis*, 19.
- Haberland, H. (2011). Ownership and maintenance of a language in transnational use. Should we leave our lingua franca alone? *Journal of Pragmatics*, 43(4), 937–949.
- Jenkins, J. (2000). *The phonology of English as an international language*. Oxford: Oxford University Press.
- Jenkins, J. (2009). (Un)pleasant? (In)correct? (Un)intelligible? ELF speakers’ perceptions of their accents. In A. Mauranen & E. Ranta (Eds.), *English as a lingua franca: Studies and findings* (pp. 10–36). Newcastle: Cambridge Scholars Publishing.
- Kemaloglu-Er, E. & Bayyurt Y. (2019). ELF-awareness in teaching and teacher education: Explicit and implicit ways of integrating ELF into the English language classroom. In N. Sifakis & N. Tsantila (Eds.), *English as a lingua franca for ELF contexts* (pp. 159–174). Clevedon: Multilingual Matters.
- Kirkpatrick, A. (2018). ELF for ELF. Concluding chapter. In N. Sifakis & N. Tsantila (Eds.), *ELF for EFL contexts* (pp. 229–242). Clevedon: Multilingual Matters.
- Kirkpatrick, A. (2021). *Is English an Asian language?* Cambridge: Cambridge University Press.
- Kirkpatrick, A. & Liddicoat, A. J. (Eds.) (2019). *The Routledge international handbook of language education policy in Asia*. London and New York: Routledge.
- Kirkpatrick, A. & Subhan, S. (2014). Non-standard or new standards or errors? The use of inflectional marking for present and past tenses in English as an Asian lingua franca. In S. Buschfeld, T. Hoffman, M. Huber, & A. Kautzsch (Eds.), *The evolution of Englishes* (pp. 386–400). Amsterdam: John Benjamins.
- Klimpfinger, T. (2007) ‘Mind you, sometimes you have to mix’. The role of code-mixing in English as a lingua franca. *Vienna English Working Papers*, 16(2), 36–61.
- Kortmann, B. (2010). Variation across Englishes: Syntax. In A. Kirkpatrick (Ed.), *The Routledge handbook of world Englishes* (pp. 400–424). London and New York: Routledge.
- Latinen, M. (2020). Empirical perspectives on English as a lingua franca (ELF) grammar. *World Englishes*, 39, 427–442.
- Marlina, R. (2014). The pedagogy of English as an international language (EIL): More reflections and dialogues. In R. Marlina & R. A. Giri (Eds.), *The pedagogy of English as an international language* (pp. 1–19). Dordrecht: Springer.
- Mauranen, A. (2009) In A. Mauranen & E. Ranta (Eds.), Introduction. In *English as a lingua franca: Studies and findings* (pp. 1–9). Cambridge: Cambridge Scholars Publishing.
- McLellan, J. (2010). Mixed codes or varieties of English? In A. Kirkpatrick (Ed.), *The Routledge handbook of world Englishes* (pp. 425–441). London and New York: Routledge.
- Newbold, D. (2018). ELF in language texts. In N. Sifakis & N. Tsantila (Eds.), *ELF for EFL contexts* (pp. 195–209). Clevedon: Multilingual Matters
- Pitzl, M-L. (2016). World Englishes and creative idioms in English as a lingua franca. *World Englishes*, 35(2), 293–309.
- Rose, H., McKinley, J., & Galloway, N. (2020). Global Englishes and language teaching: A review of pedagogical research. *Language Teaching*, 54(2), 157–189. DOI: <https://doi.org/10.1017/S0261444820000518>
- Sadeghpour, M. & Sharifian, F. (2019). World Englishes in English language teaching. *World Englishes*, 38, 245–258.
- Schaller-Schwaner, I. (2015). ELF oral presentations in a multilingual context: Intelligibility, familiarity, agency. In H. Bowles & A. Cogo (Eds.), *International perspectives on English as a lingua franca* (pp. 72–95). London: Palgrave Macmillan.
- Schaller-Schwaner, I. & Kirkpatrick, A. (2020). What is English in the light of lingua franca usage? In C. Hall & R. Wicaksono (Eds.), *Ontologies of English* (pp. 233–252). Cambridge: Cambridge University Press.

- Seidlhofer, B. (2001). Closing a conceptual gap: The case for a description of English as a lingua franca. *Applied Linguistics*, 11(2), 133–158.
- Seidlhofer, B. (2011). *Understanding English as a lingua franca*. Oxford: Oxford University Press.
- Seidlhofer, B. & Widdowson, H. (2018). ELF for EFL. A change of subject? In N. Sifakis & N. Tsantila (Eds.), *ELF for EFL contexts* (pp. 16–31). Clevedon: Multilingual Matters.
- Si, Jinghui (2020). *Is what is taught what is needed? The practicality of ELF-informed teaching in China's Business English Program*. [Unpublished PhD thesis, Griffith University, Brisbane].
- Sifakis, N. & Bayyurt, J. (2017). ELF-aware teaching learning and teacher development. In J. Jenkins, W. Baker, & M. Dewey (Eds.), *The Routledge handbook of English as a lingua franca* (pp. 641–658). London and New York: Routledge.
- Sifakis, N. & Tsantila, N. (Eds.) (2018). *English as a lingua franca for EFL contexts*. Bristol: Multilingual Matters.
- UNESCO. (1953). *The use of vernacular languages in education*. Paris: UNESCO.
- Vettorel, P. (2019). Communication strategies and co-construction of meaning in ELF: Drawing on multilingual resource pools. *Journal of English as a Lingua Franca*, 8(2), 179–210.
- VOICE. (2013). The Vienna–Oxford International Corpus of English (version 2.0 online). Director: Barbara Seidlhofer; Researchers: Angelika Breiteneder, Theresa Klimpfinger, Stefan Majewski, Ruth Osimk-Teasdale, Marie-Luise Pitzl, Michael Radeka. Retrieved 29 January, 2021, from <http://voice.univie.ac.at>.
- Watson Todd, R. & Pojanpunya, P. (2020). Shifting attitudes towards native speakers and local English teachers: An elaborative replication. *Journal of Multilingual and Multicultural Development*, 43(2), 111–121. DOI 10.1080/014334632.2020.1730861
- Widodo, H. P. & Fang, F. (2019). Global Englishes-oriented English language education. In F. Fang & H. P. Widodo (Eds.), *Critical perspectives on global Englishes in Asia; language policy, curriculum, pedagogy and assessment. New perspectives on language and education* (pp. 194–200). Bristol: Multilingual Matters.
- Zein, S. (Ed.) (2018). *Teacher education for English as a lingua franca. Perspectives from Indonesia*. Singapore: Routledge.



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Part II
Curriculum and instruction



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Curriculum in language teaching

Kathleen Graves

Introduction

Curriculum is concerned with the substance of education, *what* students learn (Doyle, 1992). A curriculum is a dynamic system that involves three interrelated dimensions: planning, enacting and evaluating (Graves, 2008). In *curriculum planning*, decisions are made about what students should learn, how that learning should be organized and how it should be assessed; those decisions are manifested in curriculum documents such as syllabuses, standards, textbooks and unit plans. The planned curriculum is also called the *intended* curriculum (Ylimaki, 2013), or in the case of a state or national curriculum, the *institutional* curriculum (Deng, 2017). *Curriculum enactment* is the curriculum as experienced by the learners, for which curriculum plans should serve as a guide and a support. It is what happens in the classroom among teacher and learners, the kind of learning that actually occurs. *Curriculum evaluation* involves finding out how well and to what extent the planned curriculum supported student learning so that it can be adjusted and improved to better support that learning. This chapter will examine the three dimensions, how they are interrelated and what is needed to bring close alignment among them so that the curriculum that is planned can provide strong support for teaching and learning, and evaluation can point out where further improvements are needed.

Dimension 1: Curriculum planning

Whether at the national or state level, program level or course level, planning and developing a language curriculum involve similar processes. These processes build on and complement each other. Language curriculum development specialists are in broad agreement about what those processes are, although they may give them different names and organize them differently, as can be seen in Table 8.1.

Broadly speaking, the first band of processes involves gathering information about the context and the learners and defining the principles that guide the curriculum. These processes lead to establishing the curriculum goals. These goals then form the basis for deciding what should be taught, how it should be organized and what materials and resources will be used to teach. Decisions must also be made about how to assess learning and how to evaluate the curriculum. These processes may appear linear, but they are more likely to overlap, as each process informs the other.

While the *processes* for developing a language curriculum may be the same regardless of the context, the resulting curriculum goals, syllabus, materials and assessments will be different because of

Table 8.1 Three perspectives on what curriculum development involves

<i>Richards (2001)</i>	<i>Nation & Macalister (2010)</i>	<i>Graves (2014)</i>
Situational analysis Needs analysis	Environment analysis Needs analysis Principles	Analyzing contextual factors Assessing learner needs Articulating guiding principles
Planning goals and learning outcomes	Goals	Determining program goals
Syllabus and course design: choosing course content, determining scope & sequence, planning the course structure	Content and sequencing Format and presentation	Deciding program content Organizing program content
Design of instructional materials		
Evaluation	Monitoring and assessment Evaluation	Designing an assessment plan

the context and the target learners. A language curriculum developed for school-age learners in Greece will be different from one developed for adult migrants in Australia because they have different needs and different purposes for learning language. A language curriculum developed for a context in which students have ready access to materials and technological resources, or for one in which students will take a high-stakes exam, will be different from one where resources are scarce or there is no exam. Hence the importance of gathering information about the learners and about the context.

A curriculum also depends on how the developer conceptualizes the subject matter, language. This is particularly important because language is not, of itself, a subject matter, but rather a tool that humans use to make meaning in all life contexts. As such, it has to be ‘packaged’ into curriculum content so that it can be learned (Graves, 2016). Different ways that language has been conceptualized for the classroom is evident in the table of contents of different language textbooks. These may include topics, grammar, pronunciation, vocabulary, functions, communicative tasks, projects, culture, the four macro skills (reading, writing, speaking, listening) and so on. These ways of conceptualizing language and language learning have been influenced by research in applied linguistics and second language acquisition. For example, a focus on tasks in curriculum grew out of research in the 1970s and 80s on the role of interaction and negotiation in second language acquisition (Breen, 1987). Different ways that language and language learning have been conceptualized for curriculum provide a history of the field of language education (see Graves, 2014, 2016; Richards, 2017).

To illustrate how differences in context, learners and conceptualizations of content result in different curricula, the next section will describe each of the processes in light of two different examples. The first is the development of an English language curriculum for grades 1 and 2 in Greece, mandated by the Ministry of Education (Dendrinis, 2013; Karavas, 2014). The second is the development of an elective English course for university students in Japan that focused on animal issues such as wildlife trafficking (Evans, 2006). Examining a national curriculum and an individual course shows how the decisions are similar at different levels of scale, and how scale affects decisions.

Needs assessment

Needs assessment is the process of gathering relevant information about the learners, their needs and purposes for learning so that the curriculum can build on what they already know and define

and meet their needs. Such information can include age, educational and cultural background, life circumstances, learning preferences, prior knowledge, interests and purposes for learning.

GREEK PRIMARY CURRICULUM

The curriculum, known as the PEAP curriculum, was targeted at children in grades 1 and 2 (ages 6 and 7) in Greek public schools. The project team identified a number of factors that would affect the curriculum (see Dendrinos, 2013). The children were just learning to be literate in Greek and so the curriculum would focus on oral, not written, language. The children's L1 would thus serve as a bridge to the foreign language. Young learners learn a language by doing things with it, so it would be important for them to use it, to listen and play with it orally. As the students were spread throughout the country, this meant they would have different backgrounds, but also different individual learning preferences. The curriculum would need to include a variety of activity types and multi-modal texts that would be accessible and engage them.

JAPANESE UNIVERSITY COURSE

The students who would take Heidi Evans' course on animal issues were Japanese university students, majoring in Policy Studies. The students had a good level of English, were academically oriented and were motivated by the school philosophy of "addressing issues from a human ecology perspective with an emphasis on policy design" (Evans, 2006, pp. 169–170). Evans conducted an informal survey of colleagues and former students to find out what students would be likely to know about animal issues so that she could select the specific topics for the course. She also noted that:

students come to class with different beliefs, assumptions, attitudes, experiences and goals. ... In tackling serious social issues topics, it was critical to make room for students to express, share, and evaluate their views and make sense of new information through discussions and their own independent research and reflection.

(p. 171)

The learners in these two examples have quite different experiences and needs related to age, educational background, life experience, prior knowledge of the language and purposes for learning language. When these experiences and needs are not taken into account, mismatches can occur, such as choosing topics that are not relevant to the learners' experiences or designing learning activities that are inappropriate or not engaging (Sefarej, 2014).

Context analysis

For a curriculum to succeed it must be workable in the context. Context analysis involves identifying the affordances and constraints of the environment that will have a clear impact on the curriculum (Nation & Macalister, 2010). These include human resources, physical resources, time and availability of materials and technology. They include institutional factors such as the role of exams. They also include the expectations and support (or lack thereof) of stakeholders such as parents or administrators, as well as sociocultural norms related to teacher and student roles and how classrooms should function.

GREEK PRIMARY CURRICULUM

According to Karavas (2014), the Greek project team surveyed parents, teachers and administrators at the outset of the project. They found that many parents were initially concerned that learning a second language would interfere with their children’s acquisition of literacy in Greek, and so it would be important to address their concerns. The survey also found that the majority of teachers who would teach the grade 1 and 2 learners had not had experience or training with that age group. Therefore, an important consideration was to train teachers in how to teach young learners, according to the characteristics identified in needs analysis.

JAPANESE UNIVERSITY COURSE

The teacher, Heidi Evans, was developing a course for a context that was familiar. An important contextual factor was the schedule; she would need to fit the course content into once-a-week classes of 90 minutes over 14 weeks. According to Evans (2006), the main contextual challenge was lack of materials; she would need to create all the materials for the course herself, knowing that she could not be sure how much the students knew about each topic. This would affect syllabus and materials design.

Each of the factors identified, such as the amount and frequency of time available, parents’ expectations, availability of materials and teacher preparedness, had to be considered for the curriculum to be workable in the context. When such factors are not taken into account, the curriculum goals, syllabus and materials risk being too ambitious or inappropriate for the teachers and students they are meant to support. Wedell and Grassick (2018) have collected case studies of teachers dealing with curriculum change in which many of these factors were not taken into account, thus undermining the teachers’ ability to use the planned curriculum effectively.

Guiding principles

Principles represent theories or beliefs about language, learners and learning. They guide decisions about what and how students will learn and why. These principles are important because they help designers in making clear links between curriculum decisions and learners, learning, and content.

GREEK PRIMARY CURRICULUM

The curriculum was guided by three principles (Dendrinis, 2013, p. 8):

1. It views pupils as learners with an emerging school literacy in their mother tongue and aims to help them develop in and through English those social literacies that they have already developed in their mother tongue.
2. It makes provisions for differentiated instruction, i.e., its curricular materials have been designed by taking into account the fact that individual pupils have different interests, preferences and learning styles, and that the pupil population of different schools has different types of social experiences and needs.

3. From a language learning point of view, the PEAP curriculum is aimed at developing a pre-A1 level ability to understand and use spoken language.

These principles highlight the importance of oral language, social literacy, the student's first language and tailoring learning and teaching to diverse learners.

JAPANESE UNIVERSITY COURSE

Evans (2006) identified three guiding principles for her course on animal issues. The first focused on learning as a social constructivist process that takes place "through social interactions, where students create their own meaning through their own learning experiences" (p. 171). The second focused on learning language through task-based and cooperative learning so that students could "communicate, negotiate meaning and stretch their linguistic abilities" (ibid.). The third focused on promoting learner independence for a variety of learning styles so that they could engage in "self-directed planning, learning and reflection" (p. 172). These principles link back to the students' need to identify their own views and to learn new information both collaboratively and through their own research.

Principles relate to the learners and the context, but also to the developers' own understandings of language and how languages are learned. These developers made specific connections to how their understandings were rooted in theories about language and about learners. For example, the first principle in the Greek curriculum was based on a view of language as a social practice (Kress, 1988) that involves multiple literacies, including social literacy. Social literacy, which involves primarily oral language, is the ability to interact socially with others in age-appropriate ways (Dendrinos, 2013). They also linked to their understanding of learning and language acquisition, for example that learning is a social-constructivist process and that language learning involves negotiating meaning or using and understanding oral language. These understandings guide decisions about the curriculum goals.

Problems can arise, however, when the understandings are at odds with the context. For example, communicative language teaching has been introduced in countries throughout the world (Graves & Garton, 2017). It is broadly based on an understanding of language as communicative competence, which is gained through meaningful interaction with others in the target language. This view has been widely adopted in contexts where classes are very large and where cultural norms are such that students do not expect to interact with each other in a classroom setting (Tram, 2021). Similarly, in settings where students will take a high-stakes language exam, community expectations that they will prepare for a grammar and vocabulary driven exam undermine the credibility of a communication-oriented curriculum (Yan, 2018).

Determining the goals of the curriculum

The goals of a language curriculum describe what students are expected to learn and achieve during and by the end of the program or course. Goals¹ (also called aims) define in broad terms the knowledge, skills and dispositions that students are expected to gain through their learning experience. According to Richards (2017, p. 142), the purpose of stating goals is "to provide a clear definition of the purpose of the language program; to provide guidelines for teachers, learners and materials writers; to help provide a focus for instruction; to describe important and realizable changes

in learning.” Since broad goals can be interpreted in different ways, they are further broken down into more specific goals or objectives that define in more detail how the goals will be achieved. As curriculum goals are about what students will learn, they are usually stated in terms of the learners.

GREEK PRIMARY CURRICULUM

The project team described three overarching goals for the Greek curriculum (Dendrinis, 2013, p. 12). These were to:

1. help children develop further in and through a foreign language those social literacies that they have already developed in their mother tongue;
2. develop additional social literacies appropriate for the school and out-of-school culture;
3. develop intercultural awareness and an interlinguistic ethos of communication.

Based on these goals, they outlined a set of pedagogic objectives that focused on the development of:

- strategies for learning language and cooperation skills;
- respect for oneself, for others, for the linguistically and culturally different;
- appreciation of one’s own and other’s mother tongue and culture, for English and other languages;
- social and cognitive skills, and the ability to do things through English, as itemized in the two-year course syllabi.

(Dendrinis, 2013, p. 12)

These goals and objectives link back to understandings of the learners’ development of mother tongue literacy, and social and cognitive development; of language as social literacy and the need to build on the first language; of learning by doing, and the purposes of learning as the appreciation of other languages and cultures.

JAPANESE UNIVERSITY COURSE

Evans identified four overarching aims for her course (2006, pp. 169–170) to:

- raise students’ awareness of animal issues, at a local and global level;
- link previous knowledge and experience with new information to facilitate uptake of new vocabulary and increase content knowledge;
- help students further develop oral, written, research, and presentation skills;
- promote students’ critical thinking skills and help them formulate their own perspectives about serious animal issues through discussion and reflection.

These goals foreground four important strands of her course: a focus on learning new content, language development, academic skills and critical thinking. These can be linked back to her principles and to her understanding of students and context. For example, the focus on critical thinking skills/formulating their own perspectives links back to the principle of promoting learner independence.

Goals do not emerge from a vacuum. They depend on who the learners are, their needs and purposes (needs analysis), the affordances and constraints of the context (context analysis) and understandings of the subject matter, language and how it is most effectively learned (guiding principles). Misalignments occur when the goals of the curriculum are ‘aspirational’ for the learners or inappropriate for the context. Aspirational goals may not account for what is required to bridge the gap between students’ current level of proficiency and the target level (Julian & Foster, 2011). Goals are inappropriate when, for example, they require resources that teacher and learners do not have access to such as technology (Soto, 2018). In other words, goals should be appropriate for the learners, realistic for the context and based on sound principles of how languages are learned.

Developing the syllabus

The goals are the basis for the next set of decisions, developing a syllabus and materials. While the goals state ‘this is where we want to go’, the syllabus describes how to get there and the materials provide the means for doing so. A syllabus defines what should be taught at different levels or grades or in a specific course and how it should be organized into cycles or units of work. Another way of thinking of the syllabus is that it outlines the scope of what will be taught and how it will be sequenced or organized.

GREEK PRIMARY CURRICULUM

The syllabus was organized around six cycles: an introductory cycle, three cycles corresponding to the three school terms, a cycle with activities for special occasions such as holidays and a cycle with extra material. A series of lessons was developed for each cycle. The lessons related to children’s daily activities at home, school and in the community such as pets, foods, television, numbers and sports. They followed a progression from focusing on ‘me’ and immediate surroundings, to focusing on interacting with others, to focusing on the wider community. The alphabet was introduced in grade 2. Language from previous lessons was recycled and every five or six lessons a lesson was specifically designed to bring together language from the previous lessons.

JAPANESE UNIVERSITY COURSE

The syllabus was organized around six topic-based units, e.g., endangered animals, wildlife trafficking, zoos. Each unit was designed around a cycle in which students learned new content through topic-related readings, discussed the issues, completed different kinds of cooperative tasks and reflected on their own views. For example, after reading an article on abandoned pets, students worked together to solve a problem related to the issue. The syllabus included three projects, an endangered animal mini-presentation, a visit to the zoo and a final poster presentation on an animal-related issue of their choice.

A syllabus ‘operationalizes’ the goals within the time frame. It is in the syllabus that the view of language and language learning becomes evident. In the Greek curriculum, the focus is on social interaction around familiar topics. In the Japanese university course, the content around animal issues is the source of language, and the academic tasks such as interpreting texts, conducting research and preparing presentations are the means of learning both language and content.

A syllabus provides clear guidance for those who use it. When the syllabus is designed for a wide range of students, as in a national curriculum, there should be some degree of flexibility in its use, as it will need to be adapted to different contexts. This was the case in the Greek curriculum, which included a cycle with extra material which teachers could use to replace or supplement parts of the other cycles, according to their learners.

Choosing or developing materials

The syllabus is the basis for choosing, adapting or developing materials that will actually be used in the classroom. Materials provide activities, explanations, texts, images and videos, in both print and electronic formats, that target the language points, topics, content and so on that the syllabus outlines. Although textbooks are the most common material in schools, they are often complemented with multi-modal materials. The point of these materials is to provide a means for students to learn language and achieve the goals set out for the curriculum.

GREEK PRIMARY CURRICULUM

Each of the lessons in the curriculum stated the cycle it was for, its topic, overall goal, pedagogic and language objectives, time needed and resources such as pictures, song lyrics, flashcards or links to videos. This was followed by teaching guidelines that described the steps of the lesson, class organization (team/pair work), how to differentiate instruction, ways to evaluate the learning process, as well as ideas for extra steps and links to further resources. Topics were introduced in the context of the children's own experience.

For example, in a lesson about 'carnival', children:

learn about the Carnival in different places of the world. They become familiar with and appreciate the aesthetic value of different kinds of masks, shapes, colours and decorations from other countries. They also learn to create masks while listening and dancing to songs from other cultures.

(PEAP, n.d.)

A sample language objective is: "To repeat phrases related to colours and animals (e.g. My mask is black/yellow/brown/I am a cat/a lion, etc.)." Sample pedagogic objectives are: To understand cultural difference and develop respect towards others; to enjoy taking roles; to dance and improve motor skills. The lesson begins with asking the children about their own experience of Carnival.

JAPANESE UNIVERSITY COURSE

The materials for the six units were created from texts and images found through a variety of topic-focused websites and articles from the popular press; they included pre- and post-activities that focused on vocabulary and content. Each of the three projects involved research, problem-solving and a presentation. For the zoo visit, each student chose an animal to observe, described the differences between the zoo and its natural habitat, and wrote a proposal for how to improve zoos, which was discussed and evaluated with peers.

The material for the animal issues course was, in effect, custom-designed by the teacher. The development of the materials for the Greek curriculum also involved teachers and so were closely tied to the teachers and students who would use them. In large-scale curriculum development this is often not the case, as the domains of curriculum planning and teaching are seen as separate, involving two types of expertise (Doyle, 1992). One of the most common types of materials used in language teaching are textbooks (Garton & Graves, 2014), which are used in different settings by different teachers, whether country-specific or globally published. Because no textbook can meet the needs of all the students who use it, teachers will need to adapt it to their particular students. However, teachers may feel that they must follow the textbook as it is written, because it has been developed by experts and because there are expectations that following the curriculum as written will result in uniform learning. This is not possible (Graves, 2021) and will be further explored in the section on curriculum enactment.

Assessment and evaluation

Another set of planning decisions concerns how to assess learning and how to evaluate the effectiveness of the curriculum. Assessment focuses on the students. These are decisions about how to document student learning. It can be documented along the way through formative assessment that seeks to understand what learners are doing, and at the end, through summative assessment, which documents what they have achieved (Katz, 2014). Assessing learning gives teachers and learners and other stakeholders information about progress and achievement related to specific objectives and broader goals. Evaluation focuses on the curriculum and is described in the section on curriculum evaluation.

GREEK PRIMARY CURRICULUM

The focus of ongoing assessment in the Greek curriculum was on the process of learning, rather than on outcomes. Teachers were asked to monitor “the way learners participate in and carry out language activities and how they engage in the learning process” (Dendrinis, 2013, p. 13). For summative assessment, ‘can do’ descriptors were developed to be used at the end of the two years. These describe how learners are able to use and understand English to participate in classroom activities as well as to communicate regarding topics they have learned. Examples of the former include being able to understand and respond to class instructions, cooperate with a partner and link pictures to English words. Examples of the latter include describing family members, expressing feelings or asking and answering basic questions.

JAPANESE UNIVERSITY COURSE

The assessment plan for the animal issues course focused on three areas: homework and quizzes, the student projects, and their participation in class activities and discussions. The projects were assessed on content and presentation from multiple perspectives: through student self-evaluations, peer evaluations and teacher evaluations. The teacher also assessed project preparation. Participation was assessed in different ways including self and group assessments.

There is a clear difference in scale and in purpose for the assessments in the two examples. Assessment in the teacher-developed course focused on aspects and artifacts of learning that were specific to the course. Assessment in the national curriculum focused on broader indicators that could be aggregated to document learning over a two-year span. Neither of these examples involved one of the biggest controversies in the relationship between curriculum and assessment—compulsory, high-stakes exams. What is tested on these exams is often at odds with the goals of the curriculum. In China, for example, the new English curriculum introduced in 2009 expected teachers to focus on whole-person education rather than on language knowledge. Goals were described in terms of what students can do instead of items to be taught (Wang, 2015). The school-leaving exam, however, focused on knowledge about language. Teachers were torn between preparing their students to take the test and preparing them to use language in holistic ways (Yan, 2018).

Ideally, in the development process, the constraints and resources of the context have been taken into account, the principles on which the curriculum is based make sense for the learners, the goals are attainable, the syllabi derive from the principles, the materials are appropriate for the learners and assessments document learning in relation to the goals. In other words, each of the processes is in alignment and is aimed at supporting successful classroom learning. Problems arise when there is misalignment between these processes, for example, when context analysis reveals time constraints that the syllabus does not take into account, or the goals aim for a level of proficiency that is at odds with learners' capacities and needs. However, even when the processes are in good alignment, the effectiveness of the planned curriculum depends on what happens in the classroom, which is the focus of the second dimension of curriculum: enactment.

Dimension 2: Curriculum enactment

Curriculum enactment, the educational experiences jointly created by teacher and learners in the classroom (Snyder et al., 1992), is the curriculum as students experience it in the classroom. Curriculum enactment unfolds as teachers and learners interact with the materials, the environment and with each other. In a sense, the enacted curriculum is what students actually learn, while the intended curriculum is a plan for their learning.

The link between the two dimensions of planning and enacting, or the intended and enacted curriculum, is the teacher. Teachers mediate the intended curriculum as they plan and teach their lessons. They mediate it by making decisions about how they use the intended curriculum based on a constellation of factors that include who the students are, their own experience and beliefs about language and how it is learned, available resources, classroom culture and social expectations about what is appropriate in that setting. When the teacher is the person who has developed the curriculum, these factors are already taken into account, and so there is likely to be close alignment between planning and enacting. This was the case in the animal issues course (Evans, 2006), in which the teacher developed the syllabus, materials and assessments based on her knowledge of the students and context, and on her goals and principles. The way she taught the course closely matched the way she had planned it. However, even when a teacher develops the course they teach, a myriad of classroom factors can affect what actually happens, such as student background knowledge or preparedness, interest in the topic/activity, length of time to complete a lesson, problems with technology and so on.

What happens when teachers do not develop the syllabus or materials they use, as is the case with most teachers, especially in larger institutions and state schools? A prevalent view in curriculum research is that the teacher's role is to implement the curriculum, not to mediate it (Wedell & Grassick, 2018). In most institutional curriculum development, such as the introduction of new state standards or a national reform, the curriculum is developed by specialists and teachers are expected to use it in ways intended by the developers. The basic premise is that if a curriculum plan is good,

The content goals of the unit were defined by the state and local standards. Igielski developed her own language goals for the unit that targeted content-specific and academic vocabulary, as well as grammar, syntax and academic language skills such as note taking and summarizing. The unit culminated in student multi-modal project presentations.

Sequencing was based on the concept of scaffolding (see Gibbons, 2015).

Students were first provided with teacher-led and text-based examples of their unit projects and goals. Then guest speakers contextualized and made these projects and goals more relevant. Students then engaged in projects as members of cooperative groups with the support of other ELLS and native English speakers. Finally, students were asked to complete projects about their own immigration and migration stories.

(Igielski, 2014, p. 152)

She also varied participation patterns, so that students could work with same-language peers, using their shared language as a scaffold for their learning.

Igielski's students were required to participate in a range of formal assessments at the state and district level, including language assessment, for accountability purposes. To document students' progress and achievement in the unit, she designed a portfolio approach that allowed for different entry points for the students to show understanding of language and content. These included conferences with each student in which they could present evidence of learning; student self-assessments about participation and overall growth towards unit goals; and check-ins with students on specific language or content.

The unit Igielski designed was guided by the institutional curriculum. She was expected to follow the state standards for each subject, use the textbooks mandated by her school district and comply with state exams. However, how she designed and taught the unit was profoundly shaped by her knowledge of her students, and the goals and principles she identified as important for their success. The standards and textbook were important elements in curriculum enactment, but they were mediated in her planning and teaching through the decisions she made, such as choosing immigration stories that reflected her students' backgrounds.

Igielski could be seen as deviating from the curriculum, since she didn't completely follow the textbook. However, no matter how well-conceived the institutional curriculum is, it can only be considered 'good' or 'successful' in terms of what happens in the classroom, i.e., enactment. Because each classroom in which it is used is different, teachers will always need to mediate it for their particular learners.

Dimension 3: Curriculum evaluation

The two previous sections have examined the processes involved in curriculum planning and curriculum enactment as two dimensions of the dynamic system of curriculum. The third dimension is evaluation. The overall purpose of evaluation is to determine how successful the curriculum was in order to improve it (Nation & Macalister, 2010). As noted earlier, curriculum plans are only successful in relation to how workable they are in the context, in other words, how well teachers are able to mediate them in enactment. Success is thus concerned with the relationship between the planned and enacted curriculum. Evaluation is a process of gathering information to learn about this relationship. Questions that might be asked in evaluation are: Were the goals appropriate for the learners and achievable in the context? Were the needs accurately defined? Were the materials related to the goals and relevant to the learners? Which activities had the most impact on learning? Were teachers adequately prepared to use the materials?

In designing and conducting evaluation it is important to determine which aspects of the curriculum are being evaluated and why, how that information will be gathered, who will be involved and how the information will be disseminated and acted on. As with assessment, evaluation can be both formative and summative. According to Nation and Macalister (2010, p. 125), formative evaluation “has the purpose of forming or shaping the course to improve it.” The purpose of summative evaluation is to make “a summary judgment on the quality or adequacy of the course...”. Information gained from evaluation should be used to adjust the curriculum so that it is workable in the context and, ultimately, better supports student learning.

GREEK PRIMARY CURRICULUM

Formative evaluation played a crucial role in the Greek primary curriculum. After materials had been developed and piloted by teachers, they were evaluated by a team of teachers and curriculum specialists prior to inclusion in the curriculum (Karavas, 2014). Summative evaluation involving parents and teachers was carried out through surveys at the end of the first and second year. As there was initial resistance from parents to the curriculum, one measure of its success was parent satisfaction. The surveys showed that parent satisfaction with the curriculum was high. The teacher survey also showed high satisfaction with the curriculum.

JAPANESE UNIVERSITY COURSE

Course evaluation for Evans’ animal issues course included a standardized university form composed of close-ended questions, which documented student satisfaction with the course. In order to obtain more specific information about the course, Evans created an evaluation which consisted of open-ended questions. She also took notes throughout the semester about the materials and activities (Evans, 2006, p. 179). Student overall evaluation on both the institutional and teacher-created questionnaires was very positive. Based on student responses the first year, Evans made several changes to the course for the following year to better meet her students’ needs such as assigning group roles and varying the format of the projects.

The three dimensions of curriculum should thus ideally form a cycle of planning, enacting and evaluating: curriculum planning shapes and supports enactment; curriculum evaluation reflects back on what can be learned from enactment. What is learned through the evaluation informs further planning, which supports enactment and so on.

Conclusion and future directions

This final section will explore two important future directions for curriculum. The first is the ongoing shift of language curriculum to a focus on content other than language. The second is the need for teachers to learn to be curriculum thinkers in order to develop agency and confidence in mediating the institutional curriculum.

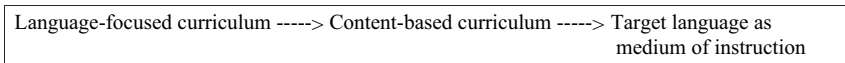


Figure 8.1 A continuum of language to content-focused curriculum

Shift to content-based curriculum

Although this chapter has focused on the processes of language curriculum development rather than on specific curriculum content, it is important to note the continuing trend towards content-based as opposed to language-focused curricula. Figure 8.1 depicts a language- to content-focused continuum, where language-focused curriculum is at one end, content-based curriculum is in the middle and target language as the medium of instruction is at the other end.

In a language-focused curriculum, learners learn aspects of the target language such as its grammar and syntax, vocabulary, communicative functions and social language, and conventions for writing, irrespective of specific content. Learning objectives are stated in terms of language; knowledge about language and how to use it are the focus of assessment. In a content-based curriculum, the learners learn content other than language (e.g., about immigration, animal issues), as well as the language needed to access and understand, and to discuss and write about the content (Snow, 2014). Objectives are stated in terms of knowledge of content as well as language, and both types of knowledge are assessed. In Europe, this approach is called CLIL (content and language integrated learning). Target language as the medium of instruction (e.g., EMI—English as the medium of instruction) focuses on content; objectives are stated in terms of content learning, and content knowledge is assessed. For most students the target language is not their native language; however, language development is not a focus of the curriculum.

The trend towards learning language through and for content learning is attractive for several reasons. According to Ioannou-Georgiou (2012) this type of learning provides an “authentic setting of meaningful learning where students can engage in exploring and finding out about the world while using a foreign language to do so” (p. 496). It provides authentic reasons to learn and use the target language by engaging in learning new content, “rather than spending years ‘rehearsing’ in a language class for a possible opportunity to use the language some time in the future” (ibid.). This was the case in Evans’ (2006) university course on animal issues: students developed academic language skills while and through learning content. This type of learning is, de facto, the focus of classrooms such as Igielski’s 4th grade classroom, where students are simultaneously learning English while learning new content in and through English (Gibbons, 2015). The stakes are high for these learners, as their success in school depends on their learning of content. Some forms of content-based learning are not as high-stakes as the content is seen as a vehicle for language learning (Snow, 2014). However, in school settings where required content is being learned through a foreign language, as in many CLIL contexts, the stakes are very high, as students are graded according to content learning.

Preparing teachers to become curriculum thinkers

When a teacher is the developer of a course, or has been involved in its development, there will be closer alignment between the three dimensions of planning, enacting and evaluating (Vilches, 2018), and the teacher will be better able to enact changes based on evaluation. This is because they have become ‘curriculum thinkers’ (Graves, 2021), in other words, they understand how a curriculum is developed and are able to mediate it for their context in ways appropriate for their learners (Wang, 2015). However, when those who develop curriculum are separate from those who enact it, this separation has meant that teachers may not think of themselves as curriculum mediators and

may not see the point of evaluating and adapting the curriculum (Gulyamova et al., 2014). Teaching teachers to become curriculum thinkers is an important step in helping a teacher develop more agency in curriculum enactment. This involves making sense of the planned curriculum both conceptually—the theories and principles underlying it—and practically—how to use the curriculum in the classroom in ways congruent with the principles (Wang, 2015). Teachers should also be taught to critically evaluate the materials they are expected to use. This includes evaluating how congruent the materials are with the purported principles as well as with the teacher’s own beliefs, and how well they represent and extend their students’ knowledge and respond to their needs. Teachers should be taught that mediation and adaptation are vital to make the materials workable in their particular context for their particular students.

Note

- 1 The term ‘outcomes’ is also used interchangeably with ‘goals’. Goals describe what is aimed for in the curriculum. Outcomes are what is actually achieved. It is thus more accurate to equate ‘intended outcomes’ with goals.

References

- Breen, M. P. (1987). Contemporary paradigms in syllabus design. Part 1. *Language Teaching*, 20(1), 81–92.
- Dendrinou, B. (2013). *The “PEAP” programme: English for young learners in Greek primary schools*. Athens: Research Center for Language Teaching, Testing and Assessment (RCeL).
- Deng, Z. (2017). Rethinking curriculum and teaching. In *Oxford research encyclopedia, education* (pp. 1–23). New York: Oxford University Press. DOI: 10.1093/acrefore/9780190264093.013.55
- Doyle, W. (1992). Curriculum & pedagogy. In P. W. Jackson (Ed.), *Handbook of research on curriculum* (pp. 486–516). New York: Macmillan.
- Evans, H. (2006). Animals in the language classroom? Teaching English and critical thinking in a social issues class. In M. Snow & L. Kamhi-Stein (Eds.), *Designing a new course for adult learners*. Alexandria, VA: TESOL.
- Garton, S. & Graves, K. (Eds.) (2014). *International perspectives on materials in ELT*. London: Palgrave Macmillan.
- Gibbons, P. (2015). *Scaffolding language scaffolding learning* (2nd ed.) New Hampshire: Heinemann.
- Graves, K. (2008). The language curriculum: A social contextual perspective. *Language Teaching*, 41(2), 149–183.
- Graves, K. (2014). Syllabus and curriculum design. In M. Celce-Murcia, D. Brinton, & M. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 46–62). Boston: Heinle-Cengage.
- Graves, K. (2016). Language curriculum design: Possibilities and realities. In G. Hall (Ed.), *The Routledge handbook of English language teaching* (pp. 79–94). London: Routledge.
- Graves, K. (2021). Mind the gap: A tale of two curriculum fallacies. *Language Teaching*, 1–13. DOI: 10.1017/S0261444821000148
- Graves, K. & Garton, S. (2017). An analysis of three curriculum approaches to teaching English in public-sector schools. *Language Teaching*, 50(4), 441–482.
- Gulyamova, J., Irgasheva, S., & Bolitho, R. (2014). Professional development through curricular reform: The Uzbekistan experience. In D. Hayes (Ed.), *Innovations in the continuing professional development of English language teachers* (pp. 45–64). London: British Council.
- Igielski, J. G. (2014). Designing effective, culturally, and linguistically responsive pedagogy. In S. Garton & K. Graves (Eds.), *International perspectives on materials in ELT* (pp. 141–156). London: Palgrave Macmillan.
- Ioannou-Georgiou, S. (2012). Reviewing the puzzle of CLIL. *ELT Journal*, 66(4), 495–504.
- Julian, K. & Foster, D. (2011). Design meeting context: A general English course for Burmese adults. In J. Macalister & I. S. P. Nation (Eds.), *Case studies in language curriculum design* (pp. 21–39). London: Taylor & Francis.
- Karavas, E. (2014). Implementing innovation in primary EFL: A case study in Greece. *ELT Journal*, 68(3), 243–253.
- Katz, A. (2014). Assessment in second language classrooms. In M. Celce-Murcia, D. Brinton, & M. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 320–337). Boston: Heinle-Cengage.
- Kress, G. (Ed.) (1988). *Communication and culture: An introduction*. Kensington: UNSW Press.
- Nation, I. S. P. & Macalister, J. (2010). *Language curriculum design*. New York: Routledge.
- PEAP (n.d.). *Project website*. <http://rcel.enl.uoa.gr/>

- Richards, J. C. (2001). *Curriculum development in language teaching*. New York: Cambridge University Press.
- Richards, J. C. (2017). *Curriculum development in language teaching* (2nd ed.) New York: Cambridge University Press.
- Sefarej, K. (2014). Coping with new teaching approaches and materials: An East-European EFL teacher's interpretation of communicative teaching activities. In S. Garton & K. Graves (Eds.), *International perspectives on materials in ELT* (pp. 89–103). London: Palgrave Macmillan.
- Snow, M. (2014). Content-based and immersion models of second/foreign language teaching. In M. Celce-Murcia, D. Brinton, & M. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 438–454). Boston: Heinle-Cengage.
- Snyder, J., Bolin, F., & Zumwalt, K. (1992). Curriculum implementation. In P. W. Jackson (Ed.), *Handbook of research on curriculum* (pp. 402–435). New York: Macmillan.
- Soto, M. A. (2018). Imaginary realities: Curriculum change that ignores classroom contexts. In M. Wedell & L. Grassick (Eds.), *International perspectives on teachers living with curriculum change* (pp. 205–228). London: Palgrave Macmillan.
- Tram, P. D. Q. (2021). EFL teachers' experiences of the new English curriculum: A cultural-historical activity theory perspective. (Unpublished doctoral dissertation) University of New South Wales, Sydney, Australia.
- Vilches, M. L. C. (2018). Involving teachers in the change process: One English teacher's account of implementing curricular change in Philippine Basic Education. In M. Wedell & L. Grassick (Eds.), *International perspectives on teachers living with curriculum change* (pp. 15–38). London: Palgrave Macmillan.
- Wang, Q. (2015). Reframing 'public lessons' to support English teachers for curriculum change in China. In T. Wright & M. Beaumont (Eds.), *Experiences of second language teacher education* (pp. 126–152). London: Palgrave Macmillan.
- Wedell, M. & Grassick, L. (2018). *International perspectives on teachers living with curriculum change*. London: Palgrave Macmillan.
- Wiggins, G., & McTighe, J. (2005). *Understanding by design* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Yan, C. (2018). Balancing change and tradition: A Chinese English teacher's experience of curriculum reform. In M. Wedell & L. Grassick (Eds.), *International perspectives on teachers living with curriculum change* (pp. 61–82). London: Palgrave Macmillan.
- Ylimaki, R. (2013). Create a comprehensive, rigorous, and coherent curricular program. In R. Ylimaki (Ed.), *The new instructional leadership ISLLC standard two* (pp. 27–44). New York: Routledge.

Materials Development for Language Learning

Ways of Connecting Practice and Theory in Coursebook Development and Use

Brian Tomlinson

Introduction

I vividly remember how my first coursebook was written. Rod Ellis and I were teaching in Mankoya Secondary School in Zambia in 1970. Our coursebook was boring for us and boring for our students too. So we started developing our own materials, which were fairly conventional in format but innovative in localisation and bizarreness of content (see Schütze [2017] for research informed claims for the value of combining what is familiar with what is novel and Richman [1994] for a researched claim that a bizarre learning experience is much more memorable than a mundane one). Our students much preferred our materials to the coursebook, especially when Rod and I were teaching at the same time in different classrooms and our loud voices carried across the campus in unison or in interaction. In developing our materials, we made no conscious attempt to apply theory to practice. We relied on our limited experience of the language classroom and our creativity. Our only principled objective was to help our students to have fun. Eventually we had enough material to completely replace the coursebook at one level and decided to approach Longman Zambia with our materials. They liked what they saw and eventually Ellis and Tomlinson (1973–74) was published at three levels, was adopted by the Ministry of Education as the national coursebook for Zambian secondary schools and, rather embarrassingly, continued to be used for the next forty years.

Coursebooks continued to be developed and published in the same ad hoc way for many years with authors submitting intuitively developed manuscripts and publishers responding to the ones they thought they could sell. Eventually the situation changed and publishers started to look for gaps in the market and to commission textbooks to fill them. Authors were given a brief to follow but allowed freedom in their approach and content. Drafts were piloted for extensive periods and revisions made. Then, as the coursebook market became both increasingly lucrative and financially risky, publishers began to commission secret research into the popularity of their rivals' successful coursebooks with a view to cloning those features most responsible for their success. Publishers began to exert even more control over the content and pedagogical approach of their coursebooks and nowadays teams of writers are usually hired to write materials to prescription. In many cases lead writers produce most of the materials for the student book and other writers are hired to write materials to order for the various workbooks, teachers' books, videos, digital tools, etc., which seem to inevitably accompany the modern coursebook.

Very few publications have chronicled the changes in how coursebooks have been developed and published but Donovan (1998) gives an account of how coursebooks were developed and published by Cambridge University Press in the 1990s and Amrani (2011) does the same for the first decade of this century (with the most distinctive difference being the replacement of the very useful but time consuming and expensive process of piloting with the much more efficient but possibly less reliable process of instant teacher feedback from questionnaires and focus groups). Other publications on the process of the development and publication of coursebooks have included:

- Tomlinson (1995), which reported the development of an innovative and principled text-driven coursebook for Namibian schools which was written by thirty teachers in six days at a workshop in Windhoek, trialled in schools by the writers and then edited by a small team;
- Singapore Wala (2003, 2013) on how coursebooks are developed and published in Singapore;
- Aitchison (2013), which describes the publication process from a writer's perspective;
- Mishan (2013), which provides a critical review of the development of coursebook pedagogies over the years;
- Daoyi and Zhaoyi (2015), which traces the changes in the types of coursebooks used to teach English in China from the 1920s to the present day;
- Zemach (2018), which describes in harrowing detail the current publisher-centric process of developing coursebooks;
- Tomlinson and Masuhara (2018), which in Chapter 1 traces the history of the development of materials from the 1920s to the present day and in Chapter 6 describes the typical publishing process of language learning materials today;
- Tomlinson (2020), which questions whether materials development is actually developing.

The ways in which language learning materials are developed and published might have changed but two things have not. The first is that the prevailing methodology of published language learning materials has remained Presentation, Practice, Production (PPP) for the last fifty years despite its very weak match with the findings of second language acquisition (SLA) research and despite there being very little evidence of its value in facilitating the development of communicative competence (see Mishan, 2013; Tomlinson, 2020; Tomlinson and Masuhara, 2018, 2021). The second is that language learning materials continue to be developed with little attempt to apply theory to practice or to make use of what we know from observation and research about what does and does not facilitate the development of communicative competence. Hidalgo et al. (1995), Johnson (2003) and Prowse (2011) have revealed that most successful textbook writers, for example, have relied heavily on repertoire (i.e. what has 'worked' for them before), on intuition, on creativity, on awareness of the norm. Remarkably there is little evidence of the specification of principled criteria prior to beginning the writing of a course. The only exceptions I know of materials not being developed intuitively or strategically are:

- Tomlinson (1981), a task-based course developed by a team of teachers for primary schools in Vanuatu;
- *On Target* (1994), a text-driven coursebook for secondary schools developed by a team of thirty teachers in Namibia (see Tomlinson, 1995);
- Tomlinson (1994), a language through literature text-driven activity book;
- the theory-driven materials on projects in Iran, Malaysia, Thailand and Singapore described in Hall (1995);
- Tomlinson and Masuhara (1994), a text-driven course for Japanese university students;
- Naustdal Fenner and Nordal-Pedersen (1999), a text-driven course for Norwegian secondary school learners of English;

- Tomlinson et al. (2000), a text-driven coursebook for Singapore secondary schools;
- materials we developed in the first decade of this century at the then Leeds Metropolitan University for primary schools in China, for secondary schools in China and Singapore and for teachers in Ethiopia.

Most of these materials were developed for national projects and were not constrained by the need to make profits. These were popular with students. Most of those which were developed for commercial publication proved too innovative for teachers and did not achieve financial success.

My highlighting of the apparent lack of principle-driven development of materials brings me to the main focus of this chapter, which is the extent to which research-based second language acquisition (SLA) theory currently informs, and could more beneficially inform, the development of materials for second language learning.

Imagine all the major car companies in the world being capable of producing cars which are cheaper, safer and cleaner than conventional cars but not actually producing them because they are afraid their unconventional appearance will prevent profitable sales. This is the situation we are in with language learning coursebooks.

Published materials, and especially the coursebook, dictate what happens in the second language classroom. I have observed thousands of lessons at all levels and for all ages in China, Ethiopia, Indonesia, Malawi, Japan, Singapore, Spain, the UK, Vanuatu and Zambia and I have rarely been in a classroom in which a coursebook is not the prime determiner of what the learners do. Many experts have been critical of the typical, language-focused coursebook format and teaching-centred pedagogical approach (e.g. Allwright, 1981; Maley, 2011; Tomlinson, 2012; Tomlinson & Masuhara, 2018) and some have been critical of the concept of the coursebook and have proposed alternatives (e.g. Thornbury & Meddings, 2001; Meddings & Thornbury, 2009). However, the coursebook has prevailed.

In a survey I did of teachers attending conferences in Malaysia, UK and Vietnam (Tomlinson, 2010), I found that 92% of the teachers used a coursebook frequently (mainly because they were required to do so) but 78% did not like the coursebooks that they were using. Another survey (Saw, 2016) reported that only three out of 85 teachers surveyed in Myanmar and the UK did not use coursebooks and that most of the teachers were negative about their coursebooks but were obliged to use them.

Despite radical developments in SLA research and L2 pedagogy, not only has the coursebook prevailed, it has remained fundamentally the same. Blurbs and buzzwords have changed but the prevailing format remains segregated sections with each focusing on a particular language item, language feature or skill, and with the prevailing methodology remaining, Presentation, Practice, Production (PPP), a methodology which typically involves teaching a selected item or feature, providing controlled and guided practice and then eliciting learner production. I am sure you have experienced this approach as a learner and/or teacher and have probably found it to be convenient and valid. However, as we will see, it has long been discredited by many (but not all) SLA and materials development researchers as being capable of providing an illusion of success but also of being highly unlikely to facilitate the eventual development of communicative competence.

Second Language Acquisition Research (SLA) and Materials Development

SLA Research Relevant to Materials Development

In my introduction I make it fairly obvious that I am in favour of language learning materials being informed by SLA research. The question now is which research and which findings are particularly relevant to the development, evaluation and adaptation of language learning materials. Not all SLA

research is valid and reliable and not all of it is relevant to materials development. Some of it is essentially laboratory research which does not take into account the realities of, for example, teaching a large class of unmotivated learners who have been forced to learn a language they perceive to be alien and of little value, and to do so in hot, crowded and un-resourced classrooms with a teacher exhausted by the demands of teaching thirty to forty lessons a week. Much of it is relevant though to any learning context anywhere in the world no matter how privileged or impoverished it is. This is the research I would like to focus on in this chapter.

Tomlinson and Masuhara (2021) review the current research on SLA and suggest practical applications for all aspects of language learning, with particular reference to materials development. As a result of their review, they formulate many principles of language acquisition and select from them those of most relevance to materials development. Other publications which include as one of their main intentions to highlight SLA research of relevance to materials development include Ellis (2016), Garton and Graves (2014), Harwood (2014), McDonough et al. (2013), McGrath (2013, 2016), Mishan and Timmis (2015), Tomlinson (2013a, 2013b, 2016) and Tomlinson and Masuhara (2018). There are also recent publications which attempt to connect the theories of SLA with the practice of language teaching and learning. These include Ellis and Shintani (2013), Benati and Angelovska (2016), Mackay et al. (2018), Lessard-Clouston (2018), Nava and Pedrazzini (2018) and DeKeyser and Botana (2019). All these publications are very welcome but my experience is that as yet there is little indication that they have had any great impact on what happens in typical materials and classrooms throughout the world.

My informed belief is that the most relevant to materials development of the many principles of SLA are that learners should:

1. be exposed to the target language in communicative use and not just in exemplification and practice;
2. be exposed to input of language in use which is rich in both quantity and quality;
3. be exposed to language in use which is comprehensible;
4. be exposed to language in use which is meaningful;
5. be exposed to embodied language in use;
6. be exposed to recycled language in use;
7. achieve affective engagement when experiencing the language in use;
8. achieve cognitive engagement when experiencing the language in use;
9. be motivated to be mentally and linguistically active when experiencing the language in use;
10. notice how the language is used to achieve effective communication;
11. notice the gaps between their use of the language and that of more proficient users;
12. make discoveries for themselves about how the language is used to achieve effective communication;
13. be provided with and seek many opportunities to use the language for purposeful communication;
14. have many opportunities to interact in the target language with other learners and users of the language.

All of these determiners can have a positive influence on people in immersion situations who really need or want to achieve communicative competence in the language they are immersed in. They are rarely characteristic of the experience of learners who are using published materials in classrooms. I have found though that it is not that difficult for materials to be developed or adapted to match these principles. See Ways of Connecting Practice and Theory section later in this chapter for suggestions as to how these principles can be applied in order to facilitate the acquisition of communicative competence and see Tomlinson (2015, 2018) and Tomlinson and Masuhara (2021) for elaboration and justification of these principles and for further suggestions for their application.

Suggested Applications of SLA Research to Materials Development

Principles for Application

My recommendation is that in order to help learners to eventually achieve communicative competence in their target language, materials should:

- provide learners with exposure to the language in use which is rich in quantity and quality (i.e. there is a lot of it and it includes language being used in many genres, text types and contexts for many purposes, especially in learning environments in which there is little or no exposure to the language outside the classroom);
- provide learners with exposure to the language in use which is comprehensible (i.e. which the learners can understand enough of to achieve their purposes and the requirements of the activities);
- provide learners with exposure to the language in use which is meaningful (i.e. which relates to the learners lives and aspirations and is significant for them);
- provide learners with exposure to the language in use which is embodied (i.e. is used in conjunction with paralinguistic and non-linguistic signals to achieve communication – e.g. with hand gestures, facial gestures, body language, tone, pitch, pace and volume of voice, pauses, proximity, hesitation, context, etc.);
- provide learners with exposure to the language in communicative use which is recycled (i.e. occurs in use many times throughout the materials);
- help learners to achieve affective engagement when experiencing the language in use by providing choices of texts and of tasks with the potential to stimulate excitement, laughter, exhilaration, anger, pathos, empathy, joy and other emotions likely to achieve the salience needed to facilitate eventual language acquisition;
- help learners to achieve cognitive engagement when experiencing the language in use by providing a choice of texts and tasks with the potential to stimulate thought, inspire ideas and promote creativity;
- help learners to become motivated to be mentally and linguistically active when experiencing the language in use;
- help learners to notice both consciously and sub-consciously how the language is used to achieve effective communication;
- help learners to notice the gaps between their oral and written use of the language and that of more proficient users;
- help learners make discoveries for themselves from contextualised experience, from corpus analysis and from out of class ‘research’ activities about how the language is used to achieve effective communication;
- provide learners with many opportunities to use the language for purposeful communication in oral, written and especially interactive communication, both inside and outside the classroom;
- provide learners with many opportunities to interact in the target language with other learners and users of the language, including their peers, more proficient learners, L2 users of the target language and native speakers.

All these principles could be applied to the development of a conventional coursebook with texts and activities. For elaboration and justification of the principles outlined see Tomlinson and Masuhara (2021) and for other examples of proposed principles for applying SLA theory to materials development practice see Ellis (2016), Harwood (2014), Tomlinson (2013a, 2013b, 2016) and Tomlinson and Masuhara (2018).

Current Practice in Materials Development

Commercially published materials have been reviewed extensively in recent years, for example, in Harwood (2014). Garton and Graves (2014), McGrath (2013, 2016), Mishan and Timmis (2015), Tomlinson (2011, 2013a, 2013b, 2015, 2016, 2020) and Tomlinson and Masuhara (2013, 2018, 2021). All of the reviews have reported a mismatch between current research-informed theory and coursebook practice. For example, in Tomlinson (2020) I expressed my disappointment that commercial coursebooks are continuing to ignore much of what we have learned from second language acquisition research and I listed the following mismatches between current practice and current theory:

- focusing on the explicit learning of language forms (thus helping learners to communicate accurately in planned discourse but not helping them to communicate effectively in unplanned discourse);
- assuming that explicitly learned declarative knowledge can be transformed into implicit procedural knowledge through presenting a language feature, getting learners to practise it and then getting them to use it in contrived and simplified situations;
- using listening and reading to focus on language forms;
- asking closed questions and setting closed activities (thus restricting peer interaction and the expression of ideas and opinions (Freeman, 2014; Tomlinson, 2018));
- ignoring such pre-requisites for language acquisition as providing a rich, meaningful and recycled exposure to language in use, engaging learners cognitively and affectively, providing learner choice, encouraging learner noticing and discovery, encouraging learner experience of the language outside the classroom and providing opportunities for authentic communication (Tomlinson, 2011, 2016; Tomlinson & Masuhara, 2018, 2021);
- ignoring the potential of such experiential approaches as task-based approaches, text-driven approaches and CLIL approaches (i.e. approaches which combine learning both new topic content and a new language at the same time).

The most commonly reported mismatch in the literature is the over-reliance on explicit learning of declarative knowledge about discrete language features. Most published materials still list discrete language features as their syllabus and focus on one of them in each of their units. For example, a unit might be dominated by teaching the past perfect through exemplification and rules, then providing easy practice of the past perfect through filling in the blank exercises and then eliciting production of the past perfect in speaking and writing activities in which the context has been narrowed to make the 'use' of the past perfect inevitable and often prescribed. In such units there is little exposure to the target language in authentic use, little attempt to engage the learners affectively or cognitively, little relevance to the learner's own life experience, few opportunities to use the target language for purposeful communication, rarely any opportunity for learners to make discoveries for themselves and often an artificial overuse of the featured language item. Each unit follows the same format and there is rarely any recycling of previously featured language items. Worst of all most of the exercises are closed in that the learners just have to find an answer to a question in a text or choose between provided answers. Such exercises as fill in the blank, matching, Yes/No, sentence completion and multiple-choice typically involve little thought and few opportunities for authentic language use, even when they are done in groups.

My generalisations in Tomlinson (2020) and in this chapter about the mismatches between theory and practice are based on my classroom observations of language classes in Addis Ababa, Guangzhou, Liverpool, Muscat, Shanghai and Singapore, on analyses of coursebook units for Tomlinson (2016, 2018) and Tomlinson and Masuhara (2013, 2018, 2021) and on a sampling of coursebooks published

in 2019–20. Three positive discoveries I should highlight were the continuing increase in localisation, personalisation and the exchange of experience, views and ideas through learner interaction, all features which are endorsed by SLA research as potential facilitators of language acquisition. Unfortunately, the analyses and observations of coursebook units in use revealed that many coursebooks still:

- restrict the learners to intensive reading of or listening to short, simple texts often contrived to illustrate a ‘new’ teaching point;
- feature such closed and shallow activities as true/false questions, matching, filling in the blanks, word substitution, sentence completion and closed comprehension questions (Tomlinson, 2018);
- restrict the learners to practice of just-taught language points or to production activities which manipulate them to use just-taught language points.

Just to make sure that my comments are still relevant I have just sampled the major British publishers’ EFL catalogues and they seem to confirm that currently published coursebooks (with a few possible exceptions) are multi-component, very attractive in appearance but very language focused, and that they feature at most levels practice of language items rather than engaging experience of language in communicative use.

What I have said here about coursebooks also seems to be true of many (but not all) digital materials,

with many of them ignoring the possibilities offered by the medium of authenticity of text and task, recycling, individualisation, choice, localisation, exploration and contextualisation and often offering little more than typical coursebook closed activities in a possibly more attractive, navigable and easily accessible way.

(Tomlinson, 2020, p. 6)

For critiques of digital materials see Tomlinson and Masuhara (2018) and Tomlinson (2022).

Reasons for the Mismatch Between Practice and Theory

In Tomlinson (2020) I listed possible reasons for the mismatch between practice and theory. Here is a précis of the reasons I suggested:

- Publishers are working more and more to a profit-driven imperative and to urgent deadlines. They seem to no longer have the time to listen to and to give conference presentations, to read and to write articles, chapters and books or to apply recent findings from, for example, corpus linguistics, pragmatics research and neurolinguistics to their publications.
- Because of the massively increased cost of developing coursebooks and of the profit-driven imperative publishers cannot risk publishing innovative materials. They continue to publish coursebooks which achieve face validity by looking just like previously popular coursebooks and, in fact, even research what makes a commercially successful coursebook popular and then clone those features.
- Publishers appear to either clone commercially successful coursebooks or make use of market research (not SLA research) to identify gaps in the market. This means that they very rarely consider proposals from materials writers but rather establish the syllabus and approach for a new course and then recruit writers to develop materials to their prescription. This inevitably inhibits innovation.

- There are pragmatic reasons why publishers resist some innovations. For example, I have had experience of publishers being reluctant to use authentic materials because of the cost and difficulty of getting permissions.
- The writers who are recruited to write (rather than develop) coursebooks to prescription tend to be young, inexperienced and keen to break into the field. They often have limited awareness of research with the potential for practical application and are understandably reluctant to risk challenging the publisher or introducing innovation.
- Even if publishers do consider a proposal for a course, they are highly unlikely to accept it if it differs from the expected norm, a norm which focuses on the teaching and practice of discrete language items and skills. Who can blame the publisher for not taking a potentially disastrous risk? But then if no risk is taken no potentially valuable application from research will ever be made.
- Publishers do try to keep up by conducting their own research. For example, Cambridge University Press has a Language and Pedagogy Research Unit which has produced a series of online Cambridge Papers in ELT with reference to research and suggestions for application to practice (<https://languageresearch.cambridge.org/cambridge-papers-in-elt>). I am not sure though how many suggestions the publishers actually follow when it comes to the risky business of publishing coursebooks.
- High stakes examinations resist anything more than cosmetic change because of their need to be able to assess and mark huge cohorts from around the world efficiently and reliably. To achieve reliability, they need (or think they need) to use such objective means of measurement as multiple-choice questions, Yes/No questions, matching, sentence combination, sentence completion and C tests. High stakes examinations thus have negative backwash effects on curriculum development, classroom pedagogy, classroom testing and, unfortunately, language learning materials.
- Ministry of Education officials, inspectors, principles and heads of department are typically conservative when it comes to recommending or purchasing coursebooks. If they take a big risk and it goes wrong their careers are at stake. So they are more likely to approve materials which achieve face validity by conforming to expectations.
- Many potentially valuable reports of research which could usefully be applied to materials development are not accessible to teachers and materials developers. Either they are in journals which are not known or available to practitioners or they are written for fellow researchers with prior knowledge of the field and competence in understanding its jargon.

For a discussion of the implications of these and other possible reasons see Tomlinson and Masuhara (2018).

Ways of Connecting Practice and Theory

Connections When Developing Materials

Based on my experience of leading materials development teams for learners in Bulgaria, China, Ethiopia, Morocco, Namibia, Singapore, Sub-Saharan Africa and Turkey, I believe that the most reliable and valuable way of connecting theory to practice when developing materials is for the producers of the materials (i.e. the advisor(s), the writer(s), the editor(s)) to get together with a representative sample of the users (e.g. teachers, learners, principles, parents, sponsors) in order to develop a principled framework for the materials. This could be for in-house materials for a particular institution, for materials for a national coursebook or for materials for a global coursebook

for a major publisher. The process I would recommend would be for the producers and users (first individually and then collectively) to:

1. specify the objectives of the materials in relation to their intended target users (e.g. to facilitate the development of communicative competence when using the target language);
2. brainstorm a list of principled beliefs (informed by SLA theory and classroom observation) about what learners need in order to achieve the objectives specified in 1 (e.g. a rich exposure to the target language in authentic use);
3. convert the beliefs into universal pre-use evaluation criteria which could be used to evaluate materials for any learner anywhere (e.g. To what extent are the learners likely to gain a rich exposure to the target language in authentic use from the written texts?);
4. convert beliefs into local pre-use evaluation criteria connected to the specified objectives of the materials and the characteristics of the target learners and their learning environment (e.g. To what extent are the written texts likely to be meaningful to fifteen year olds in South America?);
5. practise using the universal and local criteria to evaluate a unit of existing material;
6. revise the criteria to ensure that they are all specific, answerable, unambiguous, reliable and valid;
7. develop a principled materials framework designed to satisfy the revised criteria in order to help the learners to achieve the specified objectives (e.g. the text-driven framework described in Tomlinson (2013b, 2022) and in Tomlinson and Masuhara (2018, 2021) in which a core authentic text is used to achieve rich and meaningful exposure, to stimulate affective and cognitive engagement and to drive reflective, creative, analytical and communicative activities);
8. use the revised criteria and the framework to inform the development of sample units of the materials;
9. use the revised criteria to evaluate the units;
10. revise the units;
11. produce a complete draft version of the materials;
12. use the revised criteria to evaluate the materials;
13. revise the materials;
14. trial the materials with equivalent learners and/or have the materials evaluated by focus groups of teachers and of learners.

If time and money allow, I would also recommend trialling units of the materials with equivalent learners as the materials are developed and then revising them and, if necessary, the framework too.

I have managed to make use of reduced versions of this model in projects for materials in China, Ethiopia, Namibia and Singapore (see Tomlinson, 1995 and Tomlinson and Masuhara, 2018) but I doubt if anything like the complete fourteen stage model has ever been followed. It is certainly very different from the typical model of global coursebook production which is driven more by user expectation, examination requirements and writer repertoire than by principled criteria informed by SLA research.

For more information about materials evaluation see Tomlinson (2013a, 2022) and Tomlinson and Masuhara (2018) and for information about developing materials frameworks see Tomlinson (2013b, 2022) and Tomlinson and Masuhara (2018).

Connections When Adapting Materials

Teacher Adaptations

Teachers can move materials closer to or further away from being theoretically valid by the way they actually use them with their learners. They can add, subtract, replace, modify and supplement, and

such teacher agency has become the focus of attention for many materials development researchers. For example, there is now an international association dedicated to researching teacher use of materials in the classroom called MUSE (Materials Use in Language Classrooms) which conducts classroom-based research and reports it in meetings and publications (see <https://museinternational.wordpress.com/>). Many recent publications, such as Garton and Graves (2014), Harwood (2014), McGrath (2016), Tomlinson and Masuhara (2018) and Graves (2019), have also reported research on how teachers actually use materials in the classroom, and there were many such reports at the 2019 MATSDA/University of Liverpool Conference on Using Language Learning Materials: Theory and Practice (www.matsda.com). The main findings of this research seem to be that all teachers do adapt their materials to some extent. To use the terms suggested by Shaver (2010), some are materials transmitters who try to follow the coursebook exactly as it is written either because they are obliged to do so, because they do not have the confidence or experience to make planned changes or, in rare cases, they really believe that the coursebook meets their students' needs. It does seem though that they do actually make small impromptu changes without realising they are doing so. According to Shaver (2010), other teachers are curriculum developers who adapt their coursebooks to make them more useful for their learners by modifying them and by adding some materials of their own, and a minority of teachers are curriculum makers who develop their own course by selecting materials from multiple sources (often including coursebooks) and by writing materials of their own. Curriculum transmitters are using the coursebook as a script while curriculum developers and curriculum makers are using it as a resource.

What the research referred to has revealed is that:

- many teachers are reluctant to make planned adaptations to their coursebooks because they do not want to challenge the authority of the experts who wrote the books or the authorities who prescribed them (Bosompem, 2014);
- most adaptations seem to be made to ensure the coursebook provides as much practice as possible in preparation for the examinations their learners are going to take (e.g. by deleting communication activities and increasing the number of comprehension questions);
- many adaptations are made to achieve a better match between innovative coursebooks and the practices that the teachers feel more comfortable with (e.g. adding pre-teaching of vocabulary before getting learners to read a text);
- some adaptations are made to add theoretical validity and to facilitate the development of communicative competence (e.g. adding an engaging readiness activity to activate the learners' minds in connection to a text they are going to read, listen to or watch).

See Thomas and Reinders (2015) for studies of teacher adaptations in Asia, Zheng and Borg (2014) for studies of teacher adaptations in China and Masuhara (2022) and Tomlinson and Masuhara (2018) for reviews of studies of teacher adaptations. Rather worryingly many of the adaptations which were reported resulted in a weakening of new approaches being advocated by the authorities and probably a weakening of their effect.

Making Small Changes

I have found that making the following small changes to how coursebook materials are used can bring them much closer to matching SLA principles for facilitating the development of communicative competence.

Performing the Coursebook

One way of achieving this closer matching of materials and research-informed theory is through performances of the coursebook. A performance of the coursebook consists of a human enactment

of the words on the page. It is live, in the classroom and sometimes augmented by props, visuals and sound effects. The performance can be by the teacher, by the learners or by interaction between the teacher and the learners, all of which can augment, enrich and energise the coursebook as well as achieve the exposure, engagement, embodiment of language and opportunities for communication I have been advocating.

The teacher could perform a joke or anecdote as a lead in to a coursebook unit focusing on the same theme, topic or location, the teacher could perform the core text of a unit by playing all the parts, the teacher could supplement the text by performing events or actions referred to in the text or the teacher could invite a colleague (and maybe combine classes) and act with them scenes from the coursebook, using either the coursebook script or their own. For example, two teachers could act out the scene depicted on page 45 of *global Intermediate* (Clandfield & Benne, 2011) in which two soldiers are patrolling on top of a wall dividing their country from an enemy. One of the soldiers realises that he cannot remember which side of the wall they are guarding but his colleague reassures him that their country is always on their right. Then they realise that they still have a problem. The students in pairs could be asked to identify the problem, come up with a solution, rehearse a performance of it and then act it out to another pair. Volunteer pairs could act out their solutions to the class and then the two teachers could act out their solution before leading class discussion of the pros and cons of erecting walls between countries rather than getting the learners to answer the surface comprehension questions in the coursebook.

The learners could perform rehearsed versions of texts from the coursebook, they could be asked to perform extracts in a variety of different voices (e.g. angry, happy, sad, nervous, confident), they could mime the actions described in a text reporting an event or a process or they could do impromptu performances of dialogues and narrative texts either in pairs or as two halves of a whole class. I have found such performances can become especially engaging if the teacher provides contexts for the characters which stimulate dramatic performance rather than just mouthing of the words. For example, I enlivened a mundane transactional dialogue between a shoe shop assistant and a customer by telling the learners that the assistant and the customer had recently been divorced, that the assistant had no idea his ex-wife was a frequent customer in the shop and that the customer had no idea her ex-husband was now working there. After the learners had performed the dialogue with half the class playing one character and half the other, I asked them in pairs to write and then perform an inner voice version of the dialogue with each character articulating first their inner voice thoughts and then their outer voice expressions.

The learners could perform mimes of texts driven by the teacher's dramatic readings, the teacher could interview learners in character about their actions and motives rather than getting them to answer the Yes/No questions in the coursebook or the teacher and the class could improvise a continuation of a text. For example, I narrated a Korean story about a rich old man (played by me) in which he died leaving all his wealth to his older, lazy and greedy son (played by half of the class) and nothing to his younger, hard-working and generous son (played by the other half of the class) (for the story see page 28 of *global Intermediate* (Clandfield & Benne, 2011)). The learners enjoyed miming their parts in increasingly silly ways but then I played a tough interviewer asking awkward questions to the characters (e.g. 'Your father left all his money to you. Did you give any of it to your younger brother?' 'No, why should I?' 'That's rather mean. Why didn't you give him anything?').

Readiness Activities

A readiness activity activates the learners' minds in connection to the topic or theme of the text they are going to experience. This replicates what happens when using the L1, and the brain immediately seeks connections from prior actual and virtual experience when first encountering a topic, theme, location, event or character in a written or spoken text. In the L2 learners are often so anxious that they devote all their brain capacity to decoding each word in the text and do not make the

connections to their lives which would make the text more meaningful and some of the language in it more likely to be eventually acquired. An example of a readiness activity would be inviting learners to visualise and then share their first day at school, college or university before reading a poem called *First Day at School*.

Extension Activities

An extension activity is something learners do after a unit in the coursebook to increase their experience of the topic or theme and to increase their opportunities for exposure to rich input and for purposeful communication. An example would be reading a potentially meaningful and engaging authentic text on a similar topic to the texts in the coursebook unit and then responding to it creatively or critically.

Personalising

Personalising involves adding or modifying activities so that the unit relates more to each learner in the class. For example, after doing a unit about robots the learners could be asked to:

1. write the beginning of a short story in which you've bought a robot and taken it home. In the extract from your story show the robot your home and talk to it about its duties;
2. swap stories with other students in the class;
3. read Ian Mc Ewan's new novel *Machines Like Me*, if you are interested in robots and in stories.

Another example would be to get the learners to rewrite a text in the coursebook so that it is located in the area where they live and features themselves and/or members of their family or community.

Challenging Creativity

This involves modifying or adding to activities so that the learners are provided with opportunities to interpret or produce language creatively. For example, the students:

- i. modify a text so that wrong answers in objective comprehension questions become right;
- ii. draw their interpretation of a text rather than answering questions about it;
- iii. interview characters from a text;
- iv. relocate and rewrite a text;
- v. continue a text;
- vi. add an extra think question for other learners to answer;
- vii. read only the comprehension questions and then write a text to answer them.

See Tomlinson (2015, 2018) and Tomlinson and Masuhara (2018) for these and other examples of increasing the potential value of materials by making small changes.

Future Directions

Likely Future Directions

Unfortunately I cannot see very much changing in the foreseeable future. The big commercial publishers have invested in a standard coursebook format which does not match what we know facilitates language acquisition but does return profit. The examination syndicates continue to set predominantly closed and reliable examinations which are imitated by national and institutional examinations and by coursebooks. The teacher training courses continue to focus on training teachers to teach language items and skills. The language planners continue to assume that what is taught

should be learned and plan resources accordingly. The administrators, teachers, sponsors and parents have inflexible expectations of what language learning materials should look like and do. So the main hope is that teacher trainers realise that it is important to help trainees to develop the awareness and skills needed for them to adapt and supplement their materials in ways which will help their learners to eventually develop communicative competence.

Ideal Future Directions

Ideally I would like the norm to become the development of materials which provide learners with a rich exposure to the target language in communicative use, which have the potential to stimulate affective and cognitive engagement, which are open-ended and achievably challenging and which provide multiple and varied opportunities to use language for purposeful communication. Such materials have been advocated, described and exemplified in Tomlinson and Masuhara (2018, 2021) and some have actually been developed and used on projects (see Tomlinson, 1995, 2020), with most of them making use of such experiential methodologies as Text-Driven Approaches, Task-Based Language Teaching, Project-Based Approaches, Problem Solving Approaches and Content and Language Integrated Learning. Similar materials could be developed commercially and on a global scale if a publisher was willing to take the risk, make use of a team of experienced researchers and practitioners to develop, evaluate and revise the materials and invest in global teacher development courses to promote the materials. The expertise and methodologies exist. They just need to be exploited.

References

- Aitchison, J. (2013). *How ELT publishing works* (Kindle ed.). Oxford: ELT Teacher 2 Writer. www.elteacher-2writer.co.uk/
- Allwright, R. L. (1981). What do we want teaching materials for? *ELT Journal*, 36(1), 5–18.
- Amrani, F. (2011). The process of evaluation: A publisher's view. In B. Tomlinson (Ed.), *Materials development in language teaching* (2nd ed., pp. 267–295). Cambridge: Cambridge University Press.
- Benati, A. G. & Angelovska, T. (2016). *Second language acquisition: A theoretical introduction to real world applications*. London: Bloomsbury.
- Bosompem, E. G. (2014). Materials adaptation in Ghana. In S. Garton & K. Graves (Eds.), *International perspectives on materials in ELT* (pp. 104–120). Basingstoke: Palgrave Macmillan.
- Clandfield, L. & Benne, R. R. (2011). *Global intermediate coursebook*. Oxford: Macmillan.
- Daoyi, L. & Zhaoyi, W. (Eds.) (2015). *English language education in China: Past and present*. Beijing: People's Education Press.
- DeKeyser, R. M. & Botana, G. P. (Eds.) (2019). *Doing SLA Research with implications for the classroom: Reconciling methodological demands and pedagogical applicability: 52 (Language Learning & Language Teaching)*. Amsterdam: John Benjamins.
- Donovan, P. (1998). Piloting – A publisher's view. In B. Tomlinson (Ed.), *Materials development in language teaching* (1st ed., pp. 149–189). Cambridge: Cambridge University Press.
- Ellis, R. (2016). Language teaching materials as work plans: an SLA perspective. In B. Tomlinson (Ed.), *SLA research and materials development for language learning* (pp. 203–218). New York: Routledge.
- Ellis, R. & Tomlinson, B. (1973–74). *English through situations*. Harlow: Longman. Books 1, 2 and 3.
- Ellis, R. & Shintani, N. (2013). *Exploring language pedagogy through second language acquisition research*. New York: Routledge.
- Freeman, D. (2014). Reading comprehension questions: The distribution of different types in global EFL textbooks. In N. Harwood (Ed.), *English language teaching textbooks: Content, consumption, production* (pp. 72–110). Basingstoke: Palgrave Macmillan.
- Garton, S. & Graves, K. (Eds.) (2014). *International perspectives on materials in ELT*. Basingstoke: Palgrave Macmillan.
- Graves, K. (2019). Recent books on language materials development and analysis. *ELT Journal*, 73(3), 337–354.
- Hall, D. (1995). Materials production: Theory and practice. In A. C. Hidalgo, D. Hall, & G. M. Jacobs (Eds.), *Getting started: Materials writers on materials writing* (pp. 8–24). Singapore: RELC.

- Harwood, N. (Ed.) (2014). *English language teaching textbooks – content, consumption, production*. Basingstoke: Palgrave Macmillan.
- Hidalgo, A. C., Hall, D., & Jacobs, G. M. (Eds.) (1995). *Getting started: Materials writers on materials writing* (pp. 8–24). Singapore: RELC.
- Johnson, K. (2003). *Designing language teaching tasks*. Basingstoke: Palgrave Macmillan.
- Lessard-Clouston, M. (2018). *Second language acquisition applied to English language teaching*. Alexandria, Virginia: TESOL Press.
- Mackay, J., Birello, M., & Xerri, D. (Eds.) (2018). *ELT research in action: Bridging the gap between theory and classroom practice*. Faversham: IATEFL.
- Maley, A. (2011). Squaring the circle – reconciling materials as constraint with materials as empowerment. In B. Tomlinson (Ed.), *Materials development for language teaching* (pp. 379–402). Cambridge: Cambridge University Press.
- Masuhara, H. (2022). Approaches to materials adaptation. In H. Buchanan & J. Norton (Eds.), *The Routledge handbook of materials development for language teaching* (pp. 277–290). New York: Routledge.
- McDonough, J., Shaw, C., & Masuhara, H. (2013). *Materials and methods in ELT: A teacher's guide* (3rd ed.). London: Blackwell.
- McGrath, I. (2013). *Teaching materials and the roles of EFL/ESL teachers: Practice and theory*. London: Bloomsbury.
- McGrath, I. (2016). *Materials evaluation and design for language teaching* (2nd ed.) Edinburgh: Edinburgh University Press.
- Meddings, L. & Thornbury, S. (2009). *Teaching unplugged: Dogme in English language teaching*. Peaslake: Delta.
- Mishan, F. (2013). Studies of pedagogy. In B. Tomlinson (Ed.), *Applied linguistics and materials development* (pp. 269–286). London: Bloomsbury.
- Mishan, F. & Timmis, I. (2015). *Materials development for TESOL*. Edinburgh: Edinburgh University Press.
- Nava, A. & Pedrazzini, L. (2018). *Second language acquisition in action*. London: Bloomsbury.
- Naustdal Fenner, A. & Nordal-Pedersen, G. (1999). *Search 10*. Oslo: Gyldendal.
- On Target (1994). Windhoek: Gamsberg Macmillan.
- Prowse, P. (2011). How writers write: Testimony from authors. In B. Tomlinson (Ed.), *Materials development in language teaching* (2nd ed., pp. 151–173). Cambridge: Cambridge University Press.
- Richman, C. L. (1994). The bizarreness effect with complex sentences: Temporal effects. *The Canadian Journal of Experimental Psychology*, 48(3), 444–450.
- Saw, T. S. (2016). *Evaluating the external materials used for cultural elements in ELT course-books through teacher perception of teaching and learning*. [Unpublished PhD thesis. University of Essex.]
- Schütze, U. (2017). *Language learning and the brain*. Cambridge: Cambridge University Press.
- Shawer, S. F. (2010). Classroom-level curriculum development: EFL teachers as curriculum-developers, curriculum-makers and curriculum-transmitters. *Teaching and Teacher Education*, 26, 173–184. <https://doi.org/10.1016/j.tate.2009.03.015>
- Singapore Wala, D. A. (2003). Publishing a coursebook: Completing the materials development cycle. In B. Tomlinson (Ed.), *Developing materials for language teaching* (1st ed., pp. 141–161). London: Continuum.
- Singapore Wala, D. A. (2013). Publishing a coursebook: The role of feedback. In B. Tomlinson (Ed.), *Developing materials for language teaching* (2nd ed., pp. 63–87). London: Bloomsbury.
- Thomas, M. & Reinders, H. (2015). *Contemporary task-based language teaching in Asia*. Bloomsbury Academic, London: Bloomsbury.
- Thornbury, S. & Meddings, L. (2001). Coursebooks: The roaring in the chimney. *Modern English Teacher*, 10(3), 11–13.
- Tomlinson, B. (Ed.) (1981). *Talking to learn*. Port Vila: Ministry of Education of Vanuatu.
- Tomlinson, B. (1994). *Openings*. London: Penguin.
- Tomlinson, B. (1995). Work in progress. *Folio*, 2(2), 26–30.
- Tomlinson, B. (2010). What do teachers think about EFL coursebooks? *Modern English Teacher*, 19(4), 5–9.
- Tomlinson, B. (Ed.). (2011). *Materials Development in language teaching* (2nd ed.). Cambridge: Cambridge University Press.
- Tomlinson, B. (2012). Materials development for language learning and teaching. *Language Teaching: Surveys and Studies*, 45(2), 1–37.
- Tomlinson, B. (Ed.) (2013a). *Developing materials for language teaching* (2nd ed.). London: Continuum Press.
- Tomlinson, B. (Ed.). (2013b). *Applied linguistics and materials development*. London: Continuum.
- Tomlinson, B. (2015). Challenging teachers to use their coursebooks more creatively. In A. Maley & N. Peachey (Eds.), *Creativity in the English classroom*. London: British Council.
- Tomlinson, B. (Ed.). (2016). *SLA research and materials development for language learning*. New York: Routledge.

- Tomlinson, B. (2018). Making typical coursebook activities more beneficial for the learner. In D. Bao (Ed.), *Creativity and innovations in ELT materials development: Looking beyond the current design* (pp. 21–34). Bristol: Multilingual Matters.
- Tomlinson, B. (2020). Is materials development progressing? *Language Teaching Research Quarterly*. Special Issue in Honour of Brian Tomlinson's Contribution to Language Materials Research. *15*, 1–20. doi: 10.32038/ltrq.2020.15.0
- Tomlinson, B. (2022). The discipline of materials development. In H. Buchanan & J. Norton (Eds.), *The Routledge handbook of materials development* (pp. 3–16). New York: Routledge.
- Tomlinson, B. & Masuhara, H. (1994). *Use your English*. Tokyo: Asahi Press.
- Tomlinson, B. & Masuhara, H. (2013). Review of adult ELT textbooks. *ELT Journal*, *67*(2), 233–249.
- Tomlinson, B. & Masuhara, H. (2018). *The complete guide to the theory and practice of materials development for language learning*. Hoboken, NJ: Wiley.
- Tomlinson, B. & Masuhara, H. (2021). *SLA applied: Connecting practice and theory*. Cambridge: Cambridge University Press.
- Tomlinson, B., Hill, D. A., & Masuhara, H. (2000). *English for life 1*. Singapore: Marshall Cavendish.
- Zemach, D. (2018). Sausage and the law: How textbooks are made. *LATEFL Online* 2018. Retrieved July 10, 2019, from www.teachingenglish.org.uk/article/sausage-law-how-textbooks-are-made
- Zheng, X. & Borg, S. (2014). Task-based learning and teaching in China: Secondary school teachers' beliefs and practices. *Language Teaching Research*, *18*(2), 205–221.

Content-Based Instruction

Innovations and Challenges

Marguerite Ann Snow

Content-based instruction (CBI), the focus of this chapter, has enjoyed a nearly four-decade influence on the field of second and foreign language teaching. Its early roots can be traced to communicative language teaching which gained prominence in the 1970s. This shift moved away from teaching methods based on language analysis, literary text analysis, memorization, translation, or multiple-choice language testing to the goal of “communicative competence,” a term coined by Hymes (1972). The emphasis on real-world language behaviors and the forms of language that learners needed to communicate their needs and intentions gave rise to communicative language teaching (CLT) (Duff, 2014). About a decade later, Canale and Swain (1980) formulated a theoretical framework for communicative competence that consisted of four components: 1) grammatical competence; 2) sociolinguistic competence; 3) discourse competence; and 4) strategic competence. Prioritizing communicative competence in second language learning led to instructional methods that were compatible with the growing body of theory and research in second language acquisition (Ellis, 2014) and opened the door for approaches such as CBI that envisioned the classroom as a place to learn and practice meaningful and interesting language and content that stimulated learners’ motivation and met their current or future needs. Along with the shift to CLT, the “content” of language teaching gradually moved from grammar, vocabulary, and sound patterns to language notions and functions, genres, and tasks, and, in CBI, to topics, themes, and specific subject matter (Snow, 2014, 2019).

Immersion education for foreign language teaching in Canada is an early example of CBI. Starting in 1965, in the Montreal suburb of St. Lambert, English-speaking students studied the kindergarten curriculum in French; as students moved through the elementary school grades, they studied most or all school subjects in French except English Language Arts. Over the decades, immersion programs greatly expanded across all Canadian provinces and took on a variety of instructional formats. And, while French continued to be the main target language, heritage languages such as those of First Nations’ peoples and languages associated with religious communities such as Hebrew were introduced. The immersion model was first implemented in the United States in 1971 with the establishment of the Spanish Immersion Program in Culver City, California. The U.S. version of the model has also expanded greatly, particularly in the choice of target languages (e.g., Arabic, Japanese, Mandarin, Mohawk) and in instructional formats (full immersion, partial immersion, etc.). Also notable is the establishment of “dual language” programs where native speakers of the target language (e.g., Spanish) and English-speaking students are purposely grouped so that all learners have the opportunity to develop bilingual and biliteracy skills (Lindholm-Leary, 2001). Immersion programs in North America and around the world continue to be one of the best researched forms of second and foreign language teaching (Genesee, 1987; Tedick et al., 2011).¹

Further development of CBI may be traced to Mohan's seminal book *Language and Content* (1986) which made the case for the integration of language and content teaching. He argued that: "An educational approach that considers language learning alone and ignores the learning of subject matter is inadequate to the needs of...learners. Yet much educational thinking treats language learning and content learning separately" (p. 1). Brinton et al. (1989) drew on Mohan's work and their own experiences, offering this premise:

Current interest in language teaching approaches which emphasize the mastery of informational content as an integral element of second language instruction represent a coming together of practical experience and theory. In light of the assumption that language can be effectively taught through the medium of subject matter, these approaches view the target language largely as the vehicle through which subject matter content is learned rather than the immediate object of study. (p. 5)

Following early work in CBI, the second and third decades saw a proliferation of full-length books that described the implementation of CBI programs with different instructional models; educational levels (i.e., elementary through postsecondary); age groups (young learners through adults); and program goals (vocational to academic) (Cammarata, 2016; Crandall & Kaufman, 2002; Haley & Austin, 2004; Kaufman & Crandall, 2005; Krueger & Ryan, 1993; Nordmeyer & Barduhn, 2010; Snow & Brinton, 1997; Stryker & Leaver, 1997). Many authors pointed to developments in second language acquisition and research in cognitive and educational psychology to justify the continued development of CBI in the various contexts mentioned (Grabe & Stoller, 1997; Fitzsimmons-Doolan et al., 2017; Lightbown, 2014).

In 1989, Brinton et al. described three "prototype" CBI models: 1) theme-based: A model in which the curriculum of the language class is based on extended topics or themes; 2) sheltered: A model in which content specialists such as a science teacher teach their subjects to non-native speakers of the target language using language and instructional strategies especially aimed to make content accessible and expose their students to the language and discourse types of the particular discipline; and 3) adjunct: A model in which a language class is linked to a content class and the content of the discipline class (e.g., psychology) becomes the point of departure for many or all language development activities. In 1989, the authors contemplated that:

...these models [exist] along a continuum rather than as discrete entities [allowing] other content-based variations which combine features of the three prototype models. A modified model might combine features of sheltered and adjunct programs, or theme-based and sheltered programs. ...The key point to be made is that, depending on the setting, the configuration of the model may differ significantly, and features of the three models outlined may tend to blend. (p. 23)

In contrasting CBI models, Met (1999) provided a helpful perspective, namely, to consider the degree of emphasis on language and content that underlies a course or program. For example, the theme-based program described earlier would be "language-driven" with topics or themes providing the content of the language class; in contrast, immersion programs would be classified as "content-driven" since learners study the regular school curriculum through the medium of their second language. Van Lier (2005) offered a scale of language and content, describing models where "language takes precedence over content" and where "content takes precedence over language" (p. 16). In the sheltered course, described earlier, mastery of content takes precedence, and, through the subject matter, students are exposed to contextualized language to assist their second language development

(Echevarria & Graves, 2015). Adjunct programs with separate language and content courses would fit in between the two ends of the continuum.

Key Developments in CBI

More recently, Snow and Brinton (2017) and Snow and Brinton (2019) provided an updated map of CBI, focusing less on the notion of a continuum of CBI and more on the remarkable expansion of models in recent years.

Characterizing these developments as the “evolving architecture” of CBI, the map reflects “sustained content,” a term coined by Murphy and Stoller (2001) to describe a version of the theme-based model in which a single content area is “stretched” over an entire term or school year, avoiding criticism of theme-based courses which offer bits and pieces of topics with no obvious curricular coherence. In a CBI course organized around sustained content, students engage with content deeply, both in terms of the selected topics and sub-topics, and have an opportunity to learn and practice the targeted language skills, including listening, speaking, reading, writing, vocabulary, and grammar. This extended exposure also gives students a chance to practice learning strategies, study skills, and critical thinking skills. (See also Stoller & Grabe’s Six Ts approach, 2017).

While the majority of CBI approaches have originated in North America, content language integrated learning (CLIL) developed in Europe in the mid-1990s as a response to the goal of creating plurilingual children in European Union schools, with a particular focus on all students regardless of social or economic status. Coyle et al. (2010) presented a widely used definition of CLIL as:

...a dual-focused educational approach in which an **additional** language is used for the learning and teaching of both content *and* language. That is, in the teaching and learning process, there is a focus not only on content, and not only on language. Each is interwoven, even if the emphasis is greater on one or the other at a given time... It is an innovative fusion of both.

(p. 1)

In classifying types of CLIL, Dalton-Puffer (2017) offers two versions: 1) “hard” CLIL or “type A,” a form of content-driven CBI with the dominant objective being content learning; and 2) “soft” CLIL or “type B” which resembles language-driven CBI with language development as the primary objective. Leung and Morton (2016, p. 237) propose four different orientations to CLIL:

	<i>More visible language pedagogy</i>	<i>Less visible language pedagogy</i>
Higher disciplinary orientation to language	Focus on “subject-literacies”	Language as a tool for participation in content tasks and disciplinary thinking
Lower disciplinary orientation to language	Focus on explicit language knowledge (not necessarily related to content)	Focus on choice, creativity and contingency

Another model depicted in Figure 10.1, English Medium Instruction (EMI), often referred to as the postsecondary variant of CLIL, has grown in popularity, especially in Europe and other international settings. It is a model in which content instruction is delivered in the students’ second (or additional) language often with the goals of creating multilingual citizens and internationalizing the curriculum. EMI programs vary significantly by setting in terms of language support, with some offering an intentional focus on language skills instruction; in other settings, there is little or no explicit language

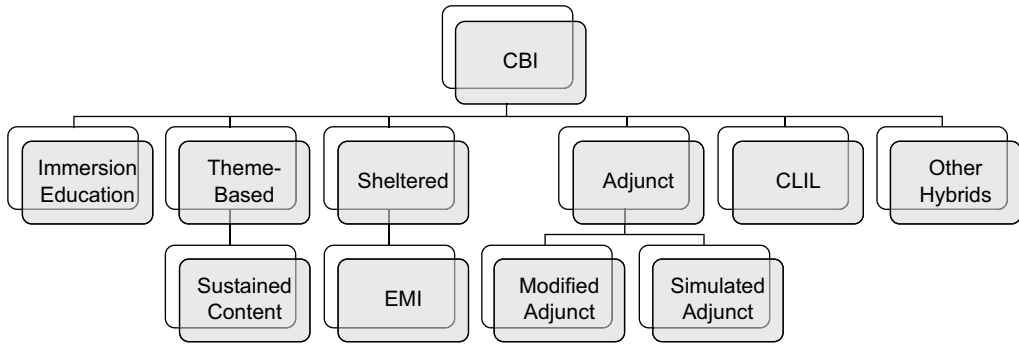


Figure 10.1 An Updated Map of CBI

Source: From *The Content-Based Classroom: New Perspectives on Integrating Language and Content* (2nd ed.), by M.A. Snow and D.M. Brinton, page 9. Copyright © 2017, University of Michigan Press. Used with permission.

skill focus for students; the goal is intensive exposure to the contextualized language of the content area that is highly relevant to students' immediate academic or professional studies (Brinton & Snow, 2017). Examples of EMI are a clinical training course for medical students (both local and international students) at the University of Copenhagen in which all coursework, lectures, and examinations were conducted in English (Kling, 2017).

Many consider CBI as an “umbrella” term for all varieties of programs which seek to integrate language and content in some fashion. Within the CLIL literature, some consider CLIL to be an umbrella term for any additive type bilingual programs (Dalton-Puffer et al., 2014); others have rejected this term (Ball et al., 2015), citing the clear parameters of CLIL. Nikula et al. (2016) prefer not to focus on “distinctions and points of convergence” (p. 1) between different forms, but rather to address the shared concern for all forms of education that have simultaneous content and language objectives. In the same vein, Brinton and Snow (2017), while believing that their updated map illustrated in Figure 10.1 reflects the many remarkable ways that CBI has evolved over the decades to accommodate student populations, teaching settings, and local educational goals and resources, prefer not to focus on hard and fast boundaries but rather to portray the rich array of possibilities CBI affords programs and learners.

CBI Programs Illustrated

This section describes five CBI programs that fit local needs and settings and have “evolved” from the models depicted in Figure 10.1.

Mainstream Elementary Instruction for English Learners

In New South Wales, Australia, students from diverse language and cultural backgrounds are enrolled in an elementary “mainstream” classroom (Gibbons, 2015, 2017), meaning that they are integrated with English-speaking students and follow the regular curriculum. These students have to learn subject content through English, even though they are not yet fluent in English. They are developing English for learning, that is, the academic language and literacies associated with subject learning.

The teacher's task is to develop subject content hand in hand with subject-related language. A specialist English language teacher co-plans and sometimes co-teaches with the class teacher with the aim of providing language support for all English learners across the curriculum. In the elementary class, teachers plan a health unit with activities and content outcomes such as students will: 1) learn how culture and climate shape what we eat; and 2) understand the need for good nutrition as reflected in a food pyramid. They also plan language outcomes which include key vocabulary (e.g., grains, proteins, processed); learn connectives of comparison, and learn use of appropriate interpersonal language for group work (e.g., "I agree." "Can you explain that a bit more...?")

Collaboration of English and Content Teachers in EMI Secondary STEM Instruction

In Tanzania, secondary students attend English-medium schools. These students especially in their first two years (Forms 1 and 2) are still developing the requisite English language proficiency to study their school subjects in English. In this project, Tanzanian teachers of English² collaborated with their colleagues who teach Biology, Physics, Chemistry, and Mathematics in secondary schools. To begin the collaboration, the teachers participated in a workshop to learn about the principles and practices of CBI. Workshop activities focused on identifying the language and content demands of the STEM classes, particularly the academic language functions and discourse structures, by analyzing content textbooks and the scope and sequence documents provided by the educational authorities. Teachers, for example, analyzed a paragraph in the Chemistry textbook on "compounds and mixtures." They noted that the paragraph contained an extended definition: "A compound refers to elements combined chemically whereas a mixture refers to the elements kept together. Both compounds and mixtures have physical properties that differ in characteristics." The paragraph goes on to describe the similarities and differences. The English teachers discovered grammatical structures like passive voice, co-relatives (*both* and *neither*), independent and dependent conjunctions (*and*, *while*), and existential *there*, and were initially surprised to see so many grammatical elements that they know well and teach often embedded in the chemistry text. The English and STEM teachers then designed joint lesson plans that had language, content, and strategy objectives for each STEM area. Participants also incorporated a variety of instructional strategies (e.g., graphic organizers, realia, group work) into the lesson plans with the goal of making the conceptually difficult material more accessible to their students, therefore, empowering their students to achieve in STEM subjects while expanding their English proficiency. Over the next semester, the English and STEM teachers acted as trainers in regional secondary schools across the country, demonstrating ways to integrate language and content and drawing on the expertise of their local English and STEM colleagues.

Hybrid Adjunct Model for University Students

At the University of the Free State (UFS) in Bloemfontein, South Africa, a hybrid adjunct model was designed to facilitate students' access to authentic academic content while simultaneously building and extending their critical English language skills (van Wyk, 2017).

It is considered hybrid to the extent that there is no language teacher per se, rather a language "practitioner" who collaborates with content specialists that teach such courses as criminology, psychology, anthropology, and sociology to identify the reading and writing skills needed to accomplish

the assessment tasks designated by the content instructors. The language practitioner then meets with language tutors to design activities for sessions that scaffold the tasks identified. For example, in one scaffolded activity, students listen to a lecture in the content class on elder abuse. The tutors then work with an accompanying text on the same topic, identifying cause and effect relationships and how these relationships are reflected in rhetorical features of cause and effect (e.g., *as a result of*). Students then write their own cause and effect statements using content from the lecture or text. Other scaffolded activities include the use of graphic organizers to list key similarities and differences between elder abuse and elder neglect which the students utilize to write a comparative essay.

Theme-based and EMI Curriculum

Faculty of the Department of Philology at Akaki Tsereteli State University in Kutaisi, Georgia designed a new curriculum for an integrated BA/MA in English which includes English language and literature courses at the undergraduate level and a one-year MA that qualifies graduates to become teachers of English in state elementary and secondary schools. The goal of the new curriculum was to reflect current theory and practice in second language teaching and learning and meet the national qualifications of the Ministry of Education. The Department prepared learning outcomes for the new program and individual faculty groups reviewed their course syllabi to revise student learning outcomes, assessments, and rubrics for each course in the program. Using the model of an existing course, *Language and the Media*, faculty also discussed ways to integrate more content into the language skills courses to keep their students motivated with interesting, relevant topics and to better prepare them to make progress toward the C1 level of the Common European Framework. While the Ministry dictates that a certain percentage of the BA/MA curriculum be offered in the Georgian language, the key pedagogy courses are taught in English and students need to acquire the requisite academic language functions (e.g., *define, categorize, etc.*), reading skills to read teacher preparation textbooks and ELT journals, and writing skills to successfully undertake writing assignments in English in their fourth-year courses and in the MA program. And, while students write their MA thesis in Georgian, the English Philology faculty requires students to prepare annotated bibliographies of relevant research and write proposals in English which include research questions, methodology, and implications and limitations of their studies for feedback by faculty. Integration of language and content in the language classes helps the students progress in their English language skills and prepares them for the EMI portion of the MA curriculum.³

Theme-based Course for U.S. Intensive English Program

Online Safety and Privacy is a theme-based unit designed for young adults at the intermediate English proficiency level who attend an intensive English program in the Los Angeles metropolitan area.⁴ Subtopics include online privacy policies, personal data distribution, and social media security, protecting your well-being, and catfishing. The unit included language, content, and strategy objectives. The strategy objectives introduced the students to the C.A.T.C. H. strategy for reading and vocabulary development. C.A.T.C.H. includes five steps: 1) Circle challenging words; 2) Acknowledge confusion by asking questions (e.g., *Does this mean that companies can sell my data without my knowledge?*); 3)

Talk to the text by making comments (e.g., *Wow. I don't think that the punishment for online bullying is harsh enough!*); 4) Capture the main idea by putting a box around it; 5) Highlight details that connect to the main idea (e.g., *Disclosure statements take too long to read*).

The unit included a core reading and video, and multiple and sustained opportunities to practice targeted vocabulary, grammar (e.g., modals of deduction, parallel structure, reporting verbs and their level of intensity), and writing skills (e.g., summarizing, planning, drafting, revising, editing, and rewriting a brochure). The brochure was graded according to a rubric that matched the language and content objectives related to the online safety and privacy unit.

Other Important Developments

An ongoing dilemma in CBI dating back to early findings of immersion programs is how to ensure that learners acquire high levels of linguistic competence, one of the components of Canale and Swain's (1980) framework. As has been widely documented, immersion students achieve success in subject-matter learning as well as native-like acquisition of English (Genesee, 1987). They also acquire high levels of comprehension and communicative ability in the target language, but typically "lower-than-expected" levels of production abilities in areas such as grammatical accuracy, lexical variety, and sociolinguistic competence (Harley et al., 1990). These well-documented findings underscore the fact that "incidental" or input-focused instruction is not sufficient. Early on, Eskey (1997) pointed out the problem of relating language form to language function in a content-based syllabus, noting that "this is the old accuracy/fluency problem, and content-based courses tend to come down hard on the side of fluency" (p. 139). This issue has been raised more recently in CLIL programs where the "actual realization of CLIL in schools and universities overwhelmingly anchor it in content teaching" with less focus on language teaching (Dalton-Puffer, 2017, p. 156). Typically, in CLIL settings, particularly in "hard" CLIL programs where the content teachers lack training in language teaching, there is "...next to no proactive language pedagogy in CLIL lessons" (Dalton-Puffer, 2017, p. 161). This ongoing challenge reprises Swain's (1988) well-known comment that "not all content teaching is necessarily good language teaching" (p. 68).

Besides evolving to meet local needs and resources, CBI programs have become a vehicle to incorporate particular programmatic aims and foci in English/foreign language teaching. The aim of explicitly teaching language forms, functions, and skills has given rise to interest in pedagogy and research in academic language discourse and form-focused instruction, and how these program objectives may be achieved. A recent thrust in most CBI programs is to understand the features of academic language – often called the language of school.

Chamot and O'Malley (1994) defined academic language as "the language that is used by teachers and students for the purpose of acquiring new knowledge and skills...imparting new information, describing abstract ideas, and developing students' conceptual understanding" (p. 40). Schleppegrell (2004) extended the definition to include the language of textbooks, pointing out that "...school-based texts are difficult for many students precisely because they emerge from discourse contexts that require different ways of using language than students experience outside of school" (p. 9). Gottlieb and Ernst-Slavit (2014) describe three dimensions of academic language: 1) the word/expression level, which includes general, specialized, and technical content words; 2) the sentence level, which involves types of sentences including simple, compound, complex, and compound-complex; and 3) the discourse level consisting of text types, cohesion of text, and coherence of ideas. These dimensions include academic language functions, for instance, to *describe*, *compare*, or *report* with the appropriate vocabulary, grammar, and discourse structures that comprise these language functions (Snow, 2017). Carr et al.'s, (2006) work on the discipline of science lists discourse patterns such as *analyzing*, *defining*, and *hypothesizing* and common function words like "*this may be due to...*" "*I observe that...*"

and “*nevertheless*”. Hagemann (2003) equates these demands to “learning a second discourse,” with the aim to develop metalinguistic knowledge and to monitor one’s own processing of language, both in comprehending and producing language.

CBI, in its many programmatic variations, provides opportunities for students to learn academic language and discourse. What is developmentally appropriate, of course, depends on the learners’ ages and language proficiency. Snow et al. (2017) present scenarios of elementary, secondary, and community college classes where students are learning academic language through integrated language and content units. In the elementary classroom illustrated, students read about Mayan social structure, using a graphic organizer to unpack the difficult text. They also participate in another reading activity in which the teacher assists them to preview the text, activate background knowledge, and make predictions about the reading using visual cues. The second scenario is a sheltered social studies high school class where students must write a speech with a call to action after reading model speeches by Martin Luther King Jr. and Cesar Chavez. Students analyze the features of the model speeches that make the speeches convincing. In the community college scenario, the students are studying a theme-based unit on the First Amendment of the U.S. Bill of Rights and applying their new knowledge about the First Amendment to the context of the Free Speech Movement. They read biographical texts by three activists and, in groups, determine stance and speakers’ tones in the first person-narratives. Each group creates an oral presentation and is graded on how well they defend their position, use persuasive arguments, and incorporate targeted vocabulary and language structures learned in the unit.

Frodesen (2017) notes that for students studying academic English at the university level in different disciplines, authentic content-based materials constitute a major part of their studies. “Instructors can guide students in analyzing and discussing language features, organizational structures, audiences, and purposes of written texts representing instances of genres in their disciplines” (p. 257). Frodesen further notes that students can also learn the language structures of academic spoken genres such as lectures and presentations.⁵ University writing programs, Frodesen reports with an English for Academic Purposes focus, make frequent use of content-based materials, including many available on the commercial market.

Pedagogical attempts to focus on linguistic competence have taken different but compatible directions. Gibbons (2015, 2017) suggests that teachers create a language inventory, a list of the academic language features for each unit of study (such as in the elementary school health unit described previously). The language inventory can then be used to design language objectives. Similarly, the Tanzanian English and STEM teachers learned how to analyze language features such as those embedded in the chemistry textbook excerpt about compounds and mixtures. They used this inventory to design language objectives as part of their lesson plans. The inventory, as Gibbons notes, can also guide assessments so that teachers can determine if students are learning language structures while developing content knowledge.

Lyster (2007, 2017) offers his *counter-balanced approach* to teach linguistic competence. The approach contains five phases: 1) noticing phase: activities which can serve as catalysts to draw learners’ attention to problematic target forms that have been contrived to be more salient in the input (e.g., typographical enhancement or intonational patters in oral input); 2) awareness phase: activities that require learners to go beyond the noticing phase by analyzing forms and discovering rules or differences between the first and target language; 3) guided practice: activities in which students use the linguistic features in a meaningful yet controlled context with opportunities for corrective feedback; 4) autonomous practice phase: opportunities for the student to use the features in a more open-ended and meaning-focused tasks so that students may experiment with the more advanced language they need to complete a content task; and 5) ongoing scaffolding: teachers provide lots of linguistic and non-linguistic supports that enable students to understand content as they draw on contextual clues. These can include planned questions and feedback that support students’ use of the target language.

The scope of linguistic competence is differentiated by educational level and student learning outcomes. In the example programs presented, elementary students in New South Wales, as part of the health unit, learned the procedural language needed to write a recipe. The Tanzanian English and Biology secondary teachers developed the content objective, “Students in Form 1 will learn about the classification of living organisms,” and the language objective, “Students will use appropriate verbs like *categorize* and phrases like ‘*is similar to*’ to assist students to talk and write about the classification.” To teach strategic competence, one of Canale and Swain’s (1980) four competences, they also created a learning strategy objective, “Students will use a Venn diagram to group living organisms according to their similarities and differences.” In the hybrid adjunct program at UFS, students used the informational content from lectures and readings to write a comparative essay on elder abuse or neglect, using appropriate logical connectors and text structures. In all of the examples, students had opportunities for sustained exposure to the vocabulary, structures, functions, and genres, to process the content deeply, and to develop some level of expertise in the topic (Murphy & Stoller, 2001). Further, the units or curricula were well-planned and coherent (Stoller & Grabe, 2017).

Many studies have investigated whether teachers can apply the pedagogy approaches suggested by Gibbons and Lyster and others. An early study by Netten and Spain (1989) of 23 Grades 1–3 immersion classrooms in Newfoundland, Canada resulted in findings that lower-ability students who had opportunities to engage in teacher–student interactions using question/answer techniques rather than a lecture format and had participated in meaningful interactions with peers instead of mainly listening to their teachers out-performed the higher-ability group. The researchers also found that the teachers of these students used language instead of non-verbal cues to convey meaning and used explicit rather than implicit forms of correction. In their conclusions, Netten and Spain (1989) argued for more language-oriented instruction in immersion classrooms that “encourage active and purposeful communication on the part of as many pupils as possible” (p. 500). Doughty and Varela (1998) compared the development of past tense verb forms by second language students in middle school science classes. One of the science teachers taught the class as she normally did without special attention to language features. The second science teacher used the recast technique to correct simple past tense verbs and past conditionals in students’ oral and written science reports. Comparison of pre- and post-tests (and a delayed post-test) scores revealed that the students who received the corrective feedback were significantly more likely to produce fewer non-target-like forms and more target-like verb forms. Importantly, the findings also revealed that content teachers can identify features of academic language that are required by certain tasks, in this case, science reports, and can then design strategies for students to notice and correct.

In an EFL context, Kong and Hoare (2011) examined the pedagogy used by a middle school teacher in China who was teaching *Nature and Society*, a course taught in English. They found that the teacher successfully facilitated cognitive and academic language by designing language and content objectives and activities that required students to process challenging content materials deeply and to use the complex content-related language needed to explain, for example, how a bat is classified as a mammal according to its defining features. More recently, Dalton-Puffer and Bauer-Marschallinger (2019), seeking to find a conceptual base for “language-aware pedagogical planning and pedagogical actions that speaks to subject educators” (pp. 32–33), investigated secondary school students’ use of academic language functions, referred to as cognitive discourse functions (CDFs) (e.g., *categorize*, *define*, *describe*, *evaluate*, *explore*, *report*) in CLIL secondary history classes that followed a competency-based curricular framework. The researchers analyzed eight lessons from a unit on the Industrial Revolution, finding that the CDFs were a useful heuristic for analyzing competency-based history education and an “inextricable element” in working toward historical competence. All CDF types appeared in the students’ contributions to classroom interaction, with *describe* being the most prominent and *report* being rare in the data. Dalton-Puffer and Bauer-Marschallinger conclude that what is needed is a “conceptualisation that makes language a natural concern of non-language

educators because it is commensurate with the educational goals they want to reach in their respective subjects and is formulated in terms that are accessible to them..." (2019, p. 33).

Other studies have seen more limited results. Fortune et al. (2008), in their study of six Spanish immersion teachers, found that the "Vs" of language teaching, vocabulary and verbs, were the language components that the teachers typically targeted. Another study that looked at trained foreign language teachers who were teaching content in English in an undergraduate university program in Mexico found that the teachers favored content, and attended only "erratically" to inaccurate language during communication breakdowns (Arias & Izquierdo, 2015, p. 194). Despite their language training, the teachers tended to assume roles as content instructors even when one might have expected more language awareness. The authors concluded that even language teachers need training and curricular support as they deliver content. In a similar vein, Baecher et al. (2017) review the challenges of integrating language and content instruction for both practicing and pre-service teachers, noting that teachers tend to focus primarily on vocabulary when they consider students' language needs. In an effort to expand their skills, Baecher et al. developed a template for designing CBI units of study which requires the prospective teachers, in the K-12 context in this case, to first consider content and language curriculum standards, and as they develop content and language objectives to plan what academic language functions and structures students must learn in the lesson and what content-specific and cross-content vocabulary the students need. The template also requires the pre-service teachers to identify what students will produce that allow the teachers to assess both content understanding and language skills including the modalities of listening, speaking, reading, or writing.

Conclusions and Future Directions

This chapter has highlighted some of the remarkable innovations in CBI over nearly 40 years coinciding with the shift in emphasis in second and foreign language teaching to a focus on communicative competence. New twists on the prototype models have appeared to meet the needs of students at all age levels, promote local objectives, and account for available financial and human resources. These innovations illustrate the many possibilities that the CBI umbrella offers.

The chapter also underscores the ongoing tensions and challenges of guiding students of all ages toward higher levels of academic language skills, regardless of program type and instructor background and specialization. As reflected in the research reviewed, some programs have fallen short of these goals while others have made substantial progress. Interactive pedagogy, regardless of the type of CBI program and whether the teacher is the language teacher, content teacher, or both, plays a huge role in successful CBI. In more language-driven programs such as theme-based instruction, the language teacher's tool kit of strategies was on display in the example programs described: role play; group work; and strategic reading and writing strategies such as pre-reading, during reading, and post-reading; and quick writes, to name just a few strategies. In more content-driven programs, the content teacher, with training, can implement strategies to make conceptually difficult content more accessible through a variety of pedagogical strategies such as questioning techniques to aid critical thinking and the use of aids such as graphic organizers. To promote language development, content teachers can also identify the academic language functions or CDFs that are embedded in the subject matter content to create opportunities for language awareness that deepens students' mastery of the conceptually difficult content while assisting them to acquire the language skills requisite to demonstrate understanding. The "two for one" slogan, long touted as the fundamental rationale for CBI, can move us further to a reality that leaves the notion of incidental language learning in the past and embraces intentional language and content development.⁶

Many research questions remain, some more pertinent to certain program types than others. Like immersion education, CLIL has benefited from a plethora of research activity, including studies of

discourse and conversation analysis; teachers' beliefs; and teacher and student identities, to name a few areas of research. Zappa-Hollman and Duff (2017) suggest adding research topics such as the use of the first language for translanguaging opportunities and call for further study of pre-service teacher preparation and in-service training, both of language and content specialists. In addition, they recommend in-depth program evaluations, particularly with a geographically broader scope of different target languages and educational contexts. Finally, Zappa-Hollman and Duff promote a better balance of qualitative and quantitative research methodology, including mixed methods studies. All these research directions and others seek to add to the rich foundation of pedagogy and research in CBI.

Notes

- 1 The language across the curriculum movement in Britain is also widely cited as an early precursor of CBI, namely that the teaching of language should be integrated with all aspects of the curriculum (Bullock Report, 1975). However, at the time, it primarily focused on first language education while CBI has always maintained a focus on second or foreign language teaching.
- 2 The English teachers were active members of the Tanzanian English Language Teachers Association (TELTA), an affiliate of TESOL International. The project was funded by the U.S. Department of State.
- 3 Many thanks to Dr. Nino Nijaradze, Chair of the Department of Philology, for sharing the curriculum development work of the faculty.
- 4 This thematic unit was developed by Nathalie Griffiths, Billy Sooksavath, and Kerry Fogarty for TESL 5640: Teaching English for Academic Purposes at California State University, Los Angeles.
- 5 Hyland (2004) defines genre as “a term for grouping texts together, representing how writers typically use language to respond to recurring situations” (p. 4).
- 6 See Deller and Price (2007) for a variety of creative activities for focusing on forms and functions when teaching many different subjects through English.

References

- Arias, A. & Izquierdo, J. (2015). Language attention in content-based instruction: The case for language instructors teaching content in a foreign language in Mexican higher education. *Journal of Immersion and Content-Based Instruction*, 3(2), 194–217.
- Baecher, L., Ediger, A., & Farnsworth, T. (2017). Teacher planning in content-based instruction: Supports for developing novice teachers' language awareness. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 79–96). University of Michigan Press.
- Ball, P., Kelly, K., & Clegg, J. (2015). *Putting CLIL into practice*. Oxford University Press.
- Brinton, D. M. & Snow, M. A. (2017). The evolving architecture of content-based instruction. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 2–20). University of Michigan Press.
- Brinton, D. M., Snow, M. A., & Wesche, M. B. (1989). *Content-based second language instruction*. Newbury House.
- Bullock Report. (1975). *A language for life*. Her Majesty's Stationery Office.
- Cammarata, L. (Ed.). (2016). *Content-based foreign language teaching: Curriculum and pedagogy for developing advanced thinking and literacy skills*. Routledge.
- Canale, M. & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1–47.
- Carr, J., Sexton, U., & Lagunoff, R. (2006). *Making science accessible to English learners: A guidebook for teachers*. WestEd.
- Chamot A. U. & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. Addison-Wesley.
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge University Press.
- Crandall, J. & Kaufman, D. (Eds.). (2002). *Content-based instruction in higher education settings*. Teachers of English to Speakers of Other Languages.
- Dalton-Puffer, C. (2017). Same but different: Content and language integrated learning. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 151–164). University of Michigan Press.

- Dalton-Puffer, C. & Bauer-Marschallinger, S. (2019). Cognitive discourse functions meet historical competences: Towards an integrated pedagogy in CLIL history education. *Journal of Immersion and Content-Based Instruction*, 7(1), 30–60.
- Dalton-Puffer, C., Llinares, A., Lorenzo, F., & Nikula, T. (2014). “You can stand under my umbrella”: Immersion, CLIL and bilingual education: A response to Cenoz, Genesee & Gorter. *Applied Linguistics*, 35(2), 213–218.
- Deller, S. & Price, C. (2007). *Teaching other subjects through English*. Oxford University Press.
- Doughty, C. & Varela, E. (1998). Communicative focus on form. In C. Doughty & J. Williams (Eds.), *Focus on form in second language classrooms* (pp. 114–138). Cambridge University Press.
- Duff, P. A. (2014). Communicative language teaching. In M. Celce-Murcia, D. M. Brinton, & M. A. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 15–30). National Geographic Learning Heinle Cengage.
- Echevarria, J. & Graves, A. (2015). *Sheltered content instruction: Teaching English language learners with diverse abilities* (5th ed.) Pearson.
- Ellis, R. (2014). Principles of instructed second language learning. In M. Celce-Murcia, D. M. Brinton, & M. A. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 31–45). National Geographic Learning Heinle Cengage.
- Eskey, D. E. (1997). Syllabus design in content-based instruction. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 132–141). Longman.
- Fitzsimmons-Doolan, S., Grabe, W., & Stoller, F. L. (2017). Research support for content-based instruction. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 21–35). University of Michigan Press.
- Fortune, T. W., Tedick, D. J., & Walker, C. L. (2008). Integrated language and content teaching: Insights from the immersion classroom. In T. W. Fortune & D. J. Tedick (Eds.), *Pathways to multilingualism: Evolving perspectives on immersion education* (pp. 71–96). Multilingual Matters.
- Frodesen, J. (2017). English for academic purposes through content-based instruction. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 253–269). University of Michigan Press.
- Genesee, F. (1987). *Learning through two languages*. Cambridge University Press.
- Gibbons, P. (2015). *Scaffolding language, scaffolding learning: Teaching English language learners in the mainstream classroom* (2nd ed.). Heinemann.
- Gibbons, P. (2017). Bringing together academic language and subject learning in elementary and secondary schools. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 97–108). University of Michigan Press.
- Gottlieb, M. & Ernst-Slavit, G. (2014). *Academic language in diverse classrooms: Definitions and contexts*. Corwin.
- Grabe, W. & Stoller, F. L. (1997). Content-based instruction: Research foundations. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 5–21). Longman.
- Hagemann, J. (2003). A metalinguistic approach: Helping students acquire the language of the academy. In C. Boiarsky (Ed.), *Academic literacy in the English classroom: Helping underprepared and working class students succeed in college* (pp. 131–144). Boynton/Cook.
- Haley, M. H. & Austin, T. (2004). *Content-based second language teaching and learning: An interactive approach*. Pearson.
- Harley, B., Cummins, J., Swain, M., & Allen, P. (1990). The nature of language proficiency. In B. Harley, P. Allen, J. Cummins, & M. Swain (Eds.), *The development of second language proficiency* (pp. 7–25). Cambridge University Press.
- Hyland, K. (2004). *Genre and second language writing*. University of Michigan Press.
- Hymes, D. (1972). On communicative competence. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics: Selected readings* (pp. 269–293). Penguin.
- Kaufman, D. & Crandall, J. (Eds.). (2005). *Content-based instruction in primary and second school settings*. Teachers of English to Speakers of Other Languages.
- Kling, J. (2017). English-medium instruction and the international classroom. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 216–227). University of Michigan Press.
- Kong, S. & Hoare, P. (2011). Cognitive content engagement in content-based language teaching. *Language Teaching Research*, 15(3), 307–324.
- Krueger, M. & Ryan, F. (1993). *Language and content: Discipline- and content-based approaches to language study*. D. C. Heath and Company.

- Leung, C. & Morton, T. (2016). Conclusion: Language competence, learning and pedagogy in CLIL – Deepening and broadening integration. In T. Nikula, E. Dafouz, P. Moore, & U. Smit (Eds.), *Conceptualising integration in CLIL and multilingual education* (pp. 235–248). Multilingual Matters.
- Lightbown, P. M. (2014). *Focus on content-based language teaching*. Oxford University Press.
- Lindholm-Leary, K. J. (2001). *Dual language education*. Multilingual Matters.
- Lyster, R. (2007). *Learning and teaching languages through content: A counterbalanced approach*. John Benjamins.
- Lyster, R. (2017). Language-focused instruction in content-based classrooms. In M. A. Snow, & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 109–123). University of Michigan Press.
- Met, M. (1999, January). Content-based instruction: Defining terms, making decisions. *NFLC Reports*. The National Foreign Language Center.
- Mohan, B. A. (1986). *Language and content*. Addison-Wesley.
- Murphy, J. M. & Stoller, F. L. (2001). Sustained-content language teaching: An emerging definition. *TESOL Journal*, 10(2), 3–5.
- Netten, J. & Spain, W. (1989). Student-teacher interaction patterns in the French immersion classroom: Implications for levels of achievement in French language proficiency. *The Canadian Modern Language Review*, 45, 485–501.
- Nikula, T., Dalton-Puffer, C., Llinares, A., & Lorenzo, F. (2016). More than content and language: The complexity of integration in CLIL and bilingual education. In T. Nikula, E. Dafouz, P. Moore, & U. Smit (Eds.), *Conceptualising integration in CLIL and multilingual education* (pp. 1–25). Multilingual Matters.
- Nordmeyer, J. & Barduhn, S. (Eds.). (2010). *Integrating language and content*. Teachers of English to Speakers of Other Languages.
- Schleppegrell, M. J. (2004). *The language of schooling: A functional linguistics perspective*. Erlbaum.
- Snow, M. A. (2014). Content-based and immersion models of second/foreign language teaching. In M. Celce-Murcia, D. M. Brinton, & M. A. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 438–454). Boston, MA: National Geographic Learning Heinle Cengage.
- Snow, M. A. (2017). Content-based language teaching as a vehicle for academic language development. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (Vol. III., pp. 159–172). Routledge.
- Snow, M. A. (2019). Content-based language instruction. In C. Chapelle (Ed.), *The Concise Encyclopedia of Applied Linguistics*. Wiley-Blackwell.
- Snow, M. A. & Brinton, D. M. (Eds.). (1997). *The content-based classrooms: Perspectives on integrating language and content*. Longman.
- Snow, M. A. & Brinton, D. M. (2017). *The content-based classroom: New perspectives on integrating language and content* (2nd ed.). University of Michigan Press.
- Snow, M. A. & Brinton, D. M. (2019). *The content-based classroom: New perspectives on integrating language and content* (2nd ed.) – ebook version. University of Michigan Press.
- Snow, M. A., McCormick, J., & Osipova, A. (2017). Academic language across educational levels in content-based instruction. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 297–308). University of Michigan Press.
- Stoller, F. L. & Grabe, W. (2017). Building coherence into the content-based curriculum: Six Ts Revisited. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 53–66). University of Michigan Press.
- Stryker, S. S. & Leaver, B. L. (1997). *Content-based instruction in foreign language education: Models and methods*. Georgetown University Press.
- Swain, M. (1988). Manipulating and complementing content teaching to maximize second language learning. *TESL Canada Journal*, 6(1), 68–83.
- Tedick, D., Christian, D., & Fortune, T. W. (Eds.). (2011). *Immersion education: Practices, policies, possibilities*. Multilingual Matters.
- van Lier, L. (2005). The bellman’s map: Avoiding the “perfect and absolute blank” in language learning. In R. M. Jourdenais & S. E. Springer (Eds.), *Content, tasks and projects in the language classroom: 2004 conference proceedings* (pp. 13–22). Monterey Institute of International Studies.
- van Wyk, A. (2017). Content-based instruction as a means of addressing linguistic diversity in higher education: A South Africa example. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 178–190). University of Michigan Press.
- Zappa-Hollman, S. & Duff, P. A. (2017). Conducting research in content-based language instruction. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (2nd ed., pp. 309–321). University of Michigan Press.

Corpus uses in language teaching

Eric Friginal and Ashleigh Cox

Introduction

Corpus linguistics (CL) is a research approach to the study and exploration of language, and specifically, discourse structure, patterns, and use (Biber et al., 2010). A corpus (plural form: *corpora*) is a large and principled collection of computer-readable, authentic texts (including transcripts of spoken data), sampled to be representative of a particular language or language variety (Biber et al., 1998; McEnery et al., 2006). Corpora, therefore, may serve as datasets of actual language analyzed and utilized for a variety of purposes by researchers and teachers, as well as learners themselves, when introduced sufficiently and effectively in the classroom. The use of corpora has become popular in the analysis of the linguistic characteristics of written and spoken language (such as English) in general, and academic and disciplinary discourse in particular. This approach has resulted in the development of more authentic teaching materials in the second language (L2), and specifically, English as a second/foreign language (ESL/EFL) classrooms, the production of accurate, frequency-based English dictionaries, and English language learning textbooks that represent actual language-in-use across settings and contexts (Friginal, 2018; Friginal & Hardy, 2014; Römer, 2011). Direct applications of corpora and corpus tools in L2 classrooms support various language teaching and second language acquisition (SLA) theories and constructs especially related to use of realia and authentic texts, positive motivation through learner-computer and learner-learner interactions, explicit teaching of language features and patterns, and learner autonomy (Friginal et al., 2020).

There has been an exponentially increasing number of teachers who have utilized corpora and corpus-based materials in their classrooms from the mid-1990s to the present. Online databases and corpus tools such as concordancers are now easily accessible, and several CL for teaching textbooks have been published in the past decade. However, as Friginal (2018), Meunier and Reppen (2015), Geluso and Yamaguchi (2014), and Friginal and Roberts (to appear) have noted, many teachers, even those who have received some training in CL, are still not regularly using corpus-based activities in their classrooms for a variety of reasons, including a lack of confidence in the methodology, questions about efficacy, time constraints, and the difficulty in orienting their students and re-designing their courses and classrooms to incorporate corpus-based approaches. In addition, systematic and experimental research studies of learning gains of CL in the classroom are still quite limited up to this point.

Considering their applications, it is easy to envision the positive contribution of corpus-based approaches to a variety of learning contexts. From as early as 2005, Teubert noted that CL has been held to be the default resource in linguistic research since it reflects real language data. L2 learners,

therefore, will benefit from the practical and pragmatic applications of corpus data as they learn about English in their classrooms. For example, corpora have contributed immensely to studies of grammar and the phraseological and collocational patterns of everyday English, illustrating how such patterns can inform language learning and teaching (Friginal & Roberts, to appear). Phraseology is certainly not a new field, but corpus approaches have enhanced the ability of learners to understand and visualize that a word is not limited to the word itself, but also the other words and phrases around it. Learners may more readily comprehend that the meaning and utility of a word extends even beyond the borders of its neighboring words to include various commonly co-occurring lexical chunks or bundles. As Römer (2009) observes, “language is highly patterned” (p. 140), and often, these patterns are important to highlight and teach explicitly in the classroom (Friginal et al., 2020).

Data-driven learning and corpora in the L2 classroom

In the broader field of language teaching across learners and settings, corpora and corpus tools have been incorporated into three primary instructional approaches: 1) educational or instructional technology-based learning, 2) computer-assisted language learning (CALL), and 3) data-driven learning (DDL). These three approaches, especially the first two, share common characteristics: both are machine-specific (i.e., use of computers) and they also align well with, and support other, instructional approaches such as learner-centered instruction and autonomous learning (Friginal, 2018). The approach taken in the field of Instructional Technology emphasizes the role of technology-based tools and their integration into the learning process; CALL focuses on learning languages with the aid of computers with a particular emphasis on software design and evaluation, and DDL highlights learners’ direct discovery and use of linguistic information/data in the language classroom and beyond. These three have been the most common instructional approaches in which corpora and corpus tools have been situated in the language classroom and across various studies over the past two decades (Friginal, 2018; Friginal et al., 2020).

For DDL, specifically, O’Keeffe (2020) suggests that its pedagogical focus fosters the independent acquisition of linguistic knowledge (e.g., lexis, grammatical constructions, collocations, and so on). DDL allows learners to discover language structures and patterns on their own through interacting with concordancing software or with concordance-based instructional materials (Smart, 2014). This interaction presents learners with actual concordance lines from corpora illustrating authentic language that centers on a particular word or phrase used in context. Pérez-Paredes (2010) mentions that DDL transfers to the language classroom by turning linguists’ analytical procedures into a pedagogically relevant tool to increase learners’ awareness of and sensitivity to patterns of language while also enhancing their language learning strategies. Friginal and Hardy (2014) noted that DDL’s use of concordancers, “provide the user with the organized contexts of items that are searched. Often, one might be interested in exploring the words before and after a given word” (p. 39), especially when clearly explained in a particular lesson or instructional material on, for example, collocations or multi-word units of discourse. At the same time, concordancers provide the immediate elements (including punctuations) surrounding a target word or phrase. The most popular, free, and readily accessible concordancer is [AntConc](http://www.laurenceanthony.net/software/antconc/) developed by Laurence Anthony (2020) (www.laurenceanthony.net/software/antconc/).

Trends and issues

Effectiveness of using corpora in the L2 classroom

Numerous studies have found the application and use of corpora in the classroom to be successful in a variety of settings for teaching grammar (e.g., Boontam & Phoocharoensil, 2018; Curado Fuentes,

2017; Moon & Oh, 2017; Yılmaz, 2017), vocabulary (e.g., Al-Mahbashi et al., 2015; Crosthwaite, 2017; Lee & Lin, 2019; Soruç & Tekin, 2017), collocations (e.g., Ackerley, 2017; Saeedakhtar et al., 2020; Vyatkina, 2016; Yılmaz, 2017), and rhetoric (e.g., Cotos et al., 2017; Flowerdew, 2015). Several studies have also found that many learners have maintained positive attitudes towards using corpora as part of learning activities, homework, and their own version of language-based research (e.g., Flowerdew, 2015; Kim, 2019; Moon & Oh, 2017; Poole, 2016; Saeedakhtar et al., 2020; Soruç & Tekin, 2017; Yılmaz, 2017). It is possible that DDL and corpus-informed instruction may also be helpful in engaging passive learners to become more active and independent (Lin & Lee, 2015).

Recent studies have also investigated what kinds of learners might benefit from exploring corpora. For example, Mizumoto and Chujo (2016) examined the role of learning style in the DDL classroom, and they found that the approach appears to work for both inductive and deductive learners. Lee et al. (2020) found that using potentially learnable strategies like exploring, double-checking, and synthesizing led to vocabulary acquisition and retention after corpus-based activities. They also found that vocabulary size and working memory were significant contributors to learners' success, but other individual factors did not have a statistically significant effect on vocabulary acquisition or retention with corpus activities. The sample size of this particular study was rather small, but it offers some preliminary insight into the question of who is likely to benefit from using corpora in the classroom.

There have been studies documenting unsuccessful applications of corpus activities in the classroom, such as Hadley and Charles' (2017) case study with 12 students in an extensive reading class, reporting that learners were not very engaged in the activities and the DDL approach was not as effective as the control group instruction. However, overall, the evidence that corpus-use in the classroom works for most learners is strong. Boulton and Cobb (2017) performed a meta-analysis of corpus in the classroom studies across many different settings and found that this approach seems to be effective in most contexts, especially in the past 10 years, and now with a relatively easier access to tools and online resources. A recent trend in pedagogy has been to focus on the ideal ways and various opportunities to implement DDL and corpus-based materials inside and outside of language classrooms.

Hands-on and hands-off approaches

“Hands-on” corpus-based approaches in the classroom require learners to directly interact with corpus tools to perform searches, while “hands-off” approaches involve corpus activities that are often paper-based, using printed handouts prepared for learners to complete an activity or supply answers and responses to guide questions. Gabrielatos (2005) describes the “spectrum of autonomy” in DDL activity design, with “hard DDL” involving the most autonomy and learners directly consulting the corpus on one end of the spectrum, and “soft DDL” with less autonomy and no direct corpus consultation by the learners on the other end of the spectrum. Boulton (2012) views both approaches as potentially helpful in promoting language learning.

There have been many successful examples of implementing “hands-on” approaches (e.g., Charles, 2015; Cotos et al., 2017; Soruç & Tekin, 2017; Yılmaz, 2017). In hands-on activities, learners can be trained how to use tools like the aforementioned freeware AntConc (Anthony, 2020) or the proprietary online resource Sketch Engine (Kilgarriff et al., 2014) and perform practice searches to answer questions assigned by a teacher or search occurrences and patterns based on their own learner-developed questions. Although hands-on DDL can be an interesting way to teach, some noted drawbacks include the time it takes to train learners to use the tools, difficulty accessing materials online, and challenges with potentially confusing outputs and results (Charles, 2015; Chen & Flowerdew, 2018; Chen et al., 2019; Leńko-Szymańska, 2017; Quinn, 2015; Schaeffer-Lacroix, 2019). Despite these difficulties, there appear to be long-term benefits to hands-on approaches and once learners develop

strategies to utilize corpus tools, they can use them to find answers to their language questions, especially as autonomous and independent learners in the future (Boulton, 2009).

Teachers who do not envision being able to train their students to use corpus tools and online databases may prefer “hands-off” corpus approaches. Hands-off approaches can involve designing worksheets with selected concordance lines and providing students with questions to guide their analysis. Even though hands-off activities do not show language learners how to use corpora directly to look for answers to their own questions, there have been many studies that have found hands-off approaches to be successful (e.g., Al-Mahbashi et al., 2015; Boontam & Phoocharoensil, 2018; Moon & Oh, 2017; Vyatkina, 2016).

Hands-off approaches have practical advantages because paper-based activities do not require students to have access to computers in class, and the DDL training time is shortened because there is no need to teach students how to use concordancing software. Some teachers also worry about students getting lost or confused when exposed to vast amounts of corpus data. For example, Lin and Lee’s (2015) case study reported that instructors recently trained in CL and DDL materials design preferred to limit the number of concordance lines students read in target activities. Paper-based activities have the perceived advantage of allowing teachers to choose which concordance lines students are exposed to. However, despite these concerns, Boulton (2009) asserts that teachers’ perceptions that learners will have difficulty handling corpora themselves may not be accurate, considering the promising results of hands-on DDL studies and reported learning gains from both instructor and learner group interviews.

There are many other ways that corpus data can inform pedagogy outside of classroom activity design. For example, Reppen (2016) suggests that language instructors can use publicly available vocabulary lists (e.g., academic word lists or “general service lists” based on commonly used words according to academic disciplines) and lexical bundle research to set priorities for vocabulary teaching. There have been many advocates for the production of commercially available corpus-based resources for teachers and learners to use, such as writing aids and dictionaries (Meunier, 2016), grammar books (Meunier, 2016; Xu, 2016), and corpus-based textbooks (Friginal, 2018; Jones & Waller, 2015; Meunier, 2016; Xu, 2016). Even though the potential for corpus research to offer insights on how language is used in real contexts and improve the quality of textbooks is clear, Jones and Waller (2015) claim that many of the EFL textbooks that are available in the market are still not informed by corpus research and data from corpora.

Aside from textbooks, there are other useful corpus-informed innovations that can help teachers develop pedagogical materials. For example, Lexile (MetaMetrics, 2021) uses word frequency information and average sentence length to categorize the difficulty level of books, which could help teachers select reading materials at the appropriate level for their students. Another tool that uses word frequency that could help teachers or learners is Compleat Lexical Tutor (Cobb, n.d.), a website that offers multiple resources such as vocabulary games for frequent English words, a vocabulary profiler, a concordancing tool, and a word-frequency-based cloze test generator. For writing teachers, the CROW Team (2022) offers resources like sample activities based on learner corpus data. There are also sample activities for academic speaking teachers on the Michigan Corpus of Academic Spoken English (MICASE) website (Simpson et al., 1999). Innovations like these examples can help teachers get started with corpus-informed pedagogy.

Corpora in the classroom with young L2 learners

Using innovative, engaging approaches is an important concern for L2 instructors teaching children and young adult learners. While a lot of research on using corpora in the classroom has focused on adult learners (i.e., university-level learners), there is a recent research trend testing the effectiveness of using corpora with younger L2 learners. At a certain age, children may not yet be developmentally

ready for hands-on corpus activities, and Crosthwaite and his colleagues (2021) caution that teachers may not find corpus-based activities to be practical for teaching children in some contexts, but there has been success using hands-on and hands-off corpus approaches with 16–18-year-olds (Saeedakhtar et al., 2020) and paper-based approaches with 14-year-olds (Moon & Oh, 2017) and 12-year-olds (Kim, 2019). Kim (2019) found that while teachers of young learners thought that their students needed more structured guidance than corpus activities provided, the students liked using corpus data to make discoveries by themselves.

Meunier (2019) recommends using corpora with children, arguing that fun, creative corpus-based activities and games can be developed and actively utilized in the classroom. For young learners, she suggests using non-traditional banks of multimodal texts such as those from PlayPhrase.me (Potapenko, 2018), a program that allows learners to type a phrase to see clips from recent movies containing the phrase in context, and Lyrics Training (LyricsTraining.com, 2020), a bank of music videos with fill-in-the-blank exercises for language learners. Hirata (2019) piloted a new multimodal children's corpus of movies and songs in English, MmCT1, with pre-service primary school teachers in Japan. MmCT1 contains Movieconc, a tool that displays movies and text on the same screen, as well as word lists and KWIC ("Key Word in Context") views. The pre-service teachers piloting MmCT1 had positive views of its potential and various applications. Another tool for teachers who prefer to design their own activities is The Oxford Children's Corpus (Wild et al., 2013), a specialized corpus developed exclusively for young L2 learners of English that is integrated into Sketch Engine (Kilgariff et al., 2014).

Types of classes effectively integrating corpora

What types of language classes can benefit from integrating corpora and DDL activities into the curriculum? This question has been answered by directly examining obvious applications to L2 grammar and writing classes, as learners are able to explore corpus examples of phrases and grammatical structures in authentic academic contexts. One popular application especially in writing classes is teaching learners how to use corpora for error analysis and self-correction (Boulton & Landure, 2015; Crosthwaite, 2017; Quinn, 2015; Yilmaz, 2017). Theoretically, this approach could provide learners with the tools needed to learn how to fix or correct their own errors in the future. Crosthwaite (2017) identifies some potential challenges to implementing corpus based self-correction activities. Students may find it difficult to form searches based on teachers' feedback, and teachers may find it difficult to provide learners with the right amount of information on their errors, including enough details for them to figure out what to search without decreasing their autonomy by directly giving them search terms. Another application of corpora for writing classrooms is the development of automated corpus-based feedback tools. Cotos et al. (2017) explored the potential benefits of a tool that generates automated corpus-informed rhetorical feedback for learners ("Research Writing Tutor," which is not freely available yet, at this point) and gives them access to a corpus to reference with annotations related to rhetorical moves. The generated feedback appeared to support learners in tracking their progress in completing a writing activity. In addition to writing feedback, Meunier (2016) suggests that learner corpus input could be helpful in designing tools for automated writing assessment.

Another setting where corpora can clearly enhance curricula is language for specific purpose (LSP) classes. In a case study using specific subsections of the Corpus of Contemporary American English (COCA) (Davies, 2008–) for EFL students specializing in business administration and tourism, students found corpus activities to be helpful (Curado Fuentes, 2017). LSP students can also be taught how to compile their own personal corpora for the domain that they need. Boulton and Cobb (2017) suggest that personally compiled corpora could even be helpful in more general non-LSP settings where students in the same class may have a wide array of interests in other domains

or disciplines. Charles (2015) tried this approach in an English for Academic Purposes (EAP) class with students from different disciplines and describes how students in the same class can complete the same activities using a range of personally compiled corpora. Chen and Flowerdew (2018) found that some students may prefer discipline-specific corpora like texts from the BNCweb (Hoffmann & Evert, 1996) that are already designed and collected because of the number of available text files, but teaching students how to build their own corpora could still be helpful because they can focus on very specific registers. Finally, corpus methods that are similar to the approaches applied in LSP settings can also be useful for students in translation classes. Translation students can compile and use parallel corpora of texts in the genre that they need to translate in so that they can compare register-specific features in the source language and the target language (Laursen & Pellon, 2012; Marín et al., 2017). This list of examples of types of classes where corpora have been used is by no means comprehensive and could be further expanded to include areas such as reading instruction, diachronic and historical linguistics, discourse analysis, and sociolinguistics. L2 teachers can think creatively about how to use corpora to meet their unique curricular goals and which objectives are most suitable for corpus activities.

Challenges and solutions

Although L2 classroom research has typically focused on ways that corpora can improve language classes, it has also highlighted some practical challenges teachers face when implementing corpus activities. One of the first challenges to overcome is teachers' hesitancy "to start trying" (Abdel Latif, 2021; Boulton, 2009; Chen et al., 2019; Crosthwaite et al., 2021; Schaeffer-Lacroix, 2019). Chen et al. (2019) investigated variables correlated with teachers' interest in using corpora, and they found that teachers with little corpus experience were more likely to find corpus tools to be difficult; teachers who were not interested in professional development activities were also less likely to see the benefits of and be interested in using corpora inside and outside the classroom. In addition, instructors who had more (traditional) teaching experience were less likely to prefer corpus tools over other resources than younger teachers or those with less experience. Related studies (e.g., Chen et al., 2019; Ebrahimi & Faghih, 2017) have also found that more experienced teachers are more likely to be hesitant to use corpora. One reason for hesitancy towards using corpora in the classroom is the perceived difficulty of using computational and corpus tools (Schaeffer-Lacroix, 2019).

Clearly, CL and DDL-specific training is an important step in helping teachers overcome this impediment to using corpora in the classroom, as emphasized by many proponents of the approach (Abdel Latif, 2021; Boulton, 2009; Leńko-Szymańska, 2017; Lozano & Izquierdo, 2019; Schaeffer-Lacroix, 2019; Taghizadeh & Hasani Yourdshahi, 2019). One of the factors that is important in corpus-based teacher training is ensuring that there is available time and sufficient mentoring. Thorough corpus training that does not move too quickly for teacher trainees or students might demand a lot of time from them, but rushed training might leave them unprepared and uninspired to use corpora. In addition to the time it takes to learn how to use corpus tools, the process of searching and analyzing results after training could be equally time consuming as well (Charles, 2015; Crosthwaite, 2017; Hadley & Charles, 2017; Quinn, 2015), which makes some learners less interested in trying it out on their own. Another factor that seems to be important in training anyone who is new to corpus approaches, whether they are teachers or students, is guidance from dedicated trainers (Charles, 2015; Curado Fuentes, 2017; Saeedakhtar et al., 2020). Teachers or students trying out corpus tools for the first time may need help formulating searches, learning how to analyze data, and troubleshooting problems they encounter. Having expert or experienced corpus users available in training sessions to answer questions may be helpful. When designing training activities, it may be productive to read studies that report details about training

procedures or DDL activities for teachers (Friginal, 2018; Ebrahimi & Faghih, 2017; Hirata, 2019) or language learners (Chen & Flowerdew, 2018; Flowerdew, 2015; Karras, 2016; Poole, 2016; Quinn, 2015).

Another solution to the perceived difficulty of learning to use corpora is the development of user-friendly tools. Flowerdew (2015) recommends ConcGram (Greaves, 2009), MICUSP (Michigan Corpus of Upper Level Student Papers, 2009), and SKELL (Baisa & Suchomel, 2014) for EAP learners because she finds them user-friendly, and Quinn (2015) has developed teaching materials using WordBanks Online (HarperCollins, 2021) with ease. Along the lines of user-friendliness, resources to help new corpus users navigate online tools can increase the effortlessness of overcoming hurdles. Ebrahimi and Faghih (2017) found that screen capture videos of how to use corpus tools were appreciated in a series of training sessions for pre-service teachers. Laurence Anthony, who developed and freely shares AntConc and many other tools, has compiled and posted multiple tutorials on YouTube (www.youtube.com/user/AntlabJPN/videos) with screen capture videos featuring explanations of how to use the tools that many new users appreciate.

Aside from the technological side of the difficulties some users face when learning to use corpora, the vocabulary needed to navigate corpus tools is an important consideration for language learners. To understand keys and functions in concordancing tools, some L2 learners prefer that the interface is in their L1 (Quinn, 2015). In addition, comprehending concordance lines is also a concern for many L2 learners. Ballance and Coxhead (2020) found that language learners need to know an average of 4,000–5,000-word families to understand concordance lines in corpora of authentic texts, but not surprisingly, there was considerable variability in the amount of vocabulary needed to use different corpora. For language learners who are not at the proficiency level needed to understand concordance lines, researchers have found some possible solutions. One solution that Mizumoto and Chujo (2016) implemented is using bilingual concordance lines in the L1 and the target language. Another solution is using corpora of graded readers that are written at a level that is appropriate for the learners (Boontam & Phoocharoensil, 2018; Moon & Oh, 2017; Yilmaz, 2017).

Another potential hurdle to using corpus approaches is the general lack of resources, especially in many developing countries (Lozano & Izquierdo, 2019; Taghizadeh & Hasani Yourdshahi, 2019). Lozano and Izquierdo (2019) argue that teacher training on designing materials and activities using technology is important so that even teachers in institutions with limited access to online tools can maximize the benefits of whatever is available. Paper-based concordance activities can be a practical option for institutions that do not have enough computers (and computer labs) or fast enough internet for students to do concordance searches (Al-Mahbashi et al., 2015). In classrooms with one computer, the teacher can show students how to perform searches at home. Another approach to making corpus use more accessible without a computer lab is the development of mobile apps (Meunier, 2019; Pérez-Paredes et al., 2019; Quan, 2016) and tools that can operate on smartphones, such as <https://writeandimprove.com/> (English Language iTutoring Limited, 2021). A major challenge to CL app development is that it can be inconvenient to look through concordance lines on a small screen (Pérez-Paredes et al., 2019). There are some corpus-informed language learning apps, such as iGrammar of English (Aarts & Wallis, 2011), that do not use a hands-on approach with concordance lines, but still provide information for learners that is supported by corpus research.

A final challenge to mention here in implementing DDL or corpus-based activities in the L2 classroom is collecting and/or choosing the appropriate corpus. Learners and teachers, like CL researchers, would need to be concerned with the concept of *representativeness*, or the extent to which the corpus reflects language variation within the target domain, and the *generalizability* of their findings, which is the extent to which the findings are applicable in texts outside of the corpus data (Kaltenböck & Mehlmauer-Larcher, 2005). If these areas are addressed in teacher training, teachers will be able to help learners consider these issues and guide them towards corpora that are suitable for their needs.

Summary of current practices

Overall, the findings on the effectiveness of using corpora in the L2 classroom and learners' increasing interest in engaging in corpus-based activities provide a hopeful outlook on this approach, moving into the next decade. It is important to teach learners how to fully utilize and interact with the tools so that they know how to exercise their autonomy to find answers to their language-related questions. They need to know that they have the power to figure it out on their own, with answers from corpora that are right in front of them (Friginal et al., 2020). If learners are not adequately prepared to use corpus tools, figuring out how to navigate them could cause unnecessary frustration and take away the enjoyment of discovering language patterns. It can be very important for someone to be available to assist new corpus users when needed (Charles, 2015; Curado Fuentes, 2017; Saeedakhtar et al., 2020), and it is likely that a lot of guided practice time might be needed to prepare new corpus users to formulate their own research questions and find the answers using corpora. Language teachers can incorporate the guided practice time into their lesson plans by helping learners examine specific language structures or words that are already on the curriculum using a corpus.

Practical examples: MOOCs and short-term online courses for learners and classroom activities

Crosthwaite's (2018, 2020) online corpus-based training for English learners can be a helpful example to consider when thinking about how to teach learners to use corpora. His training starts by introducing learners to what corpora are and giving them activities using the tool Sketch Engine for Language Learners, or SKELL (Baisa & Suchomel, 2014), which is a website and database that provides grammatical and collocational information about words, frequency counts, and synonym lists. Using examples from SKELL, he shows them the advantages that corpora have over dictionaries for searching language questions. He then introduces them to Sketch Engine, which allows users to choose a corpus from a list of options and perform searches, and Linggle (Chang, 2008), a tool that allows users to enter a search term to find frequent phrases containing the word. He gives them example searches with screen shots that they can try, introducing them to concordance lines, wildcards, word frequency, and collocations, and assigns practice searching activities that have immediate feedback. Participants learn how to fix errors related to word form, word choice, collocations, phrasing, and grammar using frequency information, wildcards, tag nodes, collocation information, and KWIC lists. The training also introduces participants to disciplinary corpora, starting with the Michigan Corpus of Upper Level Student Papers (MICUSP). It also introduces the different discipline groups, discipline text types, and genres in British Academic Written English (BAWE) corpus within Sketch Engine, as well as the Word Sketch Difference function in Sketch Engine, which has the option to show users how a word is used in different disciplinary subcorpora. By the end of the training, participants would hopefully be able to use SKELL, Sketch Engine, Linggle, and MICUSP independently. The example of Crosthwaite's (2018, 2020) massive online open course (MOOC) illustrates how the innovation of corpus tools that target language learners or teachers rather than corpus linguistics researchers can make this approach easier for classroom use.

To begin using corpora in the classroom, it may also be helpful to read case studies and specific examples of types of activities that can be done and could be adapted in a particular L2 classroom. One hands-on idea that Xu (2016) suggests is teaching students to avoid common language errors by giving them access to learner corpora and native speaker corpora to discover the errors themselves, and Ackerley (2017) provides an example of how this comparative approach can be implemented to teach collocations and colligations using AntConc. She started by compiling two corpora of public opinion survey reports: an expert corpus of public opinion reports from news and marketing websites and a learner corpus of public opinion reports written by EFL university students. Another set of students at

the same university were instructed on how to use corpus tools and they did practice activities, some of which were hands-on activities, comparing features of the learner corpus and the expert corpus before eventually writing their own public opinion survey report with access to the expert corpus and AntConc. The corpus-trained students' reports were collected as a third corpus, and Ackerley compared its phraseology with the other two corpora. Using hands-on contrastive analysis activities like Ackerley's (2017) could be a potentially engaging way to guide learners to discover errors to avoid and pay more attention to the linguistic features and patterns of their own writing. Guiding learners about the linguistic patterns of writing from an expert corpus compared to learner texts may be ideal in encouraging them to figure things out on their own—discovering likely errors or identifying various options in framing an idea. An instructor's careful use of a “native speaker” corpus when compared with learner corpora is needed to avoid using native language as a standard of the norm in L2 writing, one that might pose challenges or unnecessary confusion to learners (Friginal & Hardy, 2014).

Conclusion

Using corpora in the L2 classroom can be an exciting, effective way for language learners to discover language patterns across spoken and written discourses. It has the potential to be more engaging than traditional approaches, and it offers a way for learners to find answers to their questions independently as they progress in learning and acquiring a new language. It may take quite a bit of time and effort for instructors to teach students how to benefit from corpora, but it is an investment with long-term benefits for learners, and the ongoing development of user-friendly corpus tools for learners can make corpus use in language teaching relatively easy and more accessible. There is a growing number of research studies confirming that corpus-based instruction, operationalized into DDL, both computer-based and paper-based, can work well in a variety of language learning contexts and that learners often have positive attitudes towards DDL activities. Learners, in general, are very receptive to technology and many of them now have access to hardware and software that allow them more control and easy access wherever they are and whenever they want learning to occur. Clearly, however, there are still several areas in L2 instruction and use of corpora that need further research. O’Keeffe (2021) outlines some understudied areas that future DDL researchers can address such as the connections between DDL, SLA, and learning theories, learners’ thought processes while engaging in DDL activities, and the role of scaffolding in DDL.

Another strategic area of focus for further corpus pedagogy development is the creation of more user-friendly, mobile-based, easy to learn corpus tools developed specifically for language learners. These tools could successfully merge CL approaches with those from popular language learning apps (e.g., Duolingo or Rosetta Stone) to make L2 instruction current and well-supported with a network of users. In addition to learner-friendly tools, an important component of the expansion of DDL in language teaching is sustained and focused training for teachers and pre-service teachers (Abdel Latif, 2021; Boulton, 2009; Leńko-Szymańska, 2017; Lozano & Izquierdo, 2019; Schaeffer-Lacroix, 2019; Taghizadeh & Hasani Yourdshahi, 2019). There could be many teachers looking for innovative approaches who are willing to incorporate corpora but have not been taught how to use them. Since there has been so much available research in support of this approach, it would be worthwhile for scholars and software companies and developers to continue to make progress in this field and develop more practice tools and resources for language teachers and learners.

References

- Aarts, B. & Wallis, S. A. (2011). *The interactive grammar of English*. Survey of English Usage/UCL Business PLC.
- Abdel Latif, M. (2021). Corpus literacy instruction in language teacher education: Investigating Arab EFL student teachers' immediate beliefs and long-term practices. *ReCALL*, 33(1), 34–48. doi:10.1017/S0958344020000129

- Ackerley, K. (2017). Effects of corpus-based instruction on phraseology in learner English. *Language Learning & Technology*, 21(3), 195–216. <http://llt.msu.edu/issues/october2017/ackerley.pdf>
- Al-Mahbashi, A., Mohd Noor, N., & Amir, Z. (2015). The effect of data driven learning on receptive vocabulary knowledge of Yemeni university learners. *The Southeast Asian Journal of English Language Studies*, 21(3), 13–24.
- Anthony, L. (2020). *AntConc* (Version 3.4.3) [Computer Software]. Waseda University. Retrieved July 9, 2020, from www.laurenceanthony.net/
- Baisa, V. & Suchomel, V. (2014). SKELL – Web interface for English language learning. *RASLAN: Eighth Workshop on Recent Advances in Slavonic Natural Language Processing Proceedings*, 63–70. <https://nlp.fi.muni.cz/raslan/raslan14.pdf>
- Ballance, O. J. & Coxhead, A. (2020). How much vocabulary is needed to use a concordance? *International Journal of Corpus Linguistics*, 25(1), 36–61. <https://doi.org/10.1075/ijcl.17116.bal>
- Biber, D., Conrad, S., & Reppen, R. (1998). *Corpus linguistics investigating language structure and use*. Cambridge University Press.
- Biber, D., Reppen, R., & Friginal, E. (2010). Research in corpus linguistics. In R. B. Kaplan (Ed.), *The Oxford handbook of applied linguistics* (2nd ed., pp. 548–570). Oxford University Press.
- Boontam, P. & Phoocharoensil, S. (2018). Effectiveness of English preposition learning through data-driven learning (DDL). *Southeast Asian Journal of English Language Studies*, 24(3), 125–141. <http://doi.org/10.17576/3L-2018-2403-10>.
- Boulton, A. (2009). Data-driven learning: Reasonable fears and rational reassurance. *Indian Journal of Applied Linguistics*, 35(1), 81–106.
- Boulton, A. (2012). Hands-on/hands-off: Alternative approaches to data-driven learning. In J. Thomas & A. Boulton (Eds.), *Input, process and product: Developments in teaching and language corpora* (pp. 152–168). Masaryk University Press.
- Boulton, A. & Cobb, T. (2017). Corpus use in language learning: A meta-analysis. *Language Learning*, 67(2), 348–393. doi:10.1111/lang.12224.
- Boulton, A. & Landure, C. (2015). Using corpora in language teaching, learning, and use. *Researching and Teaching Languages for Specific Purposes*, 35(1), 1–13. <https://doi.org/10.4000/apliut.5433>
- Chang, J. S. (2008). *Linggle: A web-scale language reference search engine* [Unpublished manuscript].
- Charles, M. (2015). Same task, different corpus: The role of personal corpora in EAP classes. In A. Leńko-Szymańska & A. Boulton (Eds.), *Multiple affordances of language corpora for data-driven learning* (pp. 129–154). John Benjamins. <https://doi.org/10.1075/scl.69.07cha>
- Chen, M. & Flowerdew, J. (2018). Introducing data-driven learning to PhD students for research writing purposes: A territory-wide project in Hong Kong. *English for Specific Purposes*, 50, 97–112. <https://doi.org/10.1016/j.esp.2017.11.004>
- Chen, M., Flowerdew, J., & Anthony, L. (2019). Introducing in-service English language teachers to data-driven learning for academic writing. *System*, 87(102148), 1–12. doi:10.1016/j.system.2019.102148
- Cobb, T. (n.d.) *Range for texts v.3* [computer program]. Retrieved September 15, 2015, from www.lexutor.ca/cgi-bin/range/texts/index.pl
- Cotos, E., Link, S., & Huffman, S. R. (2017). Effects of DDL technology on genre learning. *Language Learning and Technology*, 21(3), 104–130. https://lib.dr.iastate.edu/engl_pubs/103
- Crosthwaite, P. (2017). Retesting the limits of data-driven learning: Feedback and error correction. *Computer Assisted Language Learning*, 1–27. <http://dx.doi.org/10.1080/09588221.2017.1312462>
- Crosthwaite, P. (2018, June 8). Scaling up DDL: Challenges of bringing DDL to an online SPOC format. Paper presented at 2nd BAAL Corpus Linguistics SIG event 2018: New Directions in DDL. Centre for Academic Writing, Coventry University, UK.
- Crosthwaite, P. (2020). Taking DDL online: Designing, implementing and evaluating a SPOC on data-driven learning for tertiary L2 writing. *Australian Review of Applied Linguistics*, 43(2), 169–194. <https://doi.org/10.1075/aral.00031.cro>
- Crosthwaite, P., Luciana, & Schweinberger, M. (2021). Voices from the periphery: Perceptions of Indonesian primary vs secondary pre-service teacher trainees about corpora and data-driven learning in the L2 English classroom. *Applied Corpus Linguistics*, 1, 1–13. <https://doi.org/10.1016/j.acorp.2021.100003>
- CROW Team. (2022). *Corpus and repository of writing*. <https://writecrow.org/crow-for-teachers/>
- Curado Fuentes, A. (2017). Form-focused data-driven learning for grammar development in ESP contexts. *Revista De Linguas Para Fines Especificos*, 23(1), 12.
- Davies, M. (2008). The Corpus of Contemporary American English (COCA): 560 million words, 1990–present. <https://corpus.byu.edu/coca/>

- Ebrahimi, A. & Faghih, E. (2017). Integrating corpus linguistics into online language teacher education programs. *ReCALL*, 29(1), 120–135 <https://doi.org/10.1017/S0958344016000070>
- English Language iTutoring Limited. (2021). *Write & improve with Cambridge*. <https://writeandimprove.com/>
- Flowerdew, L. (2015). Using corpus-based research and online academic corpora to inform writing of the discussion section of a thesis. *Journal of English for Academic Purposes*, 20, 58–68. <https://doi.org/10.1016/j.jeap.2015.06.001>
- Friginal, E. (2018). *Corpus linguistics for English teachers: New tools, online resources, and classroom activities*. Routledge.
- Friginal, E. & Hardy, J. A. (2014). *Corpus-based sociolinguistics: A guide for students*. Routledge.
- Friginal, E., Dye, P., & Nolen, M. (2020). Corpus-based approaches in language teaching: Outcomes, observations, and teacher perspectives. *Boğaziçi University Journal of Education*, 37(1), 43–68.
- Friginal, E. & Roberts, J. (to appear). Corpora and materials design. In R. Jablonkai & E. Csomay (Eds.). *The Routledge handbook of corpora and language teaching and learning*. Routledge.
- Gabrielatos, C. (2005) Corpora and language teaching: Just a fling, or wedding bells? *TESL-EJ*, 8(4), 1–37. <https://files.eric.ed.gov/fulltext/EJ1068106.pdf>
- Geluso, J. & Yamaguchi, A. (2014). Discovering formulaic language through data-driven learning: Learner attitudes and efficacy. *ReCALL*, 26(2), 225–242.
- Greaves, C. (2009). *ConcGram 1.0: A phraseological search engine*. John Benjamins. <https://benjamins.com/catalog/cls.1>
- Hadley, G. & Charles, M. (2017). Enhancing extensive reading with data-driven learning. *Language Learning & Technology*, 21(3), 131.
- HarperCollins. (2021). *Collins wordbanks online*. <https://wordbanks.harpercollins.co.uk/>
- Hirani, E. (2019). The development of a multimodal corpus tool for young EFL learners: A case study on the integration of DDL in teacher education. In P. Crosthwaite (Ed.), *Data-driven learning for the next generation: Corpora and DDL for pre-tertiary learners* (pp. 88–105). Routledge. doi:10.4324/9780429425899-6
- Hoffmann, S. & Evert, S. (1996). *BNCweb (CQP-Edition)*. Zurich University.
- Jones, C. & Waller, D. (2015). *Corpus linguistics for grammar: A guide for research*. Routledge.
- Kaltenböck, G. & Mehlmayer-Lacher, B. (2005). Computer corpora and the language classroom: On the potential and limitations of computer corpora in language teaching. *ReCALL*, 17(1), 65–84.
- Kilgariff, A., Baisa, V., Bušta, J., Jakubíček, M., Kovář, V., Michelfeit, J., Rychlý, P., & Suchomel, V. (2014). The Sketch Engine: Ten years on. *Lexicography*, 1, 7–36.
- Kim, H. (2019). The perception of teachers and learners towards an exploratory corpus-based grammar instruction in a Korean EFL primary school context. *Primary English Education*, 25(1), 123–152.
- Karras, J. N. (2016). The effects of data-driven learning upon vocabulary acquisition for secondary international school students in Vietnam. *ReCALL*, 28(2), 166–186.
- Laursen, A. L. & Pellon, I. A. (2012). Text corpora in translator training. A case study of the use of comparable corpora in classroom teaching. *The Interpreter and Translator Trainer*, 6(1), 45–70.
- Lee, H., Warschauer, M., & Lee, J. H. (2020). Toward the establishment of a data-driven learning model: Role of learner factors in corpus-based second language vocabulary learning. *The Modern Language Journal*, 104(2), 345–362. doi:10.1111/modl.12634
- Lee, P. & Lin, H. (2019). The effect of the inductive and deductive data-driven learning (DDL) on vocabulary acquisition and retention. *System*, 81, 14–25. <https://doi.org/10.1016/j.system.2018.12.011>
- Leńko-Szymańska, A. (2017). Training teachers in data driven learning: Tackling the challenge. *Language Learning & Technology*, 21(3), 217–241.
- Lin, M. H. & Lee, J.-Y. (2015). Data-driven learning: Changing the teaching of grammar in EFL classes. *ELT Journal*, 69(3), 264–274. <https://doi.org/10.1093/elt/ccv010>
- Lozano, A. A. & Izquierdo, J. (2019). The use of technology in second language education: Some considerations to overcome the digital divide. *Emerging Trends in Education*, 2(3), 52–70. doi:10.19136/etie.a2n3.3250
- LyricsTraining.com. (2020). *Lyrics Training* [Mobile application software]. <https://lyricstraining.com/app?nr=1&~channel=web&~feature=redirect&~campaign=none&ref=https%3A%2F%2Flyricstraining.com%2Fen%2F>
- Marín, M. J., Orts Llopis, M. Á., & Fitzgerald, A. (2017). A data-driven learning experiment in the legal English classroom using the FLAX platform. *Miscelánea*, 55, 37–64.
- McEnery, T., Xiao, R., & Tono, Y. (2006). *Corpus-based language studies: An advanced resource book*. Routledge.
- MetaMetrics. (2021). *Lexile* [Computer Software]. <https://lexile.com/>
- Meunier, F. (2016). Learner corpora and pedagogical applications. In L. Murray & F. Farr (Eds.), *The Routledge handbook of language learning and technology* (pp. 376–387). Routledge.

- Meunier, F. (2019). A case for constructive alignment in DDL: Rethinking outcomes, practices and assessment in (data-driven) language learning. In P. Crosthwaite (Ed.), *Data-driven learning for the next generation: Corpora and DDL for pre-tertiary learners* (pp. 13–31). Routledge.
- Meunier, F. & Reppen, R. (2015). Corpus vs. non-corpus informed pedagogical materials: Grammar as the focus. In D. Biber & R. Reppen (Eds.), *The Cambridge handbook of English corpus linguistics* (pp. 498–514). Cambridge University Press.
- Michigan Corpus of Upper Level Student Papers. (2009). Ann Arbor, MI: The Regents of the University of Michigan.
- Mizumoto, A. & Chujo, K. (2016). Who is data-driven learning for? Challenging the monolithic view of its relationship with learning styles. *System*, 61, 55.
- Moon, S. & Oh, S. Y. (2017). Unlearning overgenerated *be* through data-driven learning in the secondary EFL classroom. *ReCALL* 30(1), 48–67. doi:10.1017/S0958344017000246
- O’Keeffe, A. (2020). Data-driven learning – a call for a broader research gaze. *Language Teaching*, 1–14. doi:10.1017/S0261444820000245
- O’Keeffe, A. (2021). Data-driven learning – a call for a broader research gaze. *Language Teaching*, 54(2), 259–272. <http://dx.doi.org/10.1017/S0261444820000245>
- Pérez-Paredes, P. (2010). Corpus linguistics and language education in perspective: Appropriation and the possibilities scenario. In T. Harris & M. Moreno Jaén (Eds.), *Corpus linguistics in language teaching* (pp. 53–73). Peter Lang.
- Pérez-Paredes, P., Guillamón, C. O., Van de Vyver, J., Meurice, A., Jiménez, P. A., Conole, G., & Hernández, P. S. (2019). Mobile data-driven language learning: Affordances and learners’ perception. *System*, 84, 145. doi:10.1016/j.system.2019.06.009
- Poole, R. (2016). A corpus-aided approach for the teaching and learning of rhetoric in an undergraduate composition course for L2 writers. *Journal of English for Academic Purposes*, 21, 99–109. <https://doi.org/10.1016/j.jeap.2015.12.003>
- Potapenko, E. (2018). *PlayPhraseme* [Mobile application software]. www.playphrase.me/#/search
- Quan, Z. (2016). Introducing “mobile DDL (data-driven learning)” for vocabulary learning: An experiment for academic English. *Journal of Computer Education*, 3(3), 273–287. DOI 10.1007/s40692-016-0067-0
- Quinn, C. (2015). Training L2 writers to reference corpora as a self-correction tool. *ELT Journal*, 69(2), 165–177. <https://doi.org/10.1093/elt/ccu062>
- Reppen, R. (2016). Enhancing language teaching: How corpus linguistics can help. *Corpus Linguistics Research*, 2, 25–32.
- Römer, U. (2009). The inseparability of lexis and grammar: Corpus linguistic perspectives. *Annual Review of Cognitive Linguistics*, 7, 140–162.
- Römer, U. (2011). Corpus research applications in second language teaching. *Annual Review of Applied Linguistics*, 31(2), 205–225.
- Saeedakhtar, A., Bagerin, M., & Abdi, R. (2020). The effect of hands-on and hands-off data-driven learning on low-intermediate learners’ verb-preposition collocations. *System*, 91(102268), 1–14. <https://doi.org/10.1016/j.system.2020.102268>
- Schaeffer-Lacroix, E. (2019). Barriers to trainee teachers’ corpus use. In P. Crosthwaite (Ed.), *Data-driven learning for the next generation: Corpora and DDL for pre-tertiary learners* (pp. 88–105). Routledge.
- Simpson, R. C., Briggs, S. L., Ovens, J., & Swales, J. M. (1999). The Michigan Corpus of Academic Spoken English. The Regents of the University of Michigan.
- Smart, J. (2014). The role of guided induction in paper-based data-driven learning. *ReCALL*, 26(02), 184–201.
- Soruç, A. & Tekin, B. (2017). Vocabulary learning through data-driven learning in an English as a second language setting. *Education Science, Theory Practice*, 17(6), 1811–1832. doi:10.12738/estp.2017.6.0305
- Taghizadeh, M. & Hasani Yourdshahi, Z. (2019). Integrating technology into young learners’ classes: Language teachers’ perceptions. *Computer Assisted Language Learning*, 1–25. doi:10.1080/09588221.2019.1618876
- Teubert, W. (2005). My version of corpus linguistics. *International Journal of Corpus Linguistics*, 10(1), 1–13.
- Vyatkina, N. (2016). Data-driven learning for beginners: The case of German verb-preposition collocations. *ReCALL*, 28(2), 207–226. <http://dx.doi.org/10.1017/S0958344015000269>
- Wild, K., Kilgarriff, A., & Tugwell, D. (2013). The Oxford Children’s Corpus: Using a children’s corpus in lexicography. *International Journal of Lexicography*, 26(2), 190–218.
- Xu, Q. (2016). Application of learner corpora to second language learning and teaching: An overview. *English Language Teaching*, 9(8), 46–52. <https://doi.org/10.5539/elt.v9n8p46>
- Yılmaz, M. (2017). The effect of data-driven learning on EFL students’ acquisition of lexico-grammatical patterns in EFL writing. *Eurasian Journal of Applied Linguistics*, 3(2), 75–88. <https://doi.org/10.1186/s40064-016-2935-5>

Computer Assisted Language Learning

Greg Kessler

Statement of Purpose

This chapter provides a comprehensive overview of the field of computer assisted language learning (CALL) and the role technology plays in language teaching and learning according to the existing body of research. This is an increasingly diversified field that has been informed by decades of research into human learning, language learning, technological adoption, technological design, instructional design, human-computer interaction and other varied aspects of human behavior. Today, it is quite likely that every topic within the domain of language teaching and learning is being dramatically influenced by technology. The way that we engage in instructional experiences, conduct research, keep records and perform assessment have all been significantly altered through a variety of technologies. The breadth of research into the role of technology in language teaching and research reflects this diversity. CALL is a multi-faceted and multi-lineal area within applied linguistics. This complex nature is partly the result of this dynamic field being influenced by a diversity of research and pedagogical practices over the past few decades. As a result, it is quite difficult to maintain currency as a generalist in this field. This field has diversified over the years and there are few scholars who are able to stay abreast of these varied developments. Research into some specialized aspects of CALL can appear too esoteric for many outside the field to truly appreciate. Like researchers in other academic disciplines, CALL researchers are likely to focus upon distinct areas of specialization such as specific linguistic communities, certain types of language tasks, language skill areas, pedagogical contexts, pragmatics or discourse features. There has been an increasing interest in reflecting upon the role of CALL as a force for equity and justice within larger cultural and linguistic ecosystems.

Traditions in CALL

Foundational Perspectives and Paradigms

Established CALL paradigms and theoretical perspectives are drawn from a diverse range of disciplines and sources. This interdisciplinary nature is the result of influence from fields as diverse as education, linguistics, instructional technology, psychology, sociology, anthropology, computer science and engineering. The synthesis of influences from these varied fields has created a complex and rich combination of theoretical perspectives. The diverse theoretical and methodological structures have been most thoroughly synthesized by Levy and Stockwell (2006) in a manner that draws upon the

strengths of each of these disparate disciplines. The diversity of these influences has contributed to an increasingly sophisticated and robust approach to research. The investigation of the role of technology in language learning has also become more complex and ecologically focused (Thorne, 2003; Schulze, 2017). The shift toward focusing on CALL from an ecological perspective accommodated an increased focus on aspects of equity. Contemporary CALL studies are expected to incorporate detailed and longitudinal observation of teacher and student behavior in specific contexts with focus upon the greater sociolinguistic ecosystem. This is in contrast with the previous reliance upon survey based or technology tool focused studies.

Today's CALL research tends to be focused on specific situated contexts rather than broad topics. This has resulted in a multi-faceted field of increasingly specific sub-topics and specialists with very few generalists able to maintain a comprehensive overview. We have also witnessed advances in methodological approaches that allow us to capturing valuable data through innovative means that would have previously eluded us (Smith, 2008). As we have developed more sophisticated research paradigms, we have also witnessed a diversification of perspectives on the role of CALL, including an increased critical stance focusing on the role of CALL theories, approaches and practices in juxtaposition with issues of hegemony, justice and equity. Research has also expanded to provide greater insights into how student and teacher performance can be improved as well as how we can better design and situate tasks, tools and aspects of learning environments to enhance learning.

The power of CALL research has also benefitted from increased computational abilities (Heift & Schulze, 2007), the emergence of large data collections and aggregators (Kessler, 2013), a movement toward open access to research data and results (Chanier, 2007) as well as the increasing availability of big data (Reinders & Lan, 2021). We have also witnessed the release of a number of syntheses of extant CALL research that should help guide future researchers (e.g. Levy & Stockwell, 2006; Hubbard, 2009). These developments have contributed to a more mature, sophisticated discipline. In recent years we have seen additional methodological expansion, including psychometric observations such as eye tracking as an indicator of the effectiveness of recasts (Smith, 2010) and noticing (Smith, 2012) as well as the use of captions (Winke et al., 2013). However, we are still faced with great limitations in regards to conducting research that captures all aspects of a learning experience to inform future practice. Most research is situated in such specific learning contexts that replication, which is rarely even attempted, would be quite challenging. This is likely true for much classroom research (McKay, 2006). CALL research is challenged by the same factors that make all educational research difficult, but there are also technological and human factors that come into play. Some of these circumstances include individual learner and teacher characteristics, environmental circumstances and institutional idiosyncrasies. Such differences can often be significant predictors of success or failure with CALL intervention (Levy & Stockwell, 2006). While we have seen improvements in research, the awareness of these challenges should guide us toward new research approaches.

Trends

Open Educational Resources (OERs)

In recent years we have seen a rise in openness across many educational domains. OER includes open data sets, open source and open access software and open educational instructional resources (OERs). Blyth and Thoms (2021) edited a collection that provides insights into this topic from various perspectives, including some of the cornerstones of the CALL domain such as open access journals, telecollaborative projects and resources designed specifically for heritage language learning. According to Chun and Heift (2021) the journal *Language Learning & Technology* has been open access since its first issue in 1997. The Cultura project has been open since inception in 1997 as an accessible telecollaborative exchange utilizing multiple channels with pedagogical and

on demand support (Levet & Tschudi, 2021). The Center for Open Educational Resources for Language Learning (COERLL) at the University of Texas, Austin, has created an extensive body of instructional materials including textbooks, corpora, websites and an array of supporting linguistic artifacts. They also disseminate information about teaching methods that support the use of these authentic materials and conduct workshops that support the language education community. One of the most recent developments is the merging of OER and mobility, thus promoting accessibility and mobility (Pérez-Paredes et al., 2018).

Mobility

There has been a paradigm shift toward increased use of mobile devices for educational purposes. This is largely due to the increase in the use of such devices in our personal lives. In many countries mobile devices have leapfrogged desktop computers, increasing access significantly (Wang & Smith, 2013). Mobile devices have been associated with incidental vocabulary learning due to its ubiquity and portability (Lee & Lee, 2013), better listening performance (Oberg & Daniels, 2013), speaking and vocabulary gains (Hwang & Chen, 2013) and pronunciation (Anaraki, 2009). Other studies have recognized associations between the use of mobile devices and increased time on task (Stockwell, 2007), increased motivation (Lan et al., 2007) and improved interaction and negotiation (Zurita & Nussbaum, 2004). Perhaps the most important aspect of mobile technologies is that they are familiar to students and always available. Lys (2013) found that the enhanced access to listening and speaking tasks provided by iPads supported an increased quantity and quality of student oral production. However, there are many caveats that teachers should recognize when using mobile devices. With the increase of attention to mobile learning, some have observed that there are often challenges associated with introducing these personal and individual technologies for more institutional instructional purposes (Kim et al., 2013). Stockwell (2008) observed that students may often perceive cell phones as personal and recreational and avoid using them for learning. Further, language lab managers have long recognized the challenge of managing or delivering content consistently across different individual devices.

Digital Worlds and Rewilding Learning

The increased use of social media for language learning both in and out of formal educational contexts has compelled many to explore various digital spaces. Crystal (2008) noted that social and linguistic norms are evolving as we find ourselves increasingly immersed in these digital contexts. Recently there has been a shift toward focusing on the use of these contexts and linguistic social practices as they exist in the “digital wilds” as a means of rewilding learning (Sauro & Thorne, 2021). Such rewilding, like the environmental inspiration behind it, seeks to incorporate these authentic and natural spaces within formal learning. By engaging in more investigation of what happens in these informal authentic spaces, we can hope to inform the design of formal learning experiences (Kessler, 2019). This is magnified by the potential to combine such collaborative practice with the collaboratively constructed world of social media and participatory culture (Kessler, 2013). One interesting aspect of the participatory culture paradigm is the maker movement. The maker movement involves a dramatic paradigm shift from the instructional goal being the learning of a presumed established set of content toward making as a learning process. This perspective exploits the multi-disciplinary and media rich foundations of the CALL field and harnesses the creativity of this community (Dubreil & Lord, 2020). We are likely to see more work in this area in the future. Embracing these authentic experiences extends our observations to the increased use of larger data sets in varied ways, including the creation of extensive authentic corpora.

Controversies

Terminology continues to be a challenging aspect in this field. There has been an ongoing concern about using the term CALL, which I addressed at length in Kessler (2017). Most recently there has been a shift in the field to refer to these experiences as virtual exchange rather than telecollaboration or tandem learning or etandem learning or any of the other terms. This is largely to avoid the confusion that so many different terms that are unique to this field can cause as well as to align with terminology that is used across many other educational disciplines (O'Dowd, 2021).

Recent CALL research has been contextualized to recognize and raise awareness of issues related to hegemony, injustice and inequity across linguistic sociocultural and broader communities (Ortega, 2017). These are controversies that exist across linguistic contexts and are certainly not limited to CALL focused domains. Ortega has written extensively on the biases implicit in second language acquisition (SLA) research against multilingualism and bilingualism that are based upon systemic racism and marginalization. She has also argued that a social justice approach can help us recognize these inequities in order to research them more effectively. Inequitable multilingualism, a term she coined to reflect the dramatic difference between the multilinguals that are valued and appreciated by SLA research and those who are not, results from systemic inequality and results in varied forms of discrimination (2020). She argues that research paradigms are designed in a way that perpetuates these inequities and that new methodological approaches should be adopted to address this issue. Ortega (2017) also recognizes the potential for building upon the relationship between SLA and CALL research cultures as a means of working toward equitable multilingualism. She builds upon the argument by Schulze and Smith (2015) that research in any discipline is based upon ontology, epistemology and methodology by adding "Ethics or axiology, that is, questions surrounding what and who our research is good for" (Ortega, 2017, p. 286). She argues that allowing this focus on the connections between CALL and SLA research can help us recognize profound symbiosis "Among multilingualism, digital literacies and social justice." Further, she argues that this focus on ethics and axiology is more important at the moment because of the profound threats that "Respect for human diversity, including linguistic diversity, is under siege." This plea for an ethically focused shared research agenda will inspire many from both fields. There is already evidence that it is already inspiring researchers in the field of CALL.

Similarly, natural language processing (NLP), like many other developments informed by artificial intelligence (AI), has consistently revealed practices that perpetuate institutionalized hegemonic bias toward conventional power structures that favor Caucasian male voices and personas (Blodgett et al., 2020). These systems have been built in by teams of predominantly white males in environments designed with the assumption that the norm is predominantly white and male (Crawford, 2016). Further, research has over-represented English based studies and lacked attention of less commonly taught languages (Garrido-Muñoz et al., 2021), and even the work that has been done in English demonstrates bias against certain groups such as African Americans (Blodgett et al., 2020).

Privacy, Tracking and Student Rights

Controversy also exists around students' privacy and our increasing interest and ability to monitor, track and surveil students. Education software companies, like social media platforms, treat data as a commodity. These concerns need to be considered in tandem with the numerous benefits of tracking students, including improvements in assessment, uptake of feedback and monitoring of salient linguistic and technological abilities, as well as general insights into the behavior of students (Fischer, 2007). Data mining provides opportunities to create data visualizations that highlight specific factors and conditions that may impact a student's particular behavior or ability. Such visualizations can be used to modify instruction so that it enables these students to overcome challenges individually as

well as within group dynamics (Warschauer et al., 2019). However, access to such data visualizations, as well as the ability to utilize it meaningfully, is usually unattainable by language instructors. However, research suggests how such data may be made available in ways that can enhance methodology (Youngs et al., 2018). The potential opportunities and threats associated with student data are enormous and we will learn to better navigate this area as we better understand these dynamics.

Current Trends and Emerging Contexts

While the digital wilds and big data are increasingly influencing the field, we continue to see technological developments in artificial intelligence, virtual and augmented reality and other forms of automation. These technologies manifest themselves in many different ways across the language teaching profession. Throughout the covid-19 pandemic the use of virtual immersive experiences became much more common and many shared their experiences and suggestions with each other in creative ways online. Webinars, podcasts and other forms of online professional development emerged. Professional organizations offered a wide variety of training. Some of the early research of the response to the pandemic focuses on the resilience and creativity of the language education community. Zourou (2020) found that such circumstances can help create community-driven responses that promote agency. Some observed that those with little to no background in using technology for teaching found themselves relying on those who had previously developed such skills (Moser et al., 2021). Further, those with even limited prior knowledge or skills found the emergency transition to online teaching to be much easier, thus further justifying this kind of teacher preparation (Bailey & Lee, 2020). Teachers migrated to experimenting with simple communication tools such as WhatsApp (Budianto & Yudhi, 2021), as well as virtual worlds (Stevens, 2021), which some found to assist children in learning language while also developing friendships (Quinones & Adams, 2021).

Corpora, Big Data and Data-Driven Learning

The use of corpora, big data and data-driven learning in linguistic research is well established, but the use of corpora in language learning is still a relatively nascent area of investigation. While there has been a lot of anticipation for the potential of big data in language learning, there continues to be a dearth of investigation (Reinders & Lan, 2021). The rise of interest in corpus based instruction results from the increased availability of corpora, concordance tools, computation power as well as the alignment of these corpus based practices with contemporary educational practices such as learner centeredness, constructivism and striving for authentic experiences (Boulton & Cobb, 2017). There is a lot of interest in expanding the role of corpora across related academic disciplines in order to harness the potential power of these linguistic resources (McEnery et al., 2019). We are likely to see many developments in this area. Leńko-Szymańska (2017) argues that we need more teacher preparation that focuses on the use of corpora in a systematic manner. Corpus based instruction has been proven to be beneficial for collocational competence (Li, 2017). Others have called for greater institutional support and the preparation of teachers and learners (Ware, 2011; Link et al., 2020). While corpora have much to offer language teachers and learners in terms of providing rich, authentic linguistic models, the ease with which users can gather text from such large corpora can tempt some toward academic dishonesty. Like other online information, the growing body of academic writing available today is staggering. It is estimated that Google scholar alone contains more than 160 million documents (Orduńa-Malea et al., 2014). As a corpus of academic writing this is an immensely valuable resource that can be used across a variety of activities. Consequently, students and faculty can locate and search within an abundance of academic texts quite easily. This ability has resulted in both an increase in potential plagiarism as well as improved abilities to identify this academic misconduct (Pecorari & Petrić, 2014). Corpora have been recognized as valuable sources of

authentic linguistic input. The use of corpora has been found to support collocational competence (Li, 2017), vocabulary contextualization (Huang & Liou, 2007) and flexibility for vocabulary levels (Cobb, 2007). Corpora are particularly useful for students when teachers provide appropriate guidance (Yoon & Jo, 2014), which has been a recognized challenge in previous studies (Bennett, 2010). A meta-analysis of corpus based vocabulary studies found that students with intermediate L2 proficiency, and better, benefitted most. They also found that practice benefitted from purposely selected concordance lines and when hands-on corpus based materials were accompanied by instructional materials. Perhaps most importantly, this meta-analysis found that prior training, corpus length or type did not significantly impact the effectiveness of corpus based interventions (Lee et al., 2019). Data-driven learning is also being used to promote extensive reading by personalizing materials to increase saliency for learners (Hadley & Charles, 2017). Some other ways that corpora and big data are being implemented are through the use of artificial intelligence (AI) automation and robots.

AI and Automation

The area of automation continues to have great potential across language education. Particularly, in the ways we can aggregate and mine textual data. We have seen benefits regarding lexical complexity (Lu, 2012) linguistic diversity (Crossley & McNamara, 2009), as well as syntactic complexity (Lu, 2011). Across educational domains there is much anticipation of the potential for AI to transform assessment in dramatic ways that would address the numerous long-standing challenges plaguing assessment-driven pedagogy. There have been ongoing developments in automated writing evaluation (AWE) in recent years. Readers are likely to have had personal experience with basic examples of automated language experiences such as grammar and spelling checkers, but the ongoing developments extend far beyond these familiar tools. Research into automated writing evaluation continues to be robust and intriguing. Burstein et al. (2020) recommend expanding our exploration of AWE in order to identify further opportunities in this expanding area. There continues to be a lot of untapped potential in this area. We continue to see improvements in the reliability and validity of the performance of these systems which had been a major concern previously (Lang et al., 2019). A recent study comparing writing feedback with student revisions found that students attended more to feedback from the instructor than the AWE, and students who had access to feedback from AWE and an instructor rather than an instructor without AWE demonstrated better retention (Link et al., 2020). According to a Rand report, teachers are asking that AWE:

Provide timely feedback, allow an active role for teachers, align with state and district standards, be compatible with multiple source texts, point students to the part of their essays that need revision, mark success, and provide dashboard to monitor student progress.

(Matsumura et al., 2020, p. 1)

Previously, AWE has been perceived by students as helpful and motivating (Warschauer & Grimes, 2008) for students, though less beneficial than peer feedback (Lai, 2010). It has been noted to be more reliable for certain contexts and genres (Ware, 2011). This may be why it presents some challenges such as too much focus on local issues at the expense of global issues (Warschauer & Grimes, 2008) as well as promoting formulaic writing (Ware & Warschauer, 2006). In fact, AWE is most problematic when teachers are ineffectively or inadequately prepared to use it properly (Shermis & Burstein, 2013). Consequently, it is important for language teachers to understand AWE so they can make effective decisions about implementation (Cotos, 2012). Most recently there have been significant developments in predicting the behavior of students based upon some of these previous observations in addition to other information. Researchers with interests that overlap CALL and NLP have recognized the potential for learner modeling. Automated systems that are specifically designed

for language instruction rely on learner modeling, which utilizes static properties about learners such as L1 and learning style preferences as well as extant learner performance as a means of predicting future performance (Dickinson et al., 2013). Such information allows designers to achieve an ideal prioritization of feedback within the system. These systems are increasingly capable of presenting students with interactive experiences that provide salient feedback at important moments in the learning process. In spite of the developments we have witnessed in NLP, it is not clear to what extent we can rely on learner modeling and automated tools themselves. While there is an increasing potential for delivering customized feedback at a particular point during instruction, there appear to still be concerns that the feedback is often not as salient as that which may be provided by an experienced instructor and that an instructor is often necessary to help interpret such feedback (Li et al., 2015). As Amaral and Meurers (2011) note, most ICALL systems focus upon specific linguistic aspects of language, primarily grammatical, and do not address issues related to individual learner or task characteristics, or strategic, discourse and sociolinguistic competencies. Thus, we should anticipate that there will continue to be a need for human intervention for some time. This reality emphasizes the importance for instructors to understand and be able to adapt these emerging tools to their teaching contexts, utilizing the aspects that can be automated while compensating for those that cannot (Kessler, 2013). It is not clear how well teachers will be able to integrate the emerging array of automated tools that can be used for language evaluation and feedback (Cotos, 2012). This area is still in nascent stages of investigation, but we do expect to see significant developments in the near future (Li et al., 2014), as well as an improved awareness of the role of teachers in mediating feedback (Li et al., 2015) and interpreting automated feedback (Ware, 2014).

In addition to supporting the use of large bodies of linguistic data in meaningful and salient ways, AI and robots are proving to be promising for providing feedback and performing assessment.

Robots, AI and Automation

The potential use of robots has continued to be an area of investigation. Most readers may imagine a human-like android character, but robots for educational use are often more like small animals or even more machine like. They can also refer to a variety of computer based interfaces. There has been a dramatic increase in development of chatbots for language learning practice and while researchers have great expectations, there is little evidence of conclusive research about their implementation (Fryer et al., 2020). While early work with robots was more hopeful than evidence based, there have been recent advances that are more promising (De Haas et al., 2020). A few studies that have been conducted suggest that children can benefit in many ways when they interact with robots while learning language. In an experimental design with children who interacted with robots while learning compared to those who did not, it was observed that they demonstrated increased intrinsic and task motivation (Kennedy et al., 2016). Robots are generally being implemented in ways that supplement instructors rather than replace them, particularly for their potential to support extensive language practice and simulate personalized opportunities for social engagement (van den Bergh et al., 2019).

The greatest challenge for providing feedback, whether it is delivered by a human instructor, robot or other automated interface, is that we can never be sure when and how feedback is ideally salient (Ferris, 2004). Similarly, research with robots and feedback have explored various approaches across various kinds of feedback (Haas et al., 2017). Researchers are continuously improving our understanding of feedback and assessment practices and these findings inform how we design automated feedback. Many of the recent developments in feedback and assessment are focused on how we can use feedback better to motivate learners (Dörnyei, 2020) and how we can use artificial intelligence (AI) to dramatically transform and individualize feedback and assessment. In fact, across educational domains there is much anticipation of the potential for AI to transform assessment in

dramatic ways that would address the numerous long-standing challenges plaguing assessment-driven pedagogy (Fryer et al., 2020).

Conclusion

We have learned much about the role of technology in language teaching over the past few decades. We have also witnessed dramatic shifts in the way that technology is used throughout society, largely as a means of supporting social and communicative endeavors. Throughout this evolution, CALL researchers have developed robust and complex approaches to effectively observe, assess and reflect upon changing language learning and teaching practices. The results of these efforts should serve as a foundation upon which future research and pedagogical developments are constructed. While we do have some insights into specific areas of instructional practice, we are far from a comprehensive understanding of which tools, language skills and practices are best aligned. This is likely to vary across teaching contexts. Further, while some readers may tend to focus upon the technological developments, the literature indicates that the focus should be on supporting instructors to have all the resources they need to meet their pedagogical goals (Hubbard, 2009). In fact, it may not even be the most technologically savvy instructors who use CALL most effectively, but rather those who have a moderate level of competence partnered with the ability to adapt their practices to specific situated and contextualized teaching circumstances (Kessler & Plakans, 2008). Consequently, it is more important to prepare teachers to think critically about their teaching contexts and pedagogical goals than it is to teach them how to use a particular technology (Kessler, 2010). As an astute reader will note, there are so many emerging opportunities, but only instructors who are aware of the opportunities to adopt and adapt technologies to their specific needs will be able to realize their potential. Such awareness does not require technological expertise, but rather the willingness to experiment and be reflective (Lockhart & Richards, 1994). It is highly desirable that such investigation be conducted both from a more traditional quantitative approach as well as from varied qualitative perspectives that allow researchers to observe language learning and use within complex ecological systems (Thorne, 2003), including formal teaching practices that embrace the strengths of the digital wilds. Recently we have seen an increase in studies that attempt to contextualize CALL within a diverse and complex ecosystem that recognizes the significance of decisions made by CALL research and instructional design (Ortega, 2017). CALL is a field that has been dynamic and responsive to various changes. Globalization has influenced all fields in many ways as has been noted by Larsen-Freeman (2018). She recognizes the need for language education to focus on an ecological perspective that takes into account the complexity that has resulted from globalization and our increased understanding of the opportunities and challenges this era presents. We can anticipate that this important perspective will have a profound influence upon the field and the research that it produces in the future.

References

- Amaral, L. & Meurers, D. (2011). On using intelligent computer-assisted language learning in real-life foreign language teaching and learning. *ReCALL*, 23(1).
- Anaraki, F. (2009). A flash-based mobile learning system for learning English as a second language. *Proceedings International Conference on Computer Engineering and Technology*. Singapore (pp. 400–404).
- Bailey, D. R. & Lee, A. R. (2020). Learning from experience in the midst of covid-19: benefits, challenges, and strategies in online teaching. *Computer-Assisted Language Learning Electronic Journal*, 21(2), 178–198.
- Bennett, G. R. (2010). *Using corpora in the language learning classroom: Corpus linguistics for teachers*. Ann Arbor, MI: University of Michigan Press.
- Blodgett, S. L., Barocas, S., Daumé III, H. & Wallach, H. (2020). Language (technology) is power: A critical survey of “bias” in NLP. <https://doi.org/10.48550/arXiv.2005.14050>
- Blyth, C. & Thoms, J. (Eds.) (2021). *Open education and second language learning and teaching: The rise of a new knowledge ecology*. Bristol: Multilingual Matters.

- Boulton, A. & Cobb, T. (2017). Corpus use in language learning: A meta-analysis. *Language Learning*, 67(2), 348–393. doi: 10.1111/lang.12224
- Budianto, L. & Yudhi, A. (2021). Utilizing whatsapp-driven learning during covid-19 outbreak: Efl users' perceptions and practices. *Computer-Assisted Language Learning Electronic Journal (CALL-EJ)*, 22(1), 264–281.
- Burstein, J., Riordan, B. & McCaffrey, D. (2020). Expanding automated writing evaluation. In D. Yan, A. A. Rupp & P. W. Foltz (Eds.), *Handbook of automated scoring: Theory into practice* (pp. 329–346). Boca Raton, FL: Chapman and Hall/CRC.
- Chanier, T. (2007). Open access to research and the individual responsibility of researchers. *Language Learning & Technology*, 11(2), 142–148.
- Chun, D. & Heift, T. (2021). The affordances and challenges of open-access journals: The case of an applied linguistics journal. In C. S. Blyth & J. J. Thoms (Eds.), *Open education and second language learning and teaching* (pp. 183–197). Multilingual Matters.
- Cobb, T. (2007). Computing the vocabulary demands of L2 reading. *Language Learning & Technology*, 11(3), 38–64.
- Cotos, E. (2012). Towards effective integration and positive impact of automated writing evaluation in L2 Writing. In G. Kessler, A. Oskoz & I. Elola (Eds.), *Technology across writing contexts and tasks*, CALICO Monograph Series (Vol. 10, pp. 81–112). CALICO: San Marcos, TX.
- Crawford, K. (2016). Artificial intelligence's white guy problem. *The New York Times*, 25(06).
- Crossley, S. A. & McNamara, D. S. (2009). Computational assessment of lexical differences in L1 and L2 writing. *Journal of Second Language Writing*, 18, 119–136.
- Crystal, D. (2008). *Txtng: The gr8 db8*. Oxford: Oxford University Press.
- De Haas, M., Vogt, P. & Krahmer, E. (2020). The effects of feedback on children's engagement and learning outcomes in robot-assisted second language learning. *Robot-Assisted Learning and Education*. <https://doi.org/10.3389/frobt.2020.00101>
- Dickinson, M., Brew, C. & Meurers, D. (2013). *Language and computers*. Oxford: Wiley-Blackwell.
- Dörnyei, Z. (2020). *Innovations and challenges in language learning motivation*. Abingdon, Oxon: Routledge.
- Dubreil, S. & Lord, G. (2020). Make it so: Leveraging maker culture in CALL. *Calico Journal*, 38(1), i–xii.
- Ferris, D. (2004). The “grammar correction” debate in L2 writing: Where are we, and where do we go from here? (And what do we do in the meantime?). *Journal of Second Language Writing*, 13, 49–62.
- Fischer, R. (2007). How do we know what students are actually doing? Monitoring students' behavior in CALL. *Computer Assisted Language Learning*, 20, 409–422.
- Fryer, L. K., Coniam, D., Carpenter, R. & Lăpușneanu, D. (2020). Bots for language learning now: Current and future directions. *Language Learning & Technology*, 24(2), 8–22. <http://hdl.handle.net/10125/44719>
- Garrido-Muñoz, I., Montejo-Ráez, A., Martínez-Santiago, F. & Ureña-López, L. A. (2021). A Survey on Bias in Deep NLP. *Applied Sciences*, 11(7), 3184.
- Haas, M. D., Baxter, P., de Jong, C., Krahmer, E. & Vogt, P. (2017, March). Exploring different types of feedback in preschooler and robot interaction. In *Proceedings of the companion of the 2017 acm/ieee international conference on human-robot interaction* (pp. 127–128).
- Hadley, G. & Charles, M. (2017). Enhancing extensive reading with data-driven learning. *Language Learning & Technology*, 21(3), 131–152. <http://llt.msu.edu/issues/october2017/hadleycharles.pdf>
- Heift, T. & Schulze, M. (2007). *Errors and intelligence in computer-assisted language learning: Parsers and pedagogues*. New York: Routledge.
- Huang, H. T. & Liou, H. C. (2007). Vocabulary learning in an automated graded reading program. *Language Learning & Technology*, 11(3), 64–82.
- Hubbard, P. (Ed.) (2009). *Computer assisted language learning: Critical concepts in linguistics (Vols I–IV)*. London & New York: Routledge.
- Hwang, W. Y. & Chen, H. S. L. (2013). Users' familiar situational contexts facilitate the practice of EFL in elementary schools with mobile devices. *Computer Assisted Language Learning*, 26(2), 101–125.
- Kennedy, J., Baxter, P., Senft, E., & Belpaeme, T. (2016, March). Social robot tutoring for child second language learning. In *2016 11th ACM/IEEE International Conference on Human-Robot Interaction (HRI)* (pp. 231–238). IEEE.
- Kessler, G. (2010). When they talk about CALL: Discourse in a required CALL class. *CALICO Journal*, 27(2), 376–392.
- Kessler, G. (2013). Collaborative language learning in co-constructed participatory culture. *CALICO Journal*, 30(3), 307–322.
- Kessler, G. (2017). Technology in second language teaching and learning. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (Vol. 3). Routledge.
- Kessler, G. (2019). Promoting engagement through participatory social practices in next generation social media contexts. In S. Adesope and A.G. Rud (Eds.), *Contemporary technologies in education: Maximizing student engagement, motivation, and learning*. Cham, Switzerland: Palgrave Macmillan.

- Kessler, G. & Plakans, L. (2008). Does teachers' confidence with CALL equal innovative and integrated use? *Computer Assisted Language Learning*, 21(3), 269–282.
- Kim, D., Rueckert, D., Kim, D.-J. & Seo, D. (2013). Students' perceptions and experiences of mobile learning. *Language Learning & Technology*, 17(3), 52–73. <http://llt.msu.edu/issues/october2013/kimetal.pdf>
- Lai, Y.-H. (2010). Which do students prefer to evaluate their essays: Peers or computer program. *British Journal of Educational Technology*, 41(3), 432–454. <http://dx.doi.org/10.1111/j.1467-8535.2009.00959.x>
- Lan, Y.-J., Sung, Y.-T. & Chang, K.-E. (2007). From particular to popular: Facilitating EFL reading through mobile-supported cooperation. *Language Learning & Technology*, 17(3), 23–38. <http://llt.msu.edu/issues/october2013/action.pdf>
- Lang, F., Li, S. & Zhang, S. (2019). Research on reliability and validity of mobile networks-based automated writing evaluation. *International Journal of Mobile Computing and Multimedia Communications (IJMCMC)*, 10(1), 18–31.
- Larsen-Freeman, D. (2018). Looking ahead: Future directions in, and future research into, second language acquisition. *Foreign Language Annals*, 51(1), 55–72.
- Lee, H. & Lee, J. H. (2013). Implementing glossing in mobile-assisted language learning environments: Directions and outlook. *Language Learning & Technology*, 17(3), 6–22. <http://llt.msu.edu/issues/october2013/emerging.pdf>
- Lee, H., Warschauer, M. & Lee, J. H. (2019). The effects of corpus use on second language vocabulary learning: A multilevel meta-analysis. *Applied Linguistics*, 40(5), 721–753. <https://doi.org/10.1093/applin/amy012>
- Leńko-Szymańska, A. (2017). Training teachers in data-driven learning: Tackling the challenge. *Language Learning & Technology*, 21(3), 217–241. <http://llt.msu.edu/issues/october2017/lenko-szymanska.pdf>
- Levet, S. & Tschudi, S. (2021). Open by design: The Cultura Project. In C. Blyth & J. Thoms (Eds.), (pp. 47–68). <https://doi.org/10.21832/9781800411005-004>
- Levy, M. & Stockwell, G. (2006). *CALL dimensions: Options and issues in computer assisted language learning*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Li, J., Link, S. & Hegelheimer, V. (2015). Rethinking the role of automated writing evaluation (AWE) feedback in ESL writing instruction. *Journal of Second Language Writing*, 27, 1–18.
- Li, S. (2017). Using corpora to develop learners' collocational competence. *Language Learning & Technology*, 21(3), 153–171. <http://llt.msu.edu/issues/october2017/li.pdf>
- Li, Z., Link, S., Ma, H., Yang, H. & Hegelheimer, V. (2014). The role of automated writing evaluation holistic scores in the ESL classroom. *System*, 44, 66–78.
- Link, S., Mehrzad, M. & Rahimi, M. (2020). Impact of automated writing evaluation on teacher feedback, student revision, and writing improvement. *Computer Assisted Language Learning*, 1–30.
- Lockhart, C. & Richards, J. C. (1994). *Reflective teaching in second language classrooms*. New York: Cambridge University Press.
- Lu, X. (2011). A corpus-based evaluation of syntactic complexity measures as indices of college-level ESL writers' language development. *TESOL Quarterly*, 45(1), 36–62.
- Lu, X. (2012). The relationship of lexical richness to the quality of ESL learners' oral narratives. *The Modern Language Journal*, 96(2), 190–208.
- Lys, F. (2013). The development of advanced learner oral proficiency using iPads. *Language Learning & Technology*, 17(3), 94–116.
- Matsumura, L. C., Wang, E. L., Correnti, R. & Litman, D. (2020, July 28). What do teachers want to see in automated writing evaluation systems? *The Rand blog*. www.rand.org/blog/2020/07/what-do-teachers-want-to-see-in-automated-writing-evaluation.html
- McEnery, T., Brezina, V., Gablasova, D. & Banerjee, J. (2019). Corpus linguistics, learner corpora, and SLA: Employing technology to analyze language use. *Annual Review of Applied Linguistics*, 39, 74–92.
- McKay, S. L. (2006). *Researching second language classrooms*. London: Lawrence Erlbaum Associates.
- Moser, K. M., Wei, T. & Brenner, D. (2021). Remote teaching during COVID-19: Implications from a national survey of language educators. *System*, 97, 102431.
- O'Dowd, R. (2021). Virtual exchange: Moving forward into the next decade. *Computer Assisted Language Learning*, 34(3), 209–224.
- Oberg, A. & Daniels, P. (2013). Analysis of the effect a student-centred mobile learning instructional method has on language acquisition. *Computer Assisted Language Learning*, 26(2), 177–196.
- Orduña-Malea, E., Ayllón, J. M., Martín-Martín, A. & Delgado López-Cózar, E. (2014). *About the size of Google Scholar: Playing the numbers*. Granada: EC3 Working Papers, 18(8).
- Ortega, L. (2017). New CALL–SLA research interfaces for the 21st century: Towards equitable multilingualism. *CALICO Journal*, 34(3), 285–316.

- Ortega, L. (2020). The study of heritage language development from a bilingualism and social justice perspective. *Language Learning*, 70, 15–53.
- Pecorari, D. & Petrić, B. (2014). Plagiarism in second-language writing. *Language Teaching*, 47, 269–302 doi:10.1017/S0261444814000056
- Pérez-Paredes, P., Ordoñana Guillamón, C. & Aguado Jiménez, P. (2018). Language teachers' perceptions on the use of OER language processing technologies in MALL. *Computer Assisted Language Learning*, 31(5–6), 522–545.
- Quinones, G. & Adams, M. (2021). Children's virtual worlds and friendships during the covid-19 pandemic: Visual technologies as a panacea for social isolation. *Video Journal of Education and Pedagogy*, 5(1), 1–18.
- Reinders, H. & Lan, Y. J. (2021). Big data in language education and research. *Language Learning & Technology*, 25(1), 1–3. <http://hdl.handle.net/10125/44746e>
- Sauro, S. & Thorne, S. L. (2021). Pedagogically mediating engagement in the wild: Trajectories of fandom-based curricular innovation. In V. Werner & F. Tegge (Eds.), *Pop culture in language education: Theory, research, practice* (pp. 226–238). London: Routledge.
- Schulze, M. (2017). Complexity approaches to computer-assisted language learning. In S. Thorne & S. May (Eds.), *Language, education and technology. Encyclopedia of language and education* (3rd ed.). Springer, Cham. https://doi.org/10.1007/978-3-319-02237-6_24
- Schulze, M. & Smith, B. (2015). In theory—We could be better. *CALICO Journal*, 32(1), i–vi.
- Shermis, M. D. & Burstein, J. (Eds.) (2013). *Handbook of automated essay evaluation*. New York: Routledge.
- Smith, B. (2008). Methodological hurdles in capturing CMC data: The case of the missing self-repair. *Language Learning & Technology*, 12(1), 85–103.
- Smith, B. (2010). Employing eye-tracking technology in researching the effectiveness of recasts in CMC. In F. M. Hult (Ed.), *Directions and prospects for educational linguistics* (pp. 79–97). New York: Springer Verlag.
- Smith, B. (2012). Eye tracking as a measure of noticing: A study of explicit recasts in SCMC. *Language Learning & Technology*, 16, 53–81.
- Stevens, V. (2021). Virtual worlds at virtual conferences. *The Electronic Journal for English as a Second Language*, 25(1).
- Stockwell, G. (2007). Vocabulary on the move: Investigating an intelligent mobile phone-based vocabulary tutor. *Computer Assisted Language Learning*, 20(4), 365–383.
- Stockwell, G. (2008). Investigating learner preparedness for and usage patterns of mobile learning. *ReCALL*, 20(3), 253–270.
- Thorne, S. (2003). Artifacts and cultures-of-use in intercultural communication. *Language Learning and Technology*, 7, 38–67.
- van den Berghe, R., Verhagen, J., Oudgenoeg-Paz, O., Van der Ven, S. & Leseman, P. (2019). Social robots for language learning: A review. *Review of Educational Research*, 89(2), 259–295.
- Wang, S. & Smith, S. (2013). Reading and grammar learning through mobile phones. *Language Learning & Technology*, 17(3), 117–134.
- Ware, P. (2011). Computer-generated feedback on student writing. *TESOL Quarterly*, 45(4), 769–774.
- Ware, P. (2014). Feedback for adolescent writers in the English classroom: Exploring pen-and-paper, electronic, and automated options. *Writing & Pedagogy*, 6, 223–249.
- Ware, P. & Warschauer, M. (2006). Electronic feedback and second language writing. In K. Hyland & F. Hyland (Eds.), *Feedback and second language writing* (pp. 105–122). Cambridge, England: Cambridge University Press.
- Warschauer, M. & Grimes, D. (2008). Automated writing assessment in the classroom. *Pedagogies: An International Journal*, 3(1), 22–36.
- Warschauer, M., Yim, S., Lee, H. & Zheng, B. (2019). Recent contributions of data mining to language learning research. *Annual Review of Applied Linguistics*, 39, 93–112.
- Winke, P., Gass, S. & Sydorenko, T. (2013). Factors influencing the reading of captions by foreign language learners: An eye-tracking study. *Modern Language Journal*, 97(1).
- Yoon, H. & Jo, J. W. (2014). Direct and indirect access to corpora: An exploratory case study comparing students' error correction and learning strategy use in L2 writing. *Language Learning & Technology*, 18(1), 96–117. <http://ilt.msu.edu/issues/february2014/yoongo.pdf>
- Youngs, B. L., Prakash, A. & Nugent, R. (2018). Statistically-driven visualizations of student interactions with a French online course video. *Computer Assisted Language Learning*, 31(3), 206–225.
- Zourou, K. (2020). Language learning as the agency for a social purpose: examples from the coronavirus pandemic. *Alsic. Apprentissage des Langues et Systèmes d'Information et de Communication*, 23.
- Zurita, G. & Nussbaum, M. (2004). Computer supported collaborative learning using wirelessly interconnected handheld computers. *Computers & Education*, 42(3), 289–314.

Digital literacies and language learning

Rodney H. Jones

Introduction

When we talk of digital literacies and language learning, we are not primarily talking about using digital technologies to learn languages. Nor are we talking about helping students become more skilful in using computers (usually referred to as ‘digital literacy’). Rather, what we are interested in is how people’s practices of using digital technologies affect and intersect with the ways they use and learn language, and how people’s practices of using and learning language affect their use of digital technologies. Scholars interested in these intersections are concerned with how digital technologies have changed what language learners need to learn and their opportunities for learning it, and also how they have changed the wider social, political and economic contexts in which language learning takes place, and even what it means to ‘learn’ or ‘use’ a ‘language’ to begin with.

It is important to note that a preoccupation with digital literacies almost inevitably presupposes a certain understanding of language learning based on the kind of ideological pedigree the use of the (plural) ‘literacies’ implies. People who talk about literacies in the plural are signalling their alignment with the New London Group’s (1996) pronouncement that traditional text-based, cognitive views of literacy are insufficient to prepare students for the increasingly complex, mediated, multimodal and multi-layered life worlds that characterise late modernity, and that what is needed is a ‘multiliteracies’ approach which focuses on preparing students to continuously adapt to new textual forms and new patterns of social interaction ‘in work, citizenship and personal life’ (Cope & Kalantzis, 2009, p. 166). This approach has its roots in a paradigm shift in literacy studies that began in the mid-1980s called the ‘New Literacy Studies’ (see e.g., Barton et al., 1999; Heath, 1983; Street, 1984), which advocated seeing literacy not as an individual skill but as a *social practice* in which people draw upon various resources in their social environments to enact certain kinds of social identities and advance certain values, ideologies and cultural understandings. This more sociocultural and pluralistic view of literacies aligns naturally with more sociocultural, pluralistic views of language learning (e.g., Lantolf, 2000) which envision language as inseparable from the situated, goal-oriented social practices in which it is used, and learning as a process of being socialised into these practices within communities.

Over the past two decades, researchers interested in digital literacies and language learning have focused on a range of everyday digital practices, mostly of young people (e.g., Ito et al. 2010), in which learners’ ‘desire to build expressive capacity [is] driven by its use value as a resource for creating and maintaining social relationships’ (Thorne & Black, 2007, p. 148). These practices have included instant messaging (Jones, 2001), video-gaming (Gee, 2003; Steinkuehler, 2010; Thorne,

2008), mobile phone use (Warner, 2017), writing and sharing fan-fiction online (Black, 2008, 2009) and other practices of ‘fandom’ (Ito, 2011; Marsh, 2015), participation in online forums (Lam, 2000), chatrooms (Lam, 2004), social media sites (Alm, 2015; Pegrum, 2011), and online virtual worlds (Hafner, 2015; Steinkuehler & Black, 2011), and the use of video and image sharing platforms such as YouTube, Instagram and Snapchat (Albawardi & Jones, 2020; Benson, 2015; Valdivia, 2021). The focus of such studies has typically been on how the affordances of digital media make possible forms of meaning making and social interaction that facilitate socialisation into the communicative practices of various online communities and affinity groups (Gee, 2004). At the same time, these scholars have also pointed out how the ways in which people draw upon and use semiotic resources and interact with others in digital environments challenge many assumptions about language learning and language use that dominate language and literacy classrooms, where the focus is often restricted to spoken and written modes, mono-lingual production and adherence to abstract rules. Online, they have observed, language use tends to be more messy: more multimodal, heteroglossic, plurilingual and flexible.

More recent approaches, however, have moved beyond this focus on technological affordances and forms of participation to consider the wider social, economic and political environments (Nichols & Stornaiuolo, 2019) and the broader ecologies of communication (Tusting, 2017) in which these technologies and forms of participation are imbedded. This shift has largely come in response both to new technological developments (such as the rise of mobile technologies, augmented and virtual reality, big data analytics, artificial intelligence and the Internet of Things) and to growing concerns about the economic and political forces that govern digital media — including the increasing power big platforms (such as Google and Facebook) have over our everyday communication and their dependence on data extraction and surveillance (Zuboff, 2019) as business models — as well as the social consequences of these economic and political conditions, such as the proliferation of ‘fake news’, the rise of online hate speech and cyberbullying, and the role the internet plays in political polarisation and the marginalisation of particular groups. This recent critical turn in digital literacies (Darvin, 2017) is based on the realisation that a socially informed approach to literacy must also be a socially engaged approach, one which sees language learning and digital literacies as part of a larger process of learning how to be a literate citizen in a digital society.

In this chapter I will review the main issues scholars interested in digital literacies and language learning have focused on, including multimodality and heteroglossia, connectivity and interactivity, and games and play. I will then consider more recent concerns that are driving work in this area such as mobility and materiality, translanguaging and transliteracies, and posthumanism and platform capitalism.

Multimodality and heteroglossia

A central concern of scholars of digital literacies from the beginning has been the way digital technologies have changed the way people are able to make meanings by drawing upon and combining different multimodal resources. This interest in how language interacts with other modes in all communication, and especially in digital communication, is part of a more general widening of the focus in linguistics and language studies to consider a wider range of semiotic resources — visual, auditory, haptic — used in human communication, especially in the technological and superdiverse contexts of late modernity (Blommaert & Rampton, 2011).

From this perspective, composing in digital environments has come to be seen as a matter of *design* (Kalantzis & Cope, 2012; Kress, 2010) which demands of people not just an understanding of the semiotic intricacies of online multimodal texts (Adami, 2009, 2015) but also of the *processes of resemiotisation and recontextualisation* through which multimodal resources get combined and repurposed (Leppänen & Kytölä, 2017; Leppänen et al., 2014) as they circulate through digital networks.

An important point to make about understanding meaning making as a matter of *design* is that it is not just about ‘adding’ resources to language in order to make meanings more efficiently. Rather, a digital literacies perspective sees design as a set of *transformative* processes through, by creatively combining the resources available in different social situations, people are able both to change the nature of those resources and to change the social situations themselves. Design is, by its nature, a critical and agentive process. As Kress (2005, p. 20) argues: ‘Design focuses forward; it assumes that resources are never entirely apt but will need to be transformed in relation to ... contingencies ... The focus on transformation rather than on acquisition makes the designer agentive.’

Related to ways digital technologies facilitate the mixing of semiotic resources is the way they facilitate the process of textual borrowing, the ability of people to easily appropriate and ‘assemble’ (Kress, 2005 p. 6) the ‘voices’ of different people, a process sometimes referred to as *remix* (Lankshear & Knobel, 2007; Stedman, 2012) or *redesign* (Pegrum et al., 2018). Despite its denigration by some as ‘cut and paste’ composition, redesign, like design, is at heart a critical, agentive exercise through which people do not just appropriate the meanings of others, but challenge and change them, while at the same time pushing the boundaries of society’s legal and political structures around authorship, ownership and cultural production (Lessig, 2008).

Connectivity and interactivity

A second major interest, especially in early work on digital literacies, has been the new forms of participation and social organisation made possible by digital media, and how they can contribute to language and literacy learning by providing people more opportunities to encounter language in use in real situations (Meyers et al., 2013), to interact with users of different languages and/or people who use language differently than them (Barton & Lee, 2013; Leppänen et al., 2017; Thorne, 2008) and, most importantly, to use language (and other semiotic modes) in the context of situated social practices within diverse communities (Barton & Potts, 2013). What makes these opportunities possible is the ability of digital media to *connect* people across culturally and geographically diverse spaces, and its ability to engage people in *collaborative* practices (Jones & Hafner, 2021, Chapter 11) in which they share responsibility for various creative products or outcomes (e.g., working together in a ‘guild’ or team to play a massively multiplayer online game, sharing the responsibility of editing an online encyclopaedia, or creating, circulating and reworking internet memes).

A key concept when it comes to online connectivity and collaboration is Gee’s (2004) notion of ‘affinity spaces’ — loosely organised social settings where people gather to pursue common interests or passions and where practices of teaching and learning tend to be distributed among participants. Examples of such spaces include social network sites, blogs and wikis, online gaming environments and fan communities (Thorne et al., 2009). What makes such spaces different from institutional learning spaces such as language classrooms is that affinity spaces are voluntary spaces of participation in which people *choose* to learn together and in which relationships tend to be non-hierarchical, with different people bringing to them different kinds of knowledge and expertise. Another thing that makes them different is that learning is less a matter of mastering an abstract body of knowledge or decontextualised set of skills as it is of mastering particular social practices and forms of social interaction through which one is able to construct an ‘identity’ as a member of the group.

Attention to the ways people participate in online affinity spaces highlights the degree to which literacy practices are tied up with identity and processes of identity transformation, and the complexity of such processes as people move between and across online spaces, curating different identities and different forms of social presence in different spaces (Ito et al., 2010). For the perspective of language learning, this requires learning how to constantly negotiate different genres, interactional styles and community norms (Chun et al., 2016; Thorne & Black, 2007).

Another important aspect of online interaction of interest to scholars of digital literacies has been the way digital media alter the participation frameworks (Goffman, 1981) for interactions, creating complex configurations of different kinds of ‘speakers’ and different kinds of ‘listeners’. Social media platforms provide particularly good examples of how users develop various linguistic and semiotic strategies to manage the ‘context collapse’ (Marwick & boyd, 2010) that occurs when people find themselves communicating to more than one audience at once, strategies designed to hail certain users, exclude others and to contextualise messages in particular kinds of ways (Androutsopoulos, 2014; boyd, 2010; Tagg et al., 2017).

While early attention to patterns of online interaction participation focused mostly on their productive and ‘convivial’ aspects, more recent work in digital literacies has begun to attend to more troubling aspects such as cyberbullying and sexting (García-Gómez, 2019; Hauge & Rowsell, 2020), tribalism (Jones & Hafner, 2021, Chapter 8) and the circulation of fake news (Pangrazio, 2016). There has also been increased attention to the way the platforms (Gillespie, 2010), which host affinity spaces, play a role in shaping the kinds of interactions and the kinds of discourse that can take place in them based on the economic considerations of platform owners, and how this sometimes results in certain kinds of users and forms of interaction being promoted and validated and others being suppressed and marginalised (Darvin, 2017; Jones & Hafner, 2021, Chapter 7)

Games and play

Not surprisingly, a great deal of attention from digital literacies scholars has been focused on ludic and gamified online practices as sites for learning. The reason for this focus is not just the understanding that play, both online and off, provides rich opportunities for creative and collaborative meaning making (Potter & Cowan, 2020), but also that practices such as playing computer games, participating in TikTok challenges and reworking and sharing humorous memes engage people in practices of *problem solving* that often demand complex discursive and interactional skills.

This is particularly true of the communication rich environments of massively multiplayer online games (MMOG) (Steinkuehler, 2010; Thorne, 2008), which engage users in complex forms of ‘reading’ and ‘writing’, drawing upon various affordances of digital media such as interactivity, multimodality and multimediality to tell stories and present arguments (Jones & Hafner, 2021, Chapter 9). Gee (2003) argues that video games constitute uniquely effective environments for learning because they engage players in embodied experiences (usually through avatars, but more recently with their physical bodies), challenge them to master not just new skills and routines but also the broader cultural models of the ‘worlds’ in which they play, and provide information and knowledge in a ‘just in time’ fashion that players can apply right away to solve problems. Researchers more specifically interested in language learning have gathered empirical evidence about the positive effects of game play on motivation, willingness to communicate and language socialisation (Peterson et al., 2021; Reinders, 2017). Future work on the intersection between gaming and literacy/learning will focus on the new forms of immersive and embodied play made possible by augmented and virtual reality (Sadler, 2017).

There has also been considerable attention on the playful parodic practices people engage in using a range of applications from chat and messaging programs to social media platforms (Vasquez, 2019), especially those involving the deployment of multilingual and multimodal resources (Deumert, 2014). One growing area of interest has been the creation and circulation of memes in the form of image-macros (Harvey & Palese, 2018), animated-gifs (Gürsimsek, 2016) and short videos on platforms such as TikTok (Jones, 2021a). More than a decade ago, Knobel and Lankshear (2007) argued that ‘meming’ constitutes an important ‘new literacy’ which involves not just inventive forms of meaning making but also inventive forms of engagement with cultural artefacts and participation in

networks. More recently, associations have been drawn between the ludic literacies of meming and gaming and practices of political expression/activism and civic engagement more broadly (Neys & Jansz, 2019; Mihailidis, 2020; Seiffert-Brockmann et al., 2018).

Mobility and materiality

The rise of mobile digital technologies and the increasing digitisation of the physical world have introduced new challenges for scholars interested in digital literacies (Jones & Hafner, 2021, Chapter 6) and new possibilities for the use of technology for language learning (Kukulska-Hulme, 2020). Mobile digital technologies have created a situation where people are ‘always on’ (Baron, 2010), always connected to digital networks. They have also changed the ways people interact and communicate with each other in and across physical spaces as well as the kinds of modes available to them in digital communication. Space and location have become increasingly important resources for digital communication, and the increasing convenience of video interactions and prevalence of wearable technologies have made meaning making and interaction through digital devices more embodied.

An interest in space and mobility among digital literacies scholars, however, is not new. More than a decade ago, for example, Lemke (2011, p. 143) urged scholars of digital literacies to attend to the ways ‘meanings are made across time, across space, in and through matter’, and scholars such as Leander and his colleagues (Leander, 2008; Leander & McKim, 2003; Leander et al., 2010), and Erstad and her colleagues (2013) quite early on developed methodologies to trace the ways digital literacy practices ‘travel’ across online and offline spaces. A focus on the materiality and ‘artefactual’ nature of literacy practices is also something with a long tradition (see e.g., Pahl & Rowsell, 2010) of seminal work on ‘literacies’.

One particularly fruitful line of inquiry which incorporates attention to mobility and materiality has been the study of the ‘digital placemaking’ practices people engage in using locative media and image sharing platforms such as Snapchat and Instagram (Albawardi & Jones, 2020; Dou, 2021; Wargo, 2015). Another emerging area of interest is that of ‘digital gaming’ and augmented reality (Hockly, 2019). Finally, there is an increasing interest in the material literacies associated with digital devices as physical objects (Carrington, 2012).

Issues of mobility and materiality are particularly important in the context of the transnational mobilities of migrants and refugees, and an increasing number of literacy scholars (e.g., Capstick, 2020; de Haan et al., 2014; Lam & Warriner, 2012) have explored the ways migrants use digital technologies to facilitate movements across various spaces and maintain networks of information sharing and support across distances. Related to this is Madianou and Miller’s (2012) notion of ‘polymedia literacies’, which focuses less on the affordances of social media and more on how people, especially migrants, combine and contrast technologies in order to manage social networks and social relationships (see also Williams, 2017).

Translanguaging and transliteracies

Early work on online multilingualism tended to approach it through traditional monolingual idealisations of independent languages (Blackledge & Creese, 2010), and to treat the practices of language hybridity that have always been a feature of digital communication through the lenses of ‘code-mixing’ and ‘code-switching’ (Androutsopoulos, 2007; Georgakopoulou, 1997). More recent approaches, however, have embraced more contemporary frameworks of polylingualism (Jørgensen, 2008), translanguaging (Garcia & Li Wei, 2013) and heteroglossia (Androutsopoulos, 2011), which focus on how internet users draw upon diverse repertoires of communicative resources and creatively ‘blend’ and ‘mesh’ them in ways that defy traditional boundaries between ‘languages’ or ‘codes’. Lizárraga et al. (2015) use the term ‘translingual literacies’ to describe the configuration

of skills necessary to participate in the ‘multilingual ecologies’ (Thorne et al., 2015) and ‘semiotic contact zones’ (Canagarajah, 2002) created by digital media. Often studies of translingual literacies have taken the form of case studies, where the unique translingual practices of particular individuals are documented to show how they enact identities and forge relationships across particular local and transnational social fields (e.g., Kim, 2018; Schreiber, 2015).

Related to the new interest in mobility and transnationalism mentioned in the last section, a focus on translingual literacies and identities leads naturally to a wider focus on how digital media facilitate the construction of transcultural identities (Jones, 2020) and the development of ‘transcultural digital literacies’, which Kim (2016, p. 199) defines as ‘using new technological affordances to learn, imagine, and create knowledge that traverses national boundaries and conventional cultural borders.’ Stornaiuolo et al. (2017) have coined the term ‘transliteracies’ to describe their framework in which they try to capture the more dynamic, mobile and material aspects of translingual and transcultural practices online.

Posthumanism and platform capitalism

In response to growing concerns around such issues as the spread of misinformation and disinformation online, the prevalence of toxic (misogynistic, racist and xenophobic) discourse, the business practices of internet companies involving the collection of user data for advertising purposes, and the increasing use of algorithms and artificial intelligence to manage online information flows, current work in digital literacies has taken a decidedly more critical turn (Jones & Hafner, 2021, Chapter 7).

Earlier work on digital literacies, of course, also sought to engage critically with the changing landscape of communication brought on by digital technologies, seeking to highlight the ‘historical, social, cultural, political, ideological, and value-centred relations of particular systems of knowledge and social practice’ (New London Group, 1996, p. 84). Despite this, however, these earlier perspectives tended to focus more on the ‘intrinsically democratic potential’ of the ‘new’ literacy practices made possible by the affordances of digital media (Tusting, 2017, p. 7, see also Pangrazio, 2016). Social and political developments of the past decade have given rise to the realisation that these same affordances also have the potential to exacerbate social divisions and enable authoritarian governance.

Central to this new perspective has been the notion that understanding the communicative practices of internet users cannot take place in the absence of an understanding of the underlying *economic relationships* that govern the architectures of the platforms (Gillespie, 2010) upon which these communicative practices develop and of the economic and political motives of the owners of these platforms (van Dijck, 2013). Srnicek (2016) has coined the term ‘platform capitalism’ to describe the system of incentives that dominates the development of online tools and services, incentives based chiefly on the extraction of user data and the commodification of everyday interactions. Zuboff (2019) uses the more provocative term ‘surveillance capitalism’. Under these conditions, criticality is not just a matter of helping people to better evaluate the quality of the information they encounter online, but also to interrogate the ways in which online platforms are designed to promote certain kinds of behaviour and certain kinds of interaction for the financial benefit of internet companies, and to understand that all interactions online take place within a matrix of power, profit and exploitation (Ekbia & Nardi, 2017; Nichols & LeBlanc, 2020).

In response to this new sensitivity to the wider political and economic dimensions of digital literacies, Pangrazio (2016) has advocated a framework in which the features of meaning making and interaction that have traditionally dominated digital literacy teaching are combined with a focus on how the technological structures of the internet are designed to produce and reproduce systems of power and privilege. Specifically, she suggests approaches which encourage students to explore links between their everyday affective responses to digital texts and broader ideological issues (see also Jones, 2021b). Similarly, Nichols and LeBlanc (2020) call for educators to adopt a ‘platform

orientation' to digital literacies which sensitise students to the ways their everyday activities online are conditioned by the social, technical and economic underpinnings of platform design.

Related to this new critical perspective is the growing acknowledgement that many of the literate practices people engage in online are increasingly governed by algorithms and protocols which shape the kind of information people are exposed to and delimit the kinds of actions they can take (Jones, 2021b, c). Earlier scholars advocated for training students in computer coding and the 'procedural literacy' (Bogost, 2005) necessary to understand computer systems (e.g., Rushkoff, 2010). No amount of knowledge about computer programming, however, will result in complete understanding of the complex AI engines that operate beneath the surface of computer interfaces. An alternative suggestion is helping students to develop the kinds of *inferential* skills they need to interact more critically with the 'black boxes' of digital technology, what Jones (2020) refers to as 'algorithmic pragmatics'. Others have called for literacies grounded in resistance to the workings of algorithms, involving developing tactics of 'improvisations, patches and ingenuity ... [to] generate unintended, alternative outputs to respond to the "broken-ness" or biased representational politics of algorithms' (Velkova & Kaun, 2019; see also Jones, 2021b).

Finally, some scholars (e.g., Darvin, 2017; Darvin & Norton, 2015) have focused more on the social inequalities inherent in and sometimes exacerbated by the use of digital technologies, pointing out that differences in home literacies, social networks and unequally distributed social capital can affect how people from different socio-economic backgrounds develop digital literacies. De Roock (2021) points out that in many ways these inequalities are designed into platforms themselves, which 'enrol us into the social arrangements of racial capitalism.' Scholars such as this argue that approaches to digital literacies must go beyond a focus on individual users and self-expression to embrace a broader social justice agenda.

Conclusion

Many of the approaches discussed in the last section might broadly be seen as part of what Santo (2011, p. 2) labels 'hacker literacies', which he describes as: 'empowered participatory practices, grounded in critical mindsets, that aim to resist, reconfigure, and/or reformulate the sociotechnical digital spaces and tools that mediate social, cultural, and political participation.' At the same time, there is a danger in using the metaphor of the 'hacker', with its connotation of the lone dissident working to resist authority, to talk about critical literacies, because it distracts from the more collective and civic orientation that will ultimately be necessary to empower individuals and effect social and political change. Digital literacies in the future must foster in students, including language students, a sense of the common good and empower them to take collective action (Mihailidis, 2020).

There is a growing sense that the focus of digital literacies education should not be on particular apps, platforms or individual users, but on *systems* (Bridle, 2018; Brown, 1986). This includes not just techno-social systems with their protocols, feedback loops and filter bubbles, but also the political and economic systems that underpin them. This means going beyond efforts to make our students more digitally literate, placing on them the burden of responsibility for protecting themselves, and also making politicians, designers and corporate CEOs more 'literate' in issues of equity, transparency and social justice.

References

- Adami, E. (2009). We/YouTube: Exploring sign-making in video-interaction. *Visual Communication*, 8(4), 379–399.
- Adami, E. (2015). What's in a click? A social semiotic multimodal framework for the analysis of website interactivity. *Visual Communication*, 14(2), 133–153.

- Albawardi, A. & Jones, R. H. (2020). Vernacular mobile literacies: Multimodality, creativity and cultural identity. *Applied Linguistics Review*, 11(4), 649–676.
- Alm, A. (2015). Facebook for informal language learning: Perspectives from tertiary language students. *The EUROCALL Review*, 23(2), 3–18.
- Androutsopoulos, J. (2007). Language choice and code-switching in German-based diasporic web forums. In B. Danet & S. C. Herring (Eds.), *The multilingual internet: Language, culture, and communication online* (pp. 340–361), Oxford: Oxford University Press.
- Androutsopoulos, J. (2011). From variation to heteroglossia in the study of computer-mediated discourse. In C. Thurlow & K. Mroczek (Eds.), *Digital discourse: language in the new media* (pp. 277–298). Oxford: Oxford University Press.
- Androutsopoulos, J. (2014). Linguaging when contexts collapse: Audience design in social networking. *Discourse, Context & Media*, 4–5, 62–73.
- Baron, N. S. (2010). *Always on: Language in an online and mobile world*. New York: Oxford University Press.
- Barton, D., Hamilton, M., & Ivanic, R. (Eds.) (1999). *Situated literacies: Theorising reading and writing in context*. London; New York: Routledge.
- Barton, D., & Lee, C. (2013). *Language online: Investigating digital texts and practices*. Milton Park, Abingdon, Oxon: Routledge.
- Barton, D. & Potts, D. (2013). Language learning online as a social practice. *TESOL Quarterly*, 47(4), 815–820.
- Benson, P. (2015). Commenting to learn: Evidence of language and intercultural learning in comments on YouTube videos. *Language Learning & Technology*, 19(3), 88–105.
- Black, R. W. (2008). *Adolescents and online fan fiction* (New edition). New York: Peter Lang Publishing Inc.
- Black, R. W. (2009). Online fan fiction, global identities, and imagination. *Research in the Teaching of English*, 43(4), 397–425.
- Blackledge, A. & Creese, A. (2010). *Multilingualism: A critical perspective*. London; New York: Continuum.
- Blommaert, J. & Rampton, B. (2011). Language and superdiversity. *Diversities*, 13(2), 1–21.
- Bogost, I. (2005). Procedural literacy: Problem solving with programming, systems, and play. *Telemidium*, Winter/Spring, 32–36.
- boyd, D. (2010, March 4). Privacy, publicity, and visibility. Presentation delivered at Microsoft Tech Fest. Redmond. www.danah.org/papers/talks/2010/TechFest2010.html
- Bridle, J. (2018). *New dark age technology and the end of the future*. London; New York: Verso.
- Brown, J. S. (1986). From cognitive to social ergonomics and beyond. In D. A. Norman & S. W. Draper (Eds.), *User-centered system design: New perspectives on human-computer interaction* (pp. 457–486). Mahwah, NJ: Lawrence Erlbaum.
- Canagarajah, S. (2002). Multilingual writers and the academic community: Towards a critical relationship. *Journal of English for Academic Purposes*, 1(1), 29–44.
- Capstick, T. (2020). *Transnational literacies as social remittances: The role of language ideologies in shaping migrants' online literacies*. *Applied Linguistics*, 41(2), 301–319.
- Carrington, V. (2012). 'There's no going back'. Roxie's iPhone®: An object ethnography. *Language and Literacy*, 14(2), 27–40.
- Chun, D., Kern, R., & Smith, B. (2016). Technology in language use, language teaching, and language learning. *The Modern Language Journal*, 100(S1), 64–80.
- Cope, B. & Kalantzis, M. (2009). 'Multiliteracies': New literacies, new learning. *Pedagogies: An International Journal*, 4(3), 164–195.
- Darvin, R. (2017). Language, ideology, and critical digital literacy. In S. Thorne & S. May (Eds.), *Language, education and technology* (pp. 1–14). Cham: Springer International Publishing.
- Darvin, R. & Norton, B. (2015). Identity and a model of investment in applied linguistics. *Annual Review of Applied Linguistics*, 35, 36–56.
- de Haan, M., Leander, K., Ünlişoy, A., & Prinsen, F. (2014). Challenging ideals of connected learning: The networked configurations for learning of migrant youth in the Netherlands. *Learning, Media and Technology*, 39(4), 507–535.
- de Roock, R. S. (2021). On the material consequences of (digital) literacy: Digital writing with, for, and against racial capitalism. *Theory Into Practice*, 60(2), 183–193.
- Deumert, A. (2014). *Sociolinguistics and mobile communication*. Edinburgh: Edinburgh University Press.
- Dou, G. Y. (2021). Toward a non-binary sense of mobility: Insights from self-presentation in Instagram photography during COVID-19 pandemic: *Media, Culture & Society*.
- Ekbia, H. R. & Nardi, B. A. (2017). *Heteromation, and other stories of computing and capitalism*. Cambridge, MA: MIT Press.

- Erstad, O., Gilje, Ø., & Arnseth, H. C. (2013). Learning lives connected: Digital youth across school and community spaces. *Comunicar. Media Education Research Journal*, 21(1).
- Garcia, O. & Li Wei. (2013). *Translanguaging: Language, bilingualism and education*. Basingstoke: Palgrave Pivot.
- García-Gómez, A. (2019). Sexting and hegemonic masculinity: Interrogating male sexual agency, empowerment and dominant gendered norms. In P. Bou-Franch & P. Garcés-Conejos Blitvich (Eds.), *Analyzing digital discourse: New insights and future directions* (pp. 313–339). Cham: Springer International Publishing.
- Gee, J. P. (2003). *What video games have to teach us about learning and literacy*. Houndmills: Palgrave-MacMillan.
- Gee, J. P. (2004). *Situated language and learning: A critique of traditional schooling*. New York: Routledge.
- Georgakopoulou, A. (1997). Self-presentation and interactional alignments in e-mail discourse: The style- and code switches of Greek messages. *International Journal of Applied Linguistics*, 7(2), 141–164.
- Gillespie, T. (2010). The politics of ‘platforms’. *New Media & Society*, 12(3), 347–364.
- Goffman, E. (1981). *Forms of talk*. Oxford: Blackwell.
- Gürsimsek, Ö. A. (2016). Animated GIFs as vernacular graphic design: Producing Tumblr blogs. *Visual Communication*, 15(3), 329–349.
- Hafner, C. A. (2015). Co-constructing identity in virtual worlds for children. In R. H. Jones, A. Chik, & C. A. Hafner (Eds.), *Discourse and digital practices* (pp. 97–111). London: Routledge.
- Harvey, L. & Palese, E. (2018). #NeverthelessMemesPersisted: Building critical memetic literacy in the classroom. *Journal of Adolescent & Adult Literacy*, 62(3), 259–270.
- Hauge, C. & Rowsell, J. (2010). Child and youth engagement: Civic literacies and digital ecologies. *Discourse: Studies in the Cultural Politics of Education*, 41(5), 667–672.
- Heath, S. B. (1983). *Ways with words: Language, life, and work in communities and classrooms*. Cambridge: Cambridge University Press.
- Hockly, N. (2019). Augmented reality. *ELT Journal*, 73(3), 328–334.
- Ito, M. (2011). Machinima in a fanvid ecology. *Journal of Visual Culture*, 10(1), 51–54.
- Ito, M., Baumer, S., Bittanti, M., Boyd, D., et al. (2010). *Hanging out, messing around, and geeking out: Kids living and learning with new media*. Cambridge, MA: MIT Press.
- Jones, R. H. (2001). Beyond the screen: A participatory study of computer mediated communication among Hong Kong youth. A paper presented at the Annual Meeting of the American Anthropological Association, Nov. 28–Dec. 2. www.academia.edu/2993466/Beyond_the_screen_A_participatory
- Jones, R. H. (2020). Creativity in language learning and teaching: Translingual practices and transcultural identities. *Applied Linguistics Review*, 11(4), 535–550.
- Jones, R. H. (2021a, March 12). Digital literacies and synthetic embodiment: The ethics of mimicry on TikTok. A talk to the Berkeley Language Center, University of California at Berkeley. <https://youtu.be/nAii0engvng>
- Jones, R. H. (2021b, March 21). *Who broke the internet? Who can fix it? Digital literacies in the age of the algorithm. A plenary address delivered at the American Association for Applied Linguistics Virtual Conference*, March 20–23. www.academia.edu/45632269/Who_broke_the_internet_Who_can_fix_it_Digital_literacies_in_the_age_of_the_algorithm_A_plenary_address_delivered_at_the_American_Association_for_Applied_Linguistics_Virtual_Conference_March_20_23_2021
- Jones, R. H. (2021c). The text is reading you: Teaching language in the age of the algorithm. *Linguistics and Education*, 62, 100750. <https://doi.org/10.1016/j.linged.2019.100750>
- Jones, R. H. & Hafner, C. A. (2021). *Understanding digital literacies: A practical introduction* (2nd ed.) Milton Park, Abingdon, Oxon; New York: Routledge.
- Jorgensen, J. N. (2008). Polylingual languaging around and among children and adolescents. *International Journal of Multilingualism*, 5(3), 161–176.
- Kalantzis, M. & Cope, B. (2012). *Literacies*. New York: Cambridge University Press.
- Kim, G. M. (2016). Transcultural digital literacies: Cross-border connections and self-representations in an online forum. *Reading Research Quarterly*, 51(2), 199–219.
- Kim, S. (2018). “It was kind of a given that we were all multilingual”: Transnational youth identity work in digital translanguaging. *Linguistics and Education*, 43, 39–52.
- Knobel, M. & Lankshear, C. (2007). Online memes, affinities and cultural production. In M. Knobel & C. Lankshear (Eds.), *A new literacies sampler* (pp. 199–225). New York: Peter Lang.
- Kress, G. (2005). Gains and losses: New forms of texts, knowledge, and learning. *Computers and Composition*, 22(1), 5–22.
- Kress, G. R. (2010). *Multimodality: A social semiotic approach to contemporary communication*. Abingdon, Oxon: Routledge.
- Kukulka-Hulme, A. (2020). Mobile-assisted language learning. In *The Encyclopedia of Applied Linguistics* (pp. 1–9). Hoboken, NJ: Wiley.

- Lam, W. S. E. (2000). L2 literacy and the design of the self: A case study of a teenager writing on the internet. *TESOL Quarterly*, 34(3), 457–482.
- Lam, W. S. E. (2004). Second language socialization in a bilingual chat room: Global and local considerations. *Language Learning & Technology*, 8, 44–65.
- Lam, W. S. E. & Warriner, D. (2012). Transnationalism and literacy: Investigating the mobility of people, languages, texts, and practices in contexts of migration. *Reading Research Quarterly*, 47(2), 191–215.
- Lankshear, C. & Knobel, M. (2007, May 13). *Digital remix: The art and craft of endless hybridization*. Keynote address presented at International Reading Association Pre-Conference Institute, Toronto.
- Lantolf, P. J. (Ed.) (2000). *Sociocultural theory and second language learning*. Oxford: Oxford University Press.
- Leander, K. (2008). Toward a connective ethnography of online/offline literacy networks. In J. Coiro, M. Knobel, C. Lankshear, & D. J. Leu (Eds.), *Handbook of research on new literacies*. New York: Lawrence Erlbaum.
- Leander, K. M. & McKim, K. K. (2003). Tracing the everyday ‘sitings’ of adolescents on the internet: A strategic adaptation of ethnography across online and offline spaces. *Education, Communication & Information*, 3(2), 211–240.
- Leander, K. M., Phillips, N. C., & Taylor, K. H. (2010). The changing social spaces of learning: Mapping new mobilities. *Review of Research in Education*, 34(1), 329–394.
- Lemke, J. L. (2011). Multimodality, identity, and time. In C. Jewitt (Ed.), *Routledge handbook of multimodal analysis* (pp. 140–150). London: Routledge.
- Leppänen, S. & Kytölä, S. (2017). Investigating multilingualism and multi-semioticity as communicative resources in social media. In M. Martin-Jones & D. Martin (Eds.), *Researching multilingualism: critical and ethnographic approaches* (pp. 155–171). London: Routledge.
- Leppänen, S., Kytölä, S., Jousmäki, H., Peuronen, S., & Westinen, E. (2014). Entextualization and resemiotization as resources for identification in social media. In P. Seargeant & C. Tagg (Eds.), *The language of social media: Identity and community on the internet* (pp. 112–136). Basingstoke: Palgrave MacMillan.
- Leppänen, S., Kytölä, S., & Westinen, E. (2017). Multilingualism and multimodality in language use and literacies in digital environments. In S. L. Thorne & S. May (Eds.), *Language, education and technology* (pp. 119–130). Cham: Springer International Publishing.
- Lessig, L. (2008). *Remix: Making art and commerce thrive in the hybrid economy*. New York: Penguin.
- Lizárraga, J. R., Hull, G. A., & Scott, J. M. (2015). Translingual practices in a social media age: Lessons learned from youth’s transnational communication online. In D. Mole, E. Sato, T. Boals, & C. Hedgspeth (Eds.), *Multilingual learners and academic literacies: Sociocultural contexts of literacy development in adolescents* (pp. 105–131). New York: Routledge.
- Madianou, M. & Miller, D. (2011). *Migration and new media: Transnational families and polymedia*. Abingdon, Oxon; New York: Routledge.
- Marsh, J. (2015). The discourses of celebrity in the fanvid ecology of Club Penguin machinima. In R. H. Jones, A. Chik, & C. A. Hafner (Eds.), *Discourse and digital practices* (pp. 193–208). London: Routledge.
- Marwick, A. E. & boyd, D. (2010). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society*, 13(1), 114–133.
- Meyers, E. M., Erickson, I., & Small, R. V. (2013). Digital literacy and informal learning environments: An introduction. *Learning, Media and Technology*, 38(4), 355–367.
- Mihailidis, P. (2020). The civic potential of memes and hashtags in the lives of young people. *Discourse: Studies in the Cultural Politics of Education*, 41(5), 762–781.
- New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60–92.
- Neys, J. & Jansz, J. (2019). Engagement in play, engagement in politics: Playing political video games. In R. Glas, S. Lammes, M. Lange, J. Rassens, & I. Vries (Eds.), *The playful citizen* (pp. 36–65). Amsterdam: Amsterdam University Press.
- Nichols, T. P. & LeBlanc, R. J. (2020). Beyond apps: Digital literacies in a platform society. *The Reading Teacher*, 74(1), 103–109.
- Nichols, T. P. & Stornaiuolo, A. (2019). Assembling ‘digital literacies’: Contingent pasts, possible futures. *Media and Communication*, 7(2), 14–24.
- Pahl, K. & Rowsell, J. (2010). *Artifactual literacies: Every object tells a story*. New York: Teachers College Press.
- Pangrazio, L. (2016). Reconceptualising critical digital literacy. *Discourse: Studies in the Cultural Politics of Education*, 37(2), 163–174.
- Pegrum, M. (2011). Modified, multiplied, and (re-)mixed: Social media and digital literacies. In M. Thomas (Ed.), *Digital education: Opportunities for social collaboration* (pp. 9–35). New York: Palgrave Macmillan US.
- Pegrum, M., Dudeney, D. & Hockly, N. (2018). Digital literacies revisited. *The European Journal of Applied Linguistics and TEFL*, 7(2) 3–24.

- Peterson, M., Yamazaki, K., & Thomas, M. (2021). *Digital games and language learning: Theory, development and implementation*. London: Bloomsbury.
- Potter, J. & Cowan, K. (2020). Playground as meaning-making space: Multimodal making and re-making of meaning in the (virtual) playground. *Global Studies of Childhood*, 10(3), 248–263.
- Reinders, H. (2017). Digital games and second language learning. In S. L. Thorne & S. May (Eds.), *Language, education and technology* (pp. 329–343). Cham: Springer International Publishing.
- Rushkoff, D. (2010). *Program or be programmed: Ten commandments for a digital age*. OR Books.
- Sadler, R. (2017). Virtual worlds and language education. In S. L. Thorne & S. May (Eds.), *Language, Education and Technology* (pp. 375–388). Cham: Springer International Publishing.
- Santo, R. (2011). Hacker literacies: Synthesizing critical and participatory media literacy frameworks. *International Journal of Learning and Media*, 3(3), 1–5.
- Schreiber, B. R. (2015). “I am what I am”: Multilingual identity and digital trans-linguaging. *Language Learning & Technology*, 19(3), 69–87.
- Seiffert-Brockmann, J., Diehl, T., & Dobusch, L. (2018). Memes as games: The evolution of a digital discourse online. *New Media & Society*, 20(8), 2862–2879.
- Srnicek, N. (2016). *Platform capitalism*. Cambridge: Malden.
- Stedman, K. D. (2012). Remix literacy and fan compositions. *Computers and Composition*, 29(2), 107–123.
- Steinkuehler, C. (2010). Video games and digital literacies. *Journal of Adolescent & Adult Literacy*, 54(1), 61–63.
- Steinkuehler, C. & Black, R. W. (2011). Literacy in virtual worlds. In L. Christenbury, R. Bomer, & P. Smagorinsky (Eds.), *Handbook of adolescent literacy research* (pp. 271–286). New York: Guilford Press.
- Stornaiuolo, A., Smith, A., & Phillips, N. C. (2017). Developing a transliteracies framework for a connected world. *Journal of Literacy Research*, 49(1), 68–91.
- Street, B. (1984). *Literacy in theory and practice*. Cambridge: Cambridge University Press.
- Tagg, C., Seargeant, P., & Brown, A. A. (2017). *Taking offence on social media: Conviviality and communication on Facebook*. New York: Palgrave Macmillan.
- Thorne, S. L. (2008). Transcultural communication in open Internet environments and massively multiplayer online games. In S. Magnan (Ed.), *Mediating discourse online*. Amsterdam: John Benjamins.
- Thorne, S. L. & Black, R. W. (2007). Language and literacy development in computer mediated contexts and communities. *Annual Review of Applied Linguistics*, 27, 133–160.
- Thorne, S. L., Black, R. W., & Sykes, J. M. (2009). Second language use, socialization, and learning in internet interest communities and online gaming. *The Modern Language Journal*, 93, 802–821.
- Thorne, S. L., Sauro, S., & Smith, B. (2015). Technologies, identities, and expressive activity. *Annual Review of Applied Linguistics*, 35, 215–233.
- Tusting, K. (2017). Ecologies of digital literacies: Implication for education. In S. L. Thorne and S. May (Eds.), *Language, education and technology, encyclopedia of language and education*. Cham, Switzerland: Springer.
- Valdivia, A. (2021). Digital production on Instagram: Vernacular literacies and challenges to schools. *Theory Into Practice*, 60(2), 172–182.
- van Dijck, J. (2013). *The culture of connectivity: A critical history of social media*. Oxford; New York: Oxford University Press.
- Vasquez, C. (2019). *Language, creativity and humour online*. London; New York: Routledge.
- Velkova, J. & Kaun, A. (2019). Algorithmic resistance: Media practices and the politics of repair. *Information, Communication & Society*, 24(4), 1–18.
- Wargo, J. M. (2015). Spatial stories with nomadic narrators: Affect, snapchat, and feeling embodiment in youth mobile composing. *Journal of Language and Literacy Education*, 11(1), 47–64.
- Warner, J. (2017). *Adolescents’ new literacies with and through mobile phones*. New York: Peter Lang.
- Williams, B. T. (2017). Having a feel for what works: Polymedia, emotion, and literacy practices with mobile technologies. In D. M. Walls & S. Vie (Eds.), *Social writing/social media: Publics, presentations, and pedagogies* (pp. 127–143). The WAC Clearinghouse; University Press of Colorado
- Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. New York: Public Affairs.

Teaching Online

Design for Engagement

Maggie Sokolik

Introduction

For decades, the internet and connected computers have broadened the ways in which we teach English. From the earliest days, when delivering a multiple-choice self-grading quiz online seemed nearly miraculous to the more recent innovations in social media, course management platforms, and interactive online textbooks, the internet has shaped the learning environment in new and sometimes exciting, sometimes frustrating ways. However, two things are clear: the internet is a tool, and tools are not pedagogies, any more than a chalkboard or a workbook is a pedagogy. Nonetheless, the affordances of the internet represent a sea change in how learners can interact with each other, with their instructors, and with native speakers and texts. In addition, it allows for a wider number of contexts in which teaching can take place. Of course, along with those contexts come new challenges in finding effective methods and principles with which to operate.

The pandemic that began in 2020 radically shaped our notion of what a classroom could be, and how teaching can, and sometimes must, take place. As instructors all over the globe were forced out of physical spaces and onto internet platforms of various kinds, attitudes towards online learning shifted both at individual and institutional levels. Schools with weak or non-existent commitment to online learning suddenly had to be fully committed, and rapidly shift their resources, pedagogies, and most importantly, beliefs about online learning. As a result, for many institutions (including my own), former stances on the place of online learning in the curriculum have changed permanently. The question is no longer “Should we teach online?” but “How can we best teach online?”

Riggs (2020, Chapter 1) expresses this tension well:

[G]ood teaching does not spring naturally from a particular modality. A good course on campus is not good because of the location or traditional brick-and-mortar ambience. Likewise, a weak online course is not weak because it is delivered via the Internet. Good teaching in any environment requires careful attention to course design and facilitation.

We are in an era of a near-boundless number of online and other digital tools available for education. By the time this book is published, some of these tools will already be obsolete or no longer available, and new ones will have appeared. For that reason, this chapter focuses less on the specific tools of teaching online and more on the approaches and pedagogies that have proven, or are proving, valuable in different educational contexts.

Basic Definitions

Although this chapter does not address specific tools in any depth, it is important to understand some basic structures and definitions when discussing online teaching and learning. Online education utilizes specific elements, or types of digital tools, as well as different formats.

Online Elements

Written Presentation

Written presentation refers to a written text on the screen of any type that is used to instruct students. Examples might include a written explanation of a grammar point, or a reading passage. Figure 14.1 shows a typical written presentation, taken from an online introductory literature course I teach.

Video Presentation

Video presentation refers to either an instructor-created video of a short lecture, or a video from another source, such as YouTube or TED Talks. Videos can serve more than one purpose—they can instruct on a topic, in the same way that written presentations do, or they can provide a model for spoken English in terms of pronunciation, intonation, and the like. Similarly, instructors can assign students to create video assignments.

Audio Presentation

Audio presentation is like video presentation, but without the visual elements. Audio presentations, like video presentations, can be instructor-created, professionally created, or done by students as assignments.

Discussion

Most classroom management software, as well as several other applications (such as Piazza), offer ways for students to respond to questions, either posed by the instructor or by other students.

Here is a brief list of some key literary terms, divided into three categories--devices, forms, and elements--as well as some relevant examples. You should do additional research into other terms that might be useful to you.

Devices

Literary devices are structures used by writers to convey their messages. When used well, literary devices help readers to appreciate and analyze a piece of writing.

Alliteration

The repetition of initial consonant sounds to emphasize and connect words, as well as to create an effect through sound

Example: Once upon a midnight dreary, while I pondered, weak and weary... While I nodded, nearly napping, suddenly there came a tapping... - "The Raven" by Edgar Allan Poe

Figure 14.1 An example of a written presentation

Assessment Elements

Assessment elements come in lots of different formats but can include computer-assessed multiple choice or true/false questions, open-ended essay questions or short answer questions, drag-and-drop and fill in the blank exercises, and more. The thing that they have in common is their use in assessing student learning.

Of course, online experiences typically combine two or more of these different elements, for example, an online reading followed by an essay assignment, a video presentation followed by a discussion, or an audio lecture followed by some type of assessment.

Online Formats

Classes can be held in several different models, as well as a combination of models. The four basic structures are as follows.

Web-based/Asynchronous

A web-based, asynchronous class offers all the course materials online, and can work either with deadlines or with students accessing the work on their own schedules. The asynchronous aspect of a web-based course means that there is no expectation that students will be online at any specific time of the day and are not meeting with either the instructor or other students to complete their work.

Video-based/Synchronous

With the advent and popularity of interactive video applications such as Zoom, Microsoft Meetings, or Google Hangouts (among others), holding live classes has become increasingly easy for many students and teachers. Although computer and internet technology need to be up to date for video classrooms to work well, it is possible in many situations for instructors to hold classes in real time and meet and interact with students.

Hybrid/Flexible

Hybrid, or flexible, format classes can mix some asynchronous with synchronous elements, or even with face-to-face meetings. A hybrid class might, for example, meet one or two days a week, and then have the remaining part of the class available asynchronously online. Similarly, the instructor might create recorded video lectures for students to watch on their own time, and then class time or a web interface is used for discussion of the lecture.

Massive Open Online Courses (MOOCs)

MOOCs have similarities to other online courses, and feature many or all the elements listed here. However, they deserve special mention as they often do not conform to the usual format of English classes. They are, by definition, “massive”, meaning they have the potential for very large enrollments; “open”, meaning they are available to the public, not just students in a particular institution; “online”, meaning fully online, often completely asynchronous; and “courses” meaning they are complete class curricula, not just a set of practice activities or readings.

Learning Management Systems (LMSs)

Another important element of online courses is the learning management system (LMS), sometimes called course management system (CMS). Many educational institutions offer instructors access to an LMS, which can be used in tandem with face-to-face classes to deliver course materials such as syllabi, assignments, and a grade book, as well as in online courses, to help organize an entire course.

LMSs integrate many different functions in one place. Our campus system, a customized version of the Canvas LMS, integrates a syllabus, linked assignments, areas for readings and documents to be posted, discussion areas, attendance keeping, virtual whiteboards, office hour appointment setting, peer and group workspaces, space for linked media such as audio and video files, quizzes, polls, assignment submission space, rubrics, student portfolios, and online grading. Instructors in general do not use all the features available to them but choose the tools and features they will use based on their own goals and outcomes they set for the class.

Course Design

An instructor who is faced with designing a course may feel overwhelmed by the task and be unsure of where to begin. But consider this scenario from Flower Darby's *Small Teaching Online*:

Imagine you are planning a road trip for your summer vacation. Do you hop in the car one day and mindlessly drive wherever the road leads? The more free-spirited among you might well try something like that. But most of us decide on a destination first. Where do we want to go?
(Darby, 2019, Chapter 1)

In other words, a course, like a road trip, needs a plan and a destination. And, just as the road trip needs a map, a driver, someone or something to help navigate, supplies, and fuel, course design needs leadership and materials. Most of all, every design needs goals (a destination) to guide it from the beginning. If your course is an English pronunciation course for adult refugees from a variety of countries, it will have different goals than a composition course for college-bound Spanish-speaking immigrant students. This goal can start with one simple question: What do I want students in my course to have achieved by the time they finish the course? Follow-up questions relate to what resources you and they will need to meet that goal, and how you will measure the achievement.

Tables 14.1 and 14.2 show an example of the steps in planning a five-week online writing course.

Once the instructor has set out the goal, the materials needed, and what format the different materials require, the next step is to note where and how those materials will be found or created.

Table 14.1 Planning an online writing course

Goal: *For students to feel comfortable writing an essay that has a solid thesis, logical argument, and evidence to support the argument.*

<i>Materials needed</i>	<i>Format</i>
Mini-lectures on key ideas in essay writing	Video
Written materials about essay writing	Text/supporting images
Discussion of ideas for writing, etc.	Discussion forum online
Short assessments on key topics	Online multiple-choice
Assignments for peer assessment	Peer work tool
Final essay submission	Open-ended assignment tool

Table 14.2 Planning an online writing course, part two

<i>Materials needed</i>	<i>Format</i>	<i>Source</i>
Mini lectures on key ideas in essay writing	Video	- Create some with smartphone - Identify some YouTube and TED Talks
Written materials about essay writing	Text/supporting images	Write my own; link to well written materials on the internet
Discussion of ideas for writing, etc.	Discussion forum online	Course management system
Short assessments on key topics	Online multiple-choice	Course management system
Assignments for peer assessment	Peer work tool	Course management system (needs set up)
Final essay submission	Open-ended assignment tool	Course management system

Table 14.3 Planning the term

<i>Week</i>	<i>Items required</i>
1	Introduction to the course: video Reading: What is an essay? Review Quiz: Grammar terminology Free-writing assignment Essay reading: Isaac Asimov Follow-up discussion format for Asimov
2	Introduction to the thesis statement: video Reading: What is and isn't a thesis statement Self-check quiz: What makes a good thesis statement Open-ended writing assignment: Write three thesis statements Peer feedback
3	Writing a rough draft Etc...

Finally, the designer/instructor needs to divide the materials over the number of weeks in the teaching term. For example, a decision about the number of videos needed, number and type of major and minor assignments, and their distribution across the term will help the instructor to plan thoughtfully, with the destination in mind (Table 14.3).

Student Engagement

One of the most important parts of course planning is planning for student engagement with the course material as well as with you and other students. The signs of student engagement in face-to-face classrooms are familiar to most instructors: students ask and answer questions, discuss ideas with their peers, listen attentively, and take notes, and maybe even stay after class for a few minutes to discuss things further with the instructor.

In online courses, especially those without synchronous video meetings, engagement must be measured in other ways, and with the caveat that these ways are less reliable than they might sometimes appear. Here are some of the ways that the technology helps us measure “engagement,” as well as some of the ways in which these measures can fail (Table 14.4).

Table 14.4 Measures of online engagement

Software function	How it helps	Why it's imperfect
Time spent on a page, or number of pages viewed (see Figure 14.2)	Looking at the time students have spent logged in can show which students are using the LMS and which are not.	The time shown by the LMS cannot measure what a student actually does. For example, a student could open a page, then leave it open for an hour while texting with a friend.
Participation in online discussion (see Figure 14.3)	Student responses can show that they are reading questions and other answers and thinking about them.	Responses need careful reading by an instructor or grader to determine whether they add value to a discussion. For example, a student who merely adds "I agree," or "that's a good response" to another student's post is not necessarily engaged with the discussion.
Completion of tasks	This is a generally reliable measure of engagement.	The level of engagement relates directly to the value of the tasks assigned. If there is a lot of busy work or tasks that are not clearly related to the goals of the course, then the finishing of tasks will not necessarily lead to high engagement.

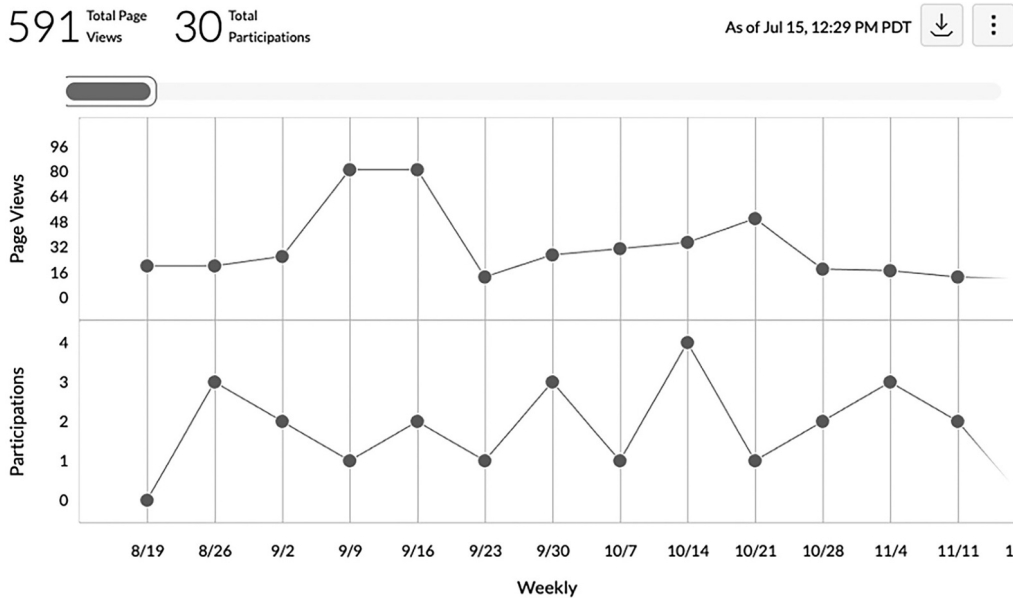


Figure 14.2 Number of page views and participation measured weekly by an LMS

591 Total Page Views 30 Total Participations

As of Jul 15, 12:29 PM PDT

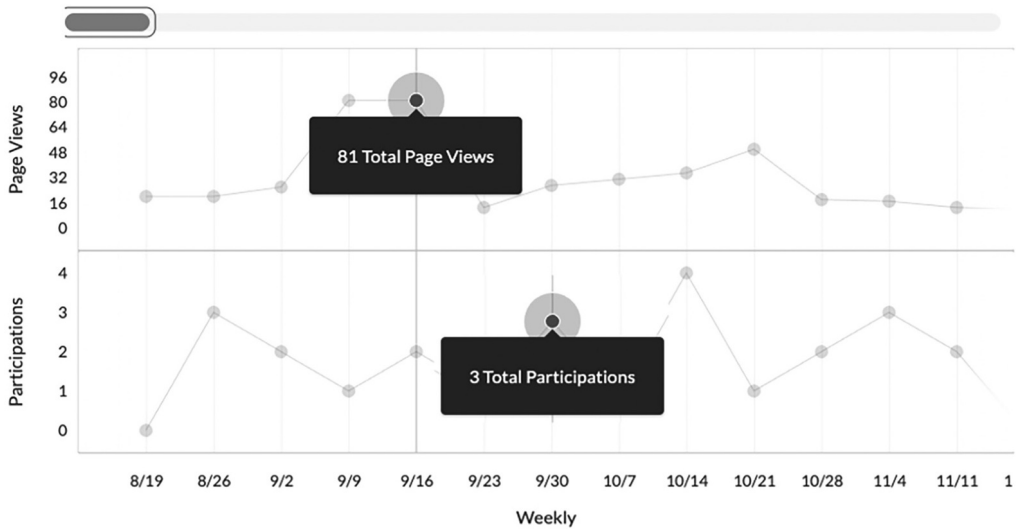


Figure 14.3 Number of page views and participation measured weekly by an LMS

Note: “Total Participations” refers to the number of times a student posted a discussion response or question.

Figure 14.2 is an example from a Canvas LMS, showing student engagement with pages in the course, as well as participation. Hovering over the dots gives further information, as shown in Figure 14.3.

Twelve Tips for Encouraging Online Engagement

As reported in Dixson (2010), two things are needed for effective online engagement: a strong sense of cooperation and collaboration in the course, and instructor presence. Here are some tips on how to achieve both aims.

Fostering Cooperation and Collaboration

1. Create an ice-breaker activity that allows students to get to know each other in an informal way. This could be their posting videos introducing themselves, or a group chat, etc.
2. Assign projects or assignments that are to be done as group or pair work.
3. Design discussion questions that encourage thoughtful answers and responses, not just rote responses from the textbook or readings. Opinion questions often work best in these circumstances, so not “What does the author define as the most important idea?” but “What is your opinion of the author’s definition?”
4. Design assignments that allow students to reveal parts of their personalities and interests.
5. Design assignments that allow students to do original research in a relevant area of the course that interests them. This can be anything from interviewing an expert on some topic, to doing online library research.
6. Offer materials to appeal to multiple senses—use materials from video, audio, graphic arts, as well as written materials.

Instructor Presence

One of the complaints often heard from students about online learning is that it seems like there is “no one there.” A typical way to be sure students see you and each other is to schedule synchronous video meetings. If that isn’t possible, however, there are other ways to achieve “presence” (*cf.* also Marshall & Kostka, 2020).

7. Post regular news updates to the course, even if it’s just to say, “Have a good Monday,” or link to something interesting you found online recently.
8. Create a video of yourself welcoming students and introducing them to the class. This can be done easily on a smartphone. It doesn’t need to be produced by a professional filmmaker. In fact, students react more positively to “homemade” videos than they do to ones that look like they come from a Hollywood studio.
9. Update the course material regularly. This can be as simple as bringing in current events relevant to the subject matter or updating a reading that has become out of date.
10. Give personal feedback on assignments. Don’t just rely on auto-grading. Even if an assignment is automatically graded by the system, add a comment or two about the student’s work to show that you are paying attention to more than just the final score (and pay attention to more than just the final score!)
11. Set up virtual office hours. Allow students to make online appointments with you to cover questions they have about the course materials. This could be done as a chat or video session.
12. Add your thoughts occasionally to the discussion areas to show you are active in the course. One caveat: there is research by Dennen et al. (2007) that student participation in online discussion will decrease if the instructor participates a lot. I can confirm from my personal experience as well.

Finally, consider how you can design assignments or activities that take students away from their computers to do things in the “real world.” An activity that asks students to visit a museum or a park for a specific purpose, for example, and report back on the discussion board can help them feel not only engaged with the course but also engaged with their community.

Student Motivation and Autonomy in Virtual Spaces

In my own ongoing research (Sokolik, 2021), I have been interested in what keeps students motivated in online courses. As has been pointed out in many places, students need a significant amount of self-organization to succeed in online courses. Many students (as well as many faculty) do not have the experience of having to plan and organize their own learning experiences, especially in the absence of others physically around them to help encourage, make suggestions, or remind them of tasks and activities that will lead to success.

Results of my research focused on my online MOOC courses, which are designed for English language learners (ELLs), show that students who set learning goals for themselves complete more of the course than those who do not. However, even more significantly correlated with course completion is the turning of goals into action plans—everything from scheduling time to study each week to setting intermediary deadlines for completing assignments. These results corroborate what Darby (2019, Chapter 7) states: “Students will not succeed in an online class if they do not take responsibility for their own learning.”

There are several ways to get students involved and taking responsibility for their own learning in a course, all which involve giving them as many choices as possible as well as getting involved in the shape of the course whenever possible. For example, depending on the focus of the course you are teaching:

- Ask students to develop and contribute discussion questions of course materials, as opposed to just answering questions you pose

- Ask students to serve as moderators of discussion forums, asking following up questions and requesting elaborations or clarifications
- Allow students to make suggestions as to videos, websites, or readings to augment course materials
- As mentioned earlier, have students work in pairs or groups to complete assignments or projects
- Have students collaboratively develop or contribute to rubrics for assessing coursework
- Integrate significant levels of peer-review and response in your course
- Ask students to develop a course code of conduct for discussion and course interaction

The more guided control you can build into your courses, the more autonomy students will develop, and the more motivated and successful they will eventually become.

Accessibility

It is likely that at some point, if not currently, you will have students who have some type of disability that affects their ability to learn from the materials you have created. There are several books and websites that go into extensive detail about making online materials accessible for all. There isn't space here to cover all of it, but there are several principles that will help you develop course materials that are accessible for all your students, whether they have color-blindness, hearing problems, or have mobility issues that make using a keyboard difficult (among others).

Documents and web pages:

- Use logical heading and subheading structure. Do not use a second-level heading, for example, unless it comes after a first-level one.
- If you distribute PDFs, make sure they are accessible to screen readers, and not just image scans of pages. One way to test this is that you should be able to copy and paste parts of text from your PDF. If you cannot, then it is a scanned document, and shouldn't be used.
- Use high contrast text and background. Black against white is the easiest to read. Look into tools that will test the contrast of your web pages and online documents.
- Use standard sizes and common fonts.
- If you create a link to another document or web page, use a descriptive link, such as Read about the Emancipation Proclamation. Do not use *click here*, or worse, just *here*.

Video:

- Be sure videos have captions available. YouTube, for example, provides automatic captioning (not always accurate, however). There are services that can caption videos for you, or you can do it yourself if you are particularly tech-savvy.
- Use videos that have good sound quality and good picture quality. If you are video recording yourself, be sure you have good lighting and an uncluttered background.
- Consider using audio narration for videos. Audio narration describes what the viewer sees on the screen.
- Use a standard format for video, such as mp4, that can be viewed on all common platforms.

Audio:

- If you present audio lectures or other material, provide a written transcript in an accessible document form.

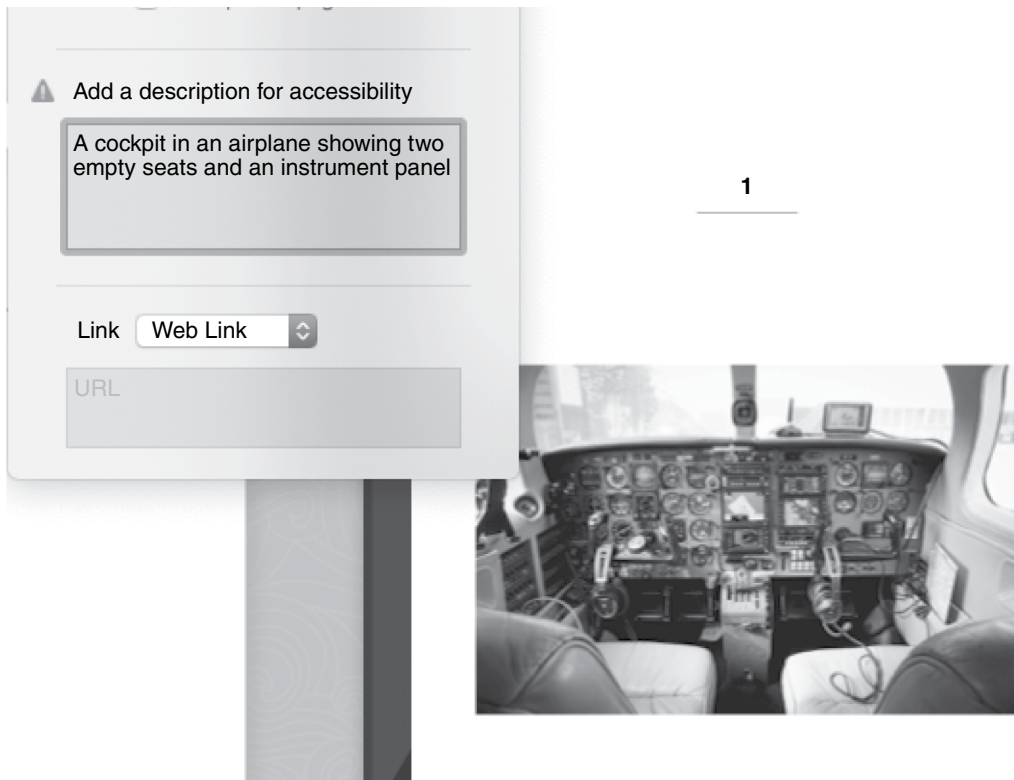


Figure 14.4 Example of an alt-tag

- Be sure the audio is of high quality without distracting background noise.
- Use a common audio format, such as mp3, so that it is playable on different devices.

Images:

- Images used online should have a descriptive alt-tag. Figure 14.4 gives an example. Different software gives different ways of adding the description. Be complete in your descriptions. Don't say merely "a cockpit."
- If an image is merely decorative, leave the alt-tag blank.
- Use clear images with good contrast levels.

A final tip is to limit the number of types of technology and software programs you are asking students to access on a regular basis.

Developing Your Creativity, Competency, and Connections

It is probably evident that if an instructor is not enthusiastic, creative, and committed to the online learning experience, students will not be either. Instructors lead by example. However, an instructor may not feel motivated by the online experience for the same reasons students are not motivated: feelings of isolation, disconnection from others, and lack of experience with a high-level of self-organization.

The Apprenticeship of Observation

Even if instructors have taken online courses, at this point in history, the amount of time spent in online courses pales in comparison to the amount of time spent in face-to-face classes. This phenomenon has been referred to as the “apprenticeship of observation” (Darby, 2019, Introduction). In other words, much of our teaching practice is informed by the teachers we have watched in action during our own education—both the good and the bad. Our experience as “apprentices” in online courses, however, is shallow, comparatively speaking. As Schmidt et al. state: “Research shows most teachers teach as they were taught. However, distance educators lack a model or benchmark for online teaching because many of them have not taken online courses as students” (2016, p. 1).

There are many solutions to these potential barriers. The first is to take an online course if you haven’t yet—take a full-blown course, not just a webinar or two. You will learn the most from a fully formed course with a syllabus, materials, and assessment.

My online story. When I was first approached to teach a MOOC, my first thought was that I needed to be a real student in one or two. In other words, I needed to take courses I was interested in focusing on information I didn’t already know. As I have an interest in music, I decided on two online music courses: songwriting and music theory. One relied on several hour-long “talking head” lectures each week with little opportunity for interaction. Although the songwriting professor was a well-known and respected expert in the field, I had little motivation to sit through hour after hour of the course. Even though I was highly interested in the subject matter, I confess, I could not drag myself through the course and did not finish.

The second course, music theory, which one might think is less creative than songwriting, turned out to be a wonderfully creative and engaging course. The instructor demonstrated key concepts on the piano and gave only short lectures. Students were prompted to answer quiz questions about theory during the lectures (a feature of the software), and there was a high degree of interaction, even though all the material was recorded and asynchronous. I completed the course and wished there had been another level to take.

Despite these very different experiences, both courses were helpful in teaching me how to create an effective online experience for my own students. The first lesson was that a course topic itself is not motivating. A course that relies on long video lectures and low interaction is not likely to capture students’ attention or keep them engaged. However, even the driest subject matter can be made engaging with high levels of interaction and good course design.

When it came time to design my own online courses, you can probably imagine whose model I followed. Without taking these courses, though, I may not have understood these principles as clearly and dramatically as I did.

In addition to taking online courses, here are a few other examples that you might try to incorporate in your ongoing professional development.

- Form or create a teaching circle, in which you can share ideas and practices with other instructors. A teaching circle can meet face to face or share ideas online.
- Join existing interest groups on social media.
- Take advantage of the many online webinars and workshops that are offered to help teachers learn different technologies and tools.
- Don’t fear experimentation: Instructors often get the ill-informed advice not to use technology in their courses that they don’t already know well. When done in the spirit of experimentation

and creativity, learning a new technology alongside your students can be an exciting experience. In addition, allowing students to teach you about a new technology can be empowering for them.

- If you don't feel your institution is providing adequate training, ask for more. Make suggestions as to the specific types of things you would like to learn. Administrators may be unaware that instructors need or want additional training.
- Attend and participate in educational conferences. Whether these are small, local organizations, or larger international conferences, you are likely to find presentations and workshops to help broaden your understanding of pedagogical principles involved with online teaching. You may make some good connections with other teachers and researchers as well.

Dictionaries, Translation, and Self-Plagiarism

Dictionaries in second or foreign language classrooms play an important role in learning. It is up to the instructor, of course, to determine what their legitimate use is. While instructors may be comfortable having students use a dictionary during a reading task, using one while taking a vocabulary quiz might typically be frowned upon.

Automated dictionaries and translation tools should be looked at in the same way in their role in online learning. It's helpful to discuss with students what the legitimate uses of these tools are, and which will not help foster learning. Open discussions about what constitutes cheating and plagiarism in your context are extremely important for student cooperation. Most institutions have strict rules about plagiarism, the copying of others' words or ideas and presenting them as one's own. However, internet and translation software has allowed an easily achieved form of plagiarism: translation plagiarism.

Translation plagiarism is defined as the transformation of writing from one language to another with the intention of hiding the source of the original text. With advances in online translation tools, this problem is particularly difficult for instructors. It can be difficult to detect, and often goes unfound by plagiarism detecting software. While often translation plagiarism refers to those who take others' works and translate them and claim them as their own, in English language education, there is the issue of *self-plagiarism*, that is, writing an original text in one language and then translating it into English. For example, look at this sample from a student essay written in Spanish, but translated into English using Google Translate:

Original:

Si pudiera vivir en cualquier tiempo y lugar del mundo, escogería vivir en los principios de los años 1900 en la Isla de Prince Edward, como en la película hecha de la novela "Anne de hastiales verdes." ¿Como hubiera sido vivir en esos tiempos? Me imagino una vida más conectada a la naturaleza, donde el trabajo arduo provee de la tierra las necesidades de la vida, y las conexiones con vecinos son los redes sociales que llenen la vida.

(Source: <https://avantassessment.com/spanish-writing-examples>)

English automatic translation:

If I could live in any time and place in the world, I would choose to live in the early 1900s on Prince Edward Island, as in the movie made from the novel "Anne of Green Gables." What would it have been like to live in those times? I imagine a life more connected to nature, where hard work provides the earth with the necessities of life, and connections with neighbors are the social networks that fill life.

(Source: Google Translate)

Many instructors would be pleased to read this paragraph, but it may raise the question as to whether this is really a case of plagiarism.

It is, for two reasons: first, self-plagiarism is plagiarism by the standards put forward in academic publishing and writing. Second, unless the student openly explains that the text was translated, there is the intent to conceal the true source of the writing, which was in Spanish, even if the student wrote it in Spanish.

In the absence of adequate tools to help discover translation plagiarism, the best defense that an instructor has is to help students understand the full extent of the consequences of plagiarism in their local environment, and to have them actively engage in exercises or activities that help them understand what does, and does not, constitute plagiarism.

Conclusion

Out of necessity, the pandemic that began in 2020 brought about a surge in online instruction, both synchronous and asynchronous. Institutions with no previous commitment to online courses suddenly had to go completely online, many without plans or goals as they did so. Instructors and students were left to figure it all out on their own, and they did.

As schools prepare now to return to in-person teaching, there is no turning back on online instruction. The proverbial genie is out of the bottle, and institutions who had no commitment or plan for online instruction now face a continuing demand from both students and instructors who, for various reasons, may find online learning more conducive to their circumstances. Students who are unable to secure student visas in a timely fashion (or at all), student parents, students who must support families with jobs outside of school, students and faculty with disabilities limiting their mobility, or with compromised immune systems all may find the continuing need for online courses. Similarly, with climate change and increased weather incidents, such as fires in the Western USA and Australia, or floods in Europe and elsewhere, as well as political unrest that weakens educational systems, online courses can provide more consistency and prevent disruptions to students' educational paths.

However, for this shift to increased numbers of online courses to work, the learning experiences must be designed for student and educator engagement. An online course is not merely the transfer of a face-to-face class to the internet. In our designs, we must avoid a fascination with new apps and higher-powered hardware and create courses that rest firmly in solid pedagogical design. These designs must focus on aims and goals of learning and being part of an educational community.

References and Further Reading

- Boettcher, J. V. & Conrad, R.-M. (2016). *The online teaching survival guide: Simple and practical pedagogical tips* (2nd ed.). San Francisco: Jossey-Bass.
- Cruz, J. D. (2021). *Teaching with Zoom 2: An advanced users guide*. Eugene, OR: Wayzgoose Press.
- Darby, F. (2019). *Small teaching online: Applying learning science in online classes*. San Francisco: Jossey-Bass.
- Dennen, V. P., Darabi, A. A., & Smith, L. J. (2007). Instructor-learner interaction in online courses: The relative perceived importance of particular instructor actions on performance and satisfaction. *Distance Education*, 28(1), 65–79.
- Dixon, M. D. (2010). Creating effective student engagement in online courses: What do students find engaging? *Journal of the Scholarship of Teaching and Learning*, 10(2), 1–13. <https://files.eric.ed.gov/fulltext/EJ890707.pdf>
- Dougherty, M. V. (2020). Translation plagiarism. In *Disguised academic plagiarism. Research ethics forum* (Vol. 8) (pp. 13–36). Springer, Cham. https://doi.org/10.1007/978-3-030-46711-1_2
- Folse, K. (2021). *Teaching with Zoom: A guide for complete beginners*. Eugene, OR: Wayzgoose Press. (Also available in Spanish as *Enseñar con Zoom: Una guía para principiantes*.)
- Marshall, H. W. & Kostka, I. (2020). Fostering teaching presence through the Synchronous online flipped learning approach. *TESL-EJ* 24(2). <https://files.eric.ed.gov/fulltext/EJ1268565.pdf>

- Riggs, S. (2020). *Thrive online: A new approach to building expertise and confidence as an online educator*. Stylus Publishing.
- Schmidt, S. W., Tschida, C. M., & Hodge, E. M. (2016). How faculty learn to teach online: What administrators need to know. *Online Journal of Distance Learning Administration*, 19(1), Spring. <https://eric.ed.gov/?id=EJ1093944>
- Sokolik, M. (2021). Goal-setting and action plans for increasing online engagement. *54th IATEFL Conference*, virtual. June 19.

Professional Learning through Professional Development for Second Language Teachers

MaryAnn Christison and Denise E. Murray

One of the challenges involved in conceptualizing and discussing professional development (PD) in any discipline is that understandings of what constitutes PD can vary a great deal. For some second language teaching professionals, PD occurs when they attend a professional conference, workshop, or webinar; for others, PD is associated with reading a useful article, co-planning lessons with other teachers, receiving unexpected and informal pieces of advice, conducting action research projects in their own classes, and reflecting on what they have learned. Some teachers and teacher educators differentiate between the terms, PD and professional learning, even though these terms are often used interchangeably in the literature on teacher education. In this chapter, we will use PD to refer to all activities that are intended to support teachers in changing their dispositions and behaviors to improve the lives of their learners, and the result of participation in such activities as professional learning. Making such a distinction also recognizes that the two concepts must be linked and that it is possible that participation in the former, in other words PD, may or may not result in the latter, in other words professional learning.

A commitment to professional competence is foundational for a professional in any field. To become competent and continue being competent in a profession requires a commitment to both life-long professional learning and continuing professional development because the knowledge base in any profession changes over time. In the field of second and foreign language (SFL) teaching, which includes English language teaching, the knowledge and skills that language teachers need are constantly changing (e.g., Freeman & Johnson, 1998; Richards & Farrell, 2005; Burns & Richards, 2009). Through a commitment to life-long professional learning, SFL teachers can improve their practice and continue to acquire knowledge and skills in new areas, such as instruction using digital technology. While in the field of second language teacher education (SLTE) this type of ongoing teacher professional learning is mostly referred to as PD, in order to capture its ongoing nature, it may also be referred to as continuing professional development (CPD) (for example, see Edge, 2002a) or life-long learning (for example, see European Commission, 2009).

In many ways, PD in SFL teaching has followed a path of innovation and change that is similar to the development of the profession (see Christison & Murray, 2020, for a study of the history of the profession). In other words, the focus of the content of PD has reflected the changes in the content of teacher education programs, which have ranged from developing proficiency in the language, to understanding the structure of the language, to teacher performance, to communication in the language, and to a focus on student learning. The types of opportunities for PD have similarly changed

over time, from PD that focused primarily on input, such as workshops delivered by experts and conference presentations, to action research that is conducted by teachers themselves in their own classrooms. These changes reflect a move from a behaviorist transmission model to a constructivist model (Crandall, 2000).

Additionally, the language that we use to talk about PD often reflects the attitudes that second language teacher educators have towards it. Many institutions and even governments require a set number of hours of PD per year for public school teachers; teacher educators and other PD providers, for example, textbook publishers, teachers, and administrators, talk about “providing PD” or “giving a workshop.” Both of these examples reflect a focus on PD that is based on input, as though teachers were empty slates, with no agency. This approach to PD is often referred to as the banking model (Freire, 2005). In the latter part of the 20th century, the focus for PD began to shift away from teaching content to sociocultural processes that underpin human learning. This approach is rooted in the work of Vygotsky (1986) and other sociocultural theorists, for example, Lantolf (2000), and it is the basis for Communities of Practice (CoP) (Wenger et al., 2002), which acknowledges that teacher learning is an interactive process that takes place among engaged professionals. There was agreement that, for PD to lead to teacher learning and changes in practice, “[p]rofessional development need[ed] to be sustained, intensive, and focused on the actual classroom” (Murray & Christison, 2019, p. 255). This shift in focus acknowledges that teachers are professionals and their lived experiences and thinking are the substance of PD. In their seminal article in *TESOL Quarterly*, Donald Freeman and Karen E. Johnson (1998) refocused the knowledge base of second language teaching on the activity of teaching itself, by asking the following questions: Who is doing it, with whom, and to what end?

In this chapter we briefly summarize directions that the research on SLTE and PD has taken; examine different perspectives on PD, including teachers’ perspectives and motivations for participating in PD; offer a framework for PD that allows PD providers to explore the varied models and types of PD that have been utilized with diverse groups of teachers; consider characteristics of effective PD; and reflect on how these features of PD interact with teacher knowledge, skills, and teaching experiences.

Research on Language Teacher Education and Professional Development

The 1998 Freeman and Johnson article that called for a reconceptualization of the knowledge base of SLTE, moved “it away from an emphasis on transmission of disciplinary, decontextualized knowledge, (principally from applied linguistics) to a greater focus on teachers and teaching and the role of teachers in the creation of knowledge” (Crandall & Christison, 2016, p. 3). Similarly, PD for practicing teachers followed suit, with teachers reflecting, collaborating, and participating in PD embedded in the practice of teaching. Yet, it is also important to note that expanding the knowledge base for SLTE and PD “to acknowledge teachers as learners of teaching and their tacit understandings of the activities of teaching does not preclude disciplinary and theoretical knowledge” (Johnson & Golombek, 2002, p. 8). There is most certainly knowledge that is foundational for second and foreign language (SFL) teachers, such as knowledge of how languages are structured, acquired, and used in socially situated contexts, and the theoretical knowledge base is always growing and developing as a result of research and how knowledge from research interacts with our understandings of real-world contexts outside of the language classroom. To be certain, teachers need multiple opportunities to examine new theoretical knowledge, which presents itself through experiences in their own classrooms. For example, the globalization of English and the upsurge of multilingualism are the focus of current theoretical knowledge and investigation, and the vast majority of SFL teachers, particularly English language teachers, see these concepts manifested in their classrooms.

The Freeman and Johnson article also highlighted the fact that there was a dearth of research devoted to teaching and teacher preparation. Fortunately, in recent decades, we have witnessed a surge in research in the field of SLTE, which has influenced the types of PD offered for SFL teachers. Crandall and Christison (2016) summarize the research in the field of SLTE and identify 14 primary areas that have influenced practice for SFL teachers: action research, classroom-based research, Communities of Practice, globalization of English, language teacher cognition, non-native English speaking teachers, novice teacher development, reflection and reflective teaching, professional learning communities, teacher collaboration, teacher expertise, teacher identity, teacher learning, and teacher research.

Even though there are still gaps in the research and gaps between theory and practice in PD, research is helping to direct PD to teacher professional learning and the role that teachers, ultimately, play in student learning. Most of the research in the field of SLTE is short term; yet, it is important to note that the field needs longitudinal research that investigates how teaching expertise emerges and “how teacher beliefs evolve” in order to answer questions about “what PD is most useful at different stages in teachers’ careers” (Crandall & Christison, 2016, p. 11). In the following sections of this chapter, research in these 14 primary areas is interwoven into the ways in which PD has been conceptualized in the field.

Perspectives on PD

There are two basic perspectives on PD, and these perspectives reflect the different purposes that teachers may have for engaging in PD. These perspectives are dependent on who initiates the PD, in other words, whether it is top-down or bottom-up (Farrell, 2013). In the top-down approach, the PD activity is most often initiated by ministries of education, school administrators, or curriculum developers, usually to meet a specific institutional goal or fill a perceived deficit in teachers’ knowledge and skills (Richards & Farrell, 2005). Furthermore, the PD activity is often conducted by a teacher educator or an outside expert and not a practicing teacher, especially not a practicing teacher who is teaching within the same context as the teachers who will be involved in the PD. While teacher educators bring much expertise and experience working with teachers, it is important to remember that very few second language teacher educators are engaged with English learners on a daily basis. Furthermore, it is the relationship between the teacher and learner in a specific school environment that determines which teaching activity will be most effective (Freeman & Johnson, 1998). It is teachers who live and work in this interconnected space and, therefore, it is their voice(s) that need to be heard in the content and processes of PD. PD should be embedded in the daily lives of teachers (Sparkes, 2002).

From the bottom-up perspective and through an inquiry into their own practices, teachers initiate and choose their focus for reflection. They also determine the process of enquiry in order to seek answers to questions they have about their own practice. In addition to a purely bottom-up approach, it is also possible to implement a mixed approach. Such an approach can provide for teacher autonomy, as well as meet administrators’ need for accountability, especially if PD is funded. A local administrator, in consultation with teachers, can develop a list of PD opportunities and allow teachers to choose the opportunities in which they want to engage. These opportunities might also be followed by in-house workshops that include reporting to other teachers on what they have learned.

Barduhn asks an important question about PD, “Why develop? It’s easier not to” (Barduhn, 2002, p. 10). Almost every teacher can tell stories about ineffective PD sessions that they have experienced. These perceptions and occurrences exist for a variety of reasons. One reason is that practicing teachers’ expectations for PD are quite high. For many practicing teachers, participating in a top-down type of PD can be logistically challenging. Because the date, time, and place are selected by others, it

is often challenging for teachers to attend. In addition, PD is often scheduled at the end of a teaching day when teachers are tired and less enthusiastic. At best, it is difficult for teachers to focus. Even when PD is scheduled during teaching hours and teachers are provided with substitute teachers and released from teaching duties, they are still responsible for their classes and preparing for substitute teachers. In addition, even in their absence, they are still accountable to their learners. Furthermore, they want the learning to be relevant to their specific needs for their own instructional context. Given these considerations, it is understandable that when practicing teachers are attending top-down PD, they set the bar quite high and want to be assured that their efforts are worth it.

Yet, in spite of the logistical challenges associated with top-down PD, most teachers, from a wide array of teaching contexts, remain motivated to engage in PD opportunities. Teachers become teachers because they are motivated to help their students learn. They also want to hone their craft and improve their practice. For some teachers, the motivation for PD comes from wanting to learn new content to teach or access the latest trends in teaching; for others, it is developing better classroom management strategies. Still, for many, it is learning the newly and rapidly evolving use of digital technologies. Teachers engage in PD primarily because they want to learn from other people, whether they are peers or luminaries in the profession, in order to bring about changes in their practice.

Purposes of PD

Research has shown, however, that there is a tenuous link between many PD activities and an increase in the effectiveness of teaching (e.g., Myers & Clark, 2002). To understand why a tenuous link exists, it is important to consider whether the PD being offered allows teachers to achieve its primary purpose, which is to “expand their knowledge and skills to improve their practice and evaluate the effectiveness of their classrooms” (Crandall, 1993, p. 505). Administrators and other managers may require PD for other reasons, for example, to implement a new approach or technology for language teaching, which may or may not be related to improving practice for individual teachers. Whatever PD administrators might plan for and teachers subsequently engage in must focus on teachers’ expressed needs and be embedded in the specific context in which they practice their craft.

In order to support language program administrators, PD providers, and teacher educators in thinking about the purposes of PD activities and how to categorize them in relation to teachers’ needs, Wong (2011) detailed six reasons to engage in professional development and then provided types of PD associated with each reason (with references to examples in the literature). Wong’s list of reasons to engage in PD is as follows:

- raise awareness of strengths and weaknesses,
- acquire new knowledge,
- solve a particular problem,
- upgrade skills due to a change in society or the field,
- advance one’s career, and
- find fulfilment on one’s career to prevent burnout.

Liu and Berger (2015) adapted Wong’s list into reflective questions (e.g., Does the PD raise teachers’ awareness of their strengths and weaknesses?) and then added a seventh question “How can I learn from colleagues?” to highlight the importance of team work and collaboration in PD.

Darling-Hammond et al. (2017), in collaboration with the Learning Policy Institute, proposed seven strategies that can be used to determine the degree to which teacher learning activities will likely be effective in bringing about change in teaching and also be perceived as meaningful and

useful by practicing teachers. These strategies are summarized and adapted for PD for SFL teachers as follows:

1. **Focused content.** In K12 contexts where many content teachers work with English and multi-lingual learners, there should also be an intentional focus on discipline-specific PD, particularly in areas such as mathematics, science, or literacy development. For English for Specific Purposes (ESP) courses in a language center, PD should be similarly focused on the specific field of study, rather than general English.
2. **Active learning.** Active learning engages teachers directly in the design and implementation of teaching strategies, uses modeling, and provides opportunities for teachers to engage in the same experiences of learning that they are designing for their learners. This type of PD moves away from input-based learning models that have no direct connection to teachers' classrooms and their learners.
3. **Collaboration.** To be deemed high-quality PD, there must be space for teachers to share ideas and collaborate. When teachers collaborate, they are afforded opportunities to create communities, and these communities have the potential to bring about changes in teaching, not just for individual teachers but for the entire community.
4. **Modeling and the use of models.** Teachers appreciate and value PD that includes curricular models and models to explain learning. For PD to be perceived as effective by teachers, they must be able to experience a model in practical ways, such as how the model is translated into a completely developed unit or a lesson plan.
5. **Coaching and expert support.** If PD is to result in changes in teacher behaviors and instruction, then teachers need ongoing support, particularly during initial implementation. Both peer-coaching and ongoing support from experts have proven successful as they both involve the sharing of expertise about content and evidence-based practices.
6. **Feedback and reflection.** If PD is to be considered high-quality, it must focus on reflection and provide built-in time for teachers to reflect on their practice, which involves considering, discussing, soliciting, and receiving feedback, and making thoughtful changes in practice.
7. **Sustainable and durative.** Effective PD is sustainable and makes a long-term commitment to teachers. Seldom is PD effective as a one-shot input-based event. High-quality PD provides teachers with adequate time to learn, practice, implement, follow-up, and reflect on new practices that facilitate change.

There is overlap among these three systems or taxonomies. They are each meant to help PD administrators plan for effective PD. Regardless of the system chosen, each is meant to be implemented in a similar way, by serving as a set of guidelines or a self-check system. Whichever system is chosen, PD administrators and practicing teachers should ask the following questions: What features are included in the PD? What could be done to include additional features and increase the potential effectiveness of the PD?

A Framework for Professional Development

While the three systems for categorizing PD activities are useful, PD can also be viewed in other ways. Wallace (1994) suggests a three-part framework for foreign language teacher development: (a) the applied science model, (b) the craft or mentoring model, and (c) the reflective teaching model. In the applied science model, the research is linked to teaching practice by providing research-based training to develop teachers' skills. The craft or mentoring model brings together a more experienced, knowledgeable colleague and a less experienced colleague, while the reflective model involves teachers becoming active researchers as they read, observe, critically analyze, reflect, and share.

Applied Science Model

Traditional PD approaches mostly adopt the applied science model in which teachers participate in PD activities. These activities include conferences, workshops, visiting lectures, webinars, courses or certifications, and reading journals and other professional literature. While many of these activities may include opportunities to engage with presenters and other participants, the overall approach is to learn from an expert who is reporting on and/or interpreting knowledge from scholarship in the field. In some cases, the presenters may be fellow teachers who are presenting knowledge from their own experiences. The goal of such activity is for participants to learn new knowledge that they can apply in their own classrooms. One cautionary note is that research has shown that teacher learning and changes in practice from such activities are limited (e.g., Crandall & Christison, 2016).

The Craft or Mentoring Model

Mentoring can be both formal or informal. Formal models may even be top-down and directed from government entities, such as California's Teacher Induction Program in which new teachers are assigned to a more experienced practitioner. The mentor acts as both a sounding board and an experienced other (*Commission on Teacher Credentialing, 2020*). Mentors should be focused on the needs of the mentee, and teaching sessions should not be part of the teacher evaluation process; the mentor should not be placed in the dual role of mentor and evaluator as this would constitute a conflict of interest. Mentors observe mentee classes, offering advice and encouragement, and these activities can be followed by engaging in discussions of what has been learned and what questions the mentee has about the new knowledge or practice.

Peer-to-Peer Coaching

Teachers may also engage in peer-to-peer coaching or reciprocal mentoring. Peer-coaching sessions work best if the pair of teachers establishes a set of indicators or protocols in advance of peer observations to help them comment on each other's classes. Whether these observations are focused on specific teaching/learning issues, such as types of corrective feedback or strategies used for activating background knowledge, or broad, general observations, such as how much the teacher talked or the grouping strategies used, partners should avoid orienting the coaching sessions on problems. Teachers benefit the most from peer coaching when the focus is on areas in which each teacher wants to improve (Allwright, 2005). Focusing on specific issues is usually thought to be more effective than general ones.

Peer-to-peer coaching usually consists of the following four stages:

1. Teachers find another teacher who is interested in professional growth through learning from their teaching practice.
2. Teachers need to agree to commit to improving their own and their colleague's practice through open and frank discussion.
3. Teachers agree on an observation protocol and observe each other's classes.
4. Teachers provide feedback through coaching. Coaching requires non-judgmental feedback that is specific and descriptive.

It is important to remember that teachers engage in peer coaching and mentoring because they are willing to experiment with new instructional ideas and because they want to improve their practice. Through open and frank discussions with a trusted peer, teachers are able to implement, reflect on, and then evaluate the new ideas they have tried in their classrooms (Joyce & Showers,

2002). Furthermore, such ongoing discussions develop Communities of Practice (CoPs) (Wenger et al., 2002), in which teacher learning takes place. Such situated learning is based on a sociocultural perspective of human learning, with its roots in Vygotsky's work (1986). For Wenger et al. (2002), CoPs consist of groups that share a professional discourse and are committed to engaging with one another in order to learn through sharing and negotiating meaning.

Cooperative Development

Another model for peer coaching is cooperative development (Edge, 2002b). In *cooperative development*, two people agree to cooperate so that one member of the pair can work towards improving their practice. This model is closer to peer coaching or reflective teaching than to mentoring because the premise is that individuals who are committed to improvement do it in their own way, in their own time, not taking direction or asking for interpretations of their own practice from the peer. This teacher agency is achieved by assigning the roles of Speaker and Understander. The role of Understanders is to help Speakers discover their own ideas, explore them, and clarify them. Such interaction requires Understanders to use different actions—attending, reflecting, focusing, thematizing, challenging, disclosing, goal-setting, trailing, and planning. While the meaning of most of these actions is transparent, *reflection* and *disclosing* have specific meanings in this model. *Reflecting* refers to colleagues acting as mirrors, telling back Speakers' ideas so that Speakers can better visualize their ideas, attitudes, and emotions. The role of Understanders is not to interpret. Understanders can offer experiences of their own, if these experiences clarify what Speakers are trying to say (which is called *Disclosing*), but do not suggest alternative actions.

Reflective Teaching Model

Reflective approaches to PD have been widely researched, adopted, and promoted over the last two decades (e.g., Farrell, 2012, 2015; Richards & Farrell, 2011). This direction is founded in the profession's move from product to practice and from the cognitive to the social and ecological foundations (Canagarajah, 2015). Through reflecting on their practice, teachers learn about themselves as teachers by examining their own beliefs, decision-making practices, values, theories about teaching, and attitudes to their practice and their students.

The process of reflective practice involves three parts: (a) experiences that teachers go through, (b) reflective activities through which teachers can learn, and (c) acting on new viewpoints that come from that learning (Cirocki & Farrell, 2017). Teachers use their teaching experiences to systematically collect data and analyze it for new insights into their practice. Although teachers can engage in reflective teaching independently, research has shown that teachers are able to make more informed decisions when they discuss their data and insights with other teachers. Such discussions require them to “negotiate their meaning and, by so doing, to extend and reframe the ways in which they look at their own practice” (Bailey et al., 1998, p. 537). Teachers engage in a variety of different activities that facilitate reflection and have been shown to be effective. We outline several of these for teachers to consider, depending on their own specific contexts.

Teaching Journals

Teaching journals allow teachers to record their experiences in the classroom. They include both objective and descriptive data, as well as the teacher's interpretation of the data. General education research on writing has shown writing to be a socio-cognitive activity, through which the writer discovers new meaning “at the point of a pen” (e.g., Flower & Hayes, 1981; Flower, 1994). As teachers write, reflect, and interpret, whether online or by hand, they critically engage with their

experiences. The social aspect of journaling is also critical because, as teachers share their reflections with other teachers, they are introduced to alternative instructional practices and experiences (Burton et al., 2009).

Practitioner Research

Practitioner research refers to any research that is conducted by teachers, as opposed to classroom-based research, which refers to research conducted in classrooms, which may be conducted solely by outside researchers, such as university professors, or by outside researchers in collaboration with teachers. In other words, classroom-based research refers to the *where*, while practitioner research refers to the *who*. Neither necessarily depends on any one particular research methodology.

One form of practitioner research that is reflective is action research, which answers the question “how.” *Action research* (AR) “is a disciplined process of inquiry conducted by and for those taking the action. The primary reason for engaging in action research is to assist the ‘actor’ in improving and/or refining his or her actions” (Sagor, 2000). AR involves teachers in the following activities:

1. identifying a question, puzzle, or issue in their practice,
2. observing their classroom,
3. reflecting on the characteristics of the instruction that are related to their issue,
4. planning a change (action) to their instruction that might address their concerns,
5. introducing the change in their instruction, and
6. observing the consequences of that change.

AR has been widely used in education, including English language teaching (Burns, 2000; Mertler, 2008), because it is:

- cyclic—similar steps recur, in a similar sequence,
- participative—the subject of the study is an active participant in the research process,
- qualitative—it involves mostly non-numerical data,
- reflective—each cycle includes critical reflection on the process and outcomes,
- responsive—it can respond to the emerging needs of the situation, and
- emergent—a process that takes place gradually.

(Adapted from Dick, 2000)

AR can be undertaken individually or collaboratively. *Collaborative action research* is “collective, self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social...practices” (Kemmis & McTaggart, 1988, p. 5). In collaborative AR a group of teachers follows the same cycle as follows:

- the group discusses a puzzle or issue of concern,
- the group plans how it will act,
- members of the group undertake the change in their practice,
- individuals observe the consequences of the change in their practice, and
- the group individually and jointly reflects on the outcomes and decides whether to undertake a further cycle.

The advantage of collaborative AR is that, through collaboration, teachers gain additional insights into their practice, and it provides a context and framework for the creation of a CoP as they engage with other professionals. The research process is conducted through a focused, planned, active, and

reflective conversation, drawing on the professional discourse of the field. As Yates and Brindley (2001, p. 1) note, research has shown “teachers learn by doing, by reflecting and solving problems, and by working together in a supportive environment.”

Professional Learning Communities

One of the most successful forms of PD at the school, program, department, or institutional level is the model of professional learning communities (PLCs; Stroll et al., 2006). Although the terms PLC and Communities of Practice (CoPs) are often used ubiquitously and interchangeably in the literature, in this chapter we use the term PLC to describe a group of educators who meet regularly as a form of PD, share expertise, and work collaboratively to accomplish goals for a program, a school, department, or an institution (DuFour, 2004). In PLCs, group members are committed to using the same specific recommended strategies to improve program, school, or institutional outcomes.

PLCs are almost always devoted to intentional school improvement (DuFour et al., 2021). While they can take on a wide variety of forms, they share a number of essential qualities:

1. PLCs meet regularly, which means that group members know in advance when meetings are to take place and can plan for them.
2. Time for meetings is scheduled during the teaching day and attendance is an expected teaching responsibility and does not compete with out-of-school personal time.
3. The group pursues common goals. The priorities for the group are achieving benefits for the whole program, school, or institution.
4. There are high expectations for both teachers and students. Schools embracing this belief motivate teachers to share a vision for promoting student learning.
5. Group meetings are conducted and run by teachers, and teachers’ ambitions and interests are taken into consideration.
6. Protocols/guidelines are established and followed by the group.
7. Interactions are respectful and objections are factual.

The Climate of a School, Program, or Institution

For PLCs to be effective at the level of a school, program, department, or institution, the climate must be conducive to reaping the expected benefits of establishing a PLC. PLCs are most effective in educational climates where a combination of the following factors is present (Feger & Arruda, 2008):

1. There is a collaborative-friendly culture in which both teachers and leaders are committed to the work of educating learners and the success of the school, program, department, or institution.
2. Both leaders and teachers must be able to take a macro-centric view of what issues they are facing and learn how to bring fragmented efforts into alignment with a common goal.
3. Teachers and leaders embrace shared beliefs and behaviors. Beliefs that support PLCs include a sustained commitment to improvement, high value placed on continuous learning and inquiry, an orientation to solving problems that focuses on solution, and a willingness to share failures, mistakes, and uncertainties openly so that they can become part of seeking solutions.

The Role of Administrators in PD

Professional learning does not occur only within the individual teacher; it can also occur within the entire ecology of an institution. As noted, PD is often required by institutions locally or by

government mandates. However, for this type of PD to be effective requires a commitment to a professional learning culture for the entire center, school, or institution. Administrators play an important and practical role as they have the responsibility to develop “a positive, integrated teacher development culture within a school” (Forth, 1998, p. 21), one that not only serves the goals of the school but also considers the different stages of growth of each teacher. Such a culture is conducive to teacher learning and improved outcomes for learners. Furthermore, teachers who are supported and encouraged to develop their knowledge and skills and to collaborate with their peers are more likely to innovate and become thoughtful participants in any curriculum change. PD is an essential element of the curriculum development process so that teachers understand the purpose of the innovation, can successfully implement it, and evaluate its effectiveness.

For example, within the framework of PLCs, an administrator is responsible for overseeing the processes associated with the PLC, such as providing teachers with access to student achievement data, as well as other resources. Because PLCs are conceptualized as long-term endeavors, administrators are responsible for providing oversight for multiple years and staying attuned to changes within the group. An administrator must also consider the teaching backgrounds and educational experiences of teachers for whom PD is intended. It would not be unusual for novice teachers (teachers in the first five years of teaching) to be participating in PD with teachers who have been teaching 15 plus years or more. As Baecher (2012), Faez and Valeo (2012), and Farrell (2012) have noted, novice teachers have unique challenges, especially relative to classroom management (Farrell, 2006), that more experienced teachers would not typically have.

Another challenge for administrators is trying to determine how to move PD beyond short-term offerings to sustained and situated PD. The field of SLTE still needs longitudinal research that investigates how teaching expertise emerges and how teachers’ beliefs evolve at different stages in teachers’ careers.

Online Language Teacher Education (OLTE) and Online PD

Even before the pandemic of 2020–21 changed the educational landscape worldwide, online and distance education were the fastest growing areas of education in the world (Murray & Christison, 2017; Sampson, 2012). Considering the growth of English and the fact that human migration is at an all-time high, it should not be surprising to find that there would be an increase in the number of online PD courses and programs. With the demand for more online educational opportunities and courses has come the concern about how to effectively design online courses and PD to meet teachers’ cognitive and social needs.

One of the most commonly used frameworks in OLTE and online PD is that of community of inquiry (CoI) (Anderson et al., 2001). The theoretical underpinnings of CoI have been embraced by online educators because the model is focused on providing support for online PD providers and teacher educators in developing and delivering online courses and programs that are “supportive intellectually and socially,” and “engage [teachers] in meaningful discourse” so that they “develop personal and lasting understandings of course topics” (Rourke & Kanuka, 2009, p. 21).

The three components of online CoI can be conceptualized around three presences—teaching presence, cognitive presence, and social presence. Teaching presence has to do with the extent to which the teacher educator is present in “the design, facilitation, and direction of cognitive and social processes” (Anderson et al., 2001, p. 5) with an online course or a PD experience. How was teacher presence accounted for in the design of the course? How was the PD provider involved in facilitating learning? What did the teacher educator do to further teachers’ cognitive and social processes? If you ask teachers involved in PD at any given time, would they be able to readily acknowledge the ways in which the presence of an online teacher contributed to their learning.

Cognitive presence is about “the extent to which the participants ... are able to construct meaning through sustained communication” (Garrison et al., 2001, p. 89). Cognitive presence has been identified as having four indicators, which include trigger, exploration, integration, and resolution, in ascending order of complexity (Garrison et al., 2001).

Social presence is defined as “the ability of participants in a community of inquiry to project themselves socially and emotionally, as ‘real’ people (i.e., their full personality)” (Garrison et al., 2001, p. 94). Second language teacher educators have long known that the development of one’s “identity as a teacher is partly given and is partly achieved by active location in social space” (Coldron & Smith, 1999, p. 711). Collaboration and interaction are important components in actualizing social presence online. In planning for online PD, teaching presence, cognitive presence, and social presence are important considerations and can affect the quality of online PD offerings.

Conclusions and Future Directions

This chapter has outlined and discussed some critical factors that affect PD for SFL teachers, such as the importance of understanding perspectives on PD, the research that unites theory and practice, and how to categorize PD offerings in terms of teacher needs. A framework for PD is presented and discussed, which focuses on helping PD providers and teacher educators understand the options that are available when conceptualizing and implementing PD. Because PD providers are concerned with professional learning that goes beyond individual teachers, the chapter focused on the development of high-quality PLCs and the role administrators must play in their development. Crucial to understanding how PD is framed in this chapter is recognizing the importance of maintaining a distinction between the terms PD and professional learning, with the term PD framing the activity and the term professional learning being used to frame the result. Maintaining such a distinction is important because it allows PD providers to consider what types of PD might lead to desired outcomes. Throughout the chapter, the relationship between PD and the field of SLTE is carefully considered. SLTE’s growing research base underpins the directions for PD in the future. SLTE is a relatively new field of study that has evolved since the 1990s (Richards & Nunan, 1990). In that relatively short amount of time, SLTE has taken on a global perspective and the knowledge base of SLTE has greatly expanded (Crandall & Christison, 2016); yet still many challenges to effective PD remain and need to be investigated. Such investigations need to be focused on teachers’ needs and their experiences in their classrooms.

Practitioners and PD providers will need to grapple with the increasing challenges and opportunities created by online learning, both the online learning of English and for the provision of professional development. While the global pandemic has provided a petri dish for experimentation of online language and professional teacher learning, systematic studies will need to be conducted in the future. However, this experimentation was emergency remote teaching (Hodges et al., 2020). What is needed is an examination of the regular, planned practice of online PD to determine which approaches and activities result in teacher learning. As well as providing insights into online education, the pandemic also revealed how resilient and flexible teachers need to be to adjust to changes in their context. Therefore, it is imperative that future research explore how PD can prepare teachers for these vital soft skills.

References

- Allwright, D. (2005). Developing principles for practitioner research: The case of exploratory practice. *Modern Language Journal*, 89(3), 353–366.
- Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, 5(2). Retrieved from www.aln.org/publications/jaln.v4n2/v5n2...anderson.asp

- Baecher, L. (2012). Feedback from the field: What novice PreK–12 ESL teachers want to tell TESOL educators. *TESOL Quarterly*, 46(3), 578–588.
- Bailey, F., Hawkins, M., Irujo, S., Larsen-Freeman, D., Rintell, E., & Willett, J. (1998). Language teacher educators collaborative conversations. *TESOL Quarterly*, 32(3), 536–546.
- Barduhn, S. (2002). Why develop? It's easier not to. In J. Edge (Ed.), *Continuing professional development: Some of our perspectives* (pp. 10–13). IATEFL.
- Burns, A. (2000). *Participatory action research and ESL*. Cambridge University Press.
- Burns, A. & Richards, J. C. (Eds.) (2009). *The Cambridge guide to second language teacher education*. Cambridge University Press.
- Burton, J., Quirke, P., Reichmann, C., & Peyton, J. K. (Eds.) (2009). *Reflective writing: A way to lifelong teacher learning*. http://tesl-ej.org/books/reflective_writing.pdf
- Canagarajah, S. (2015). TESOL as a professional community: A half-century of pedagogy, research, and theory. *TESOL Quarterly*, 50(1), 7–41.
- Christison, M. A. & Murray, D. E. (2020). The odyssey of professional excellence and quality assurance in TESOL: The changing culture of the TESOL profession. In J. de Dios Martinez Agudo (Ed.). *Quality in TESOL and teacher education: From a results culture towards a quality culture* (pp. 265–274). Routledge.
- Cirocki, A. & Farrell, T. S. C. (2017). Reflective practice for professional development of TESOL practitioners. *The European Journal of Applied Linguistics and TEFL*, 6(2), 5–22. www.reflectiveinquiry.ca/wp-content/uploads/2016/06/RP-special.pdf
- Coldron, J. & Smith R. (1999). Active location in teachers' construction of their professional identities. *Journal of Curriculum Studies*, 31(6), 711–726.
- Commission on Teacher Credentialing. (2020). Teacher induction. www.ctc.ca.gov/educator-prep/teacher-induction
- Crandall, J. (1993). Professionalism and professionalization of adult ESL literacy. *TESOL Quarterly*, 27(3), 497–515.
- Crandall, J. (2000). Language teacher education. *Annual Review of Applied Linguistics*, 20, 34–55.
- Crandall, J. & Christison, M. A. (2016). An overview of research in English language teacher education and professional development. In J. Crandall & M. A. Christison (Eds.), *Global research on teacher education and professional development in TESOL* (pp. 3–34). Routledge.
- Darling-Hammond, L., Hyster, M. E., & Gardner, M. C. (2017). *Effective teacher professional development*. Learning Policy Institute.
- Dick, B. (2000) *A beginner's guide to action research*. www.uq.net.au/action_research/arp/guide.html
- DuFour, R. (2004). What is a professional learning community? *Educational Leadership*, 61(8), 6–11.
- DuFour, R., DuFour, R., Eaker, R., Mattos, M., & Muhammad, A. (2021). *Revisiting professional learning communities at work: Proven insights for sustained, substantive school improvement* (2nd ed.) Solution Tree Press.
- Edge, J. (2002a). *Continuing cooperative development: A discourse framework for individuals as colleagues*. University of Michigan Press.
- Edge, J. (Ed.) (2002b). *Continuing professional development: Some of our perspectives*. IATEFL.
- European Commission. (2009). *European strategy and co-operation in education and training*. http://ec.europa.eu/education/lifelong-learningpolicy/doc28_en.htm
- Faez, F & Valeo, A. (2012). TESOL teacher education: Novice teachers' perceptions of their preparedness and efficacy in the classroom. *TESOL Quarterly*, 46(3), 450–471.
- Farrell, T. S. C. (2006). The teacher is an octopus: Uncovering preservice ELTS prior beliefs through metaphor analysis. *RELC Journal*, 3(2), 236–248.
- Farrell, T. S. C. (2012). Novice-service language teacher development: Bridging the gap between preservice and in-service education and development. *TESOL Quarterly*, 46(3), 435–449.
- Farrell, T. S. C. (2013). *Reflective writing for language teachers*. Equinox
- Farrell, T. S. C. (2015). *Promoting teacher reflection in second language education: A framework for TESOL professionals*. Routledge.
- Feger, S. & Arruda, E. (2008). *Professional learning communities: Key themes from the literature*. The Education Alliance: Brown University. www.brown.edu/academics/educationalliance/sites/brown.edu/academics/education-alliance/files/publications/PBS_PL_C_Lit_Review.pdf
- Flower, L. (1994). *The construction of negotiated meaning: A social cognitive theory of writing*. Southern Illinois Press.
- Flower, L. & Hayes, J. R. (1981). A cognitive process of theory of writing. *College Composition and Communication*, 32(4), 365–387.
- Forth, I. (1998). Managing teacher development. *ELT Management*, 26, 21–24.
- Freeman, D. & Johnson, K. E. (1998). Reconceptualizing the knowledge-base of language teacher education. *TESOL Quarterly*, 32(3), 397–417.

- Freire, P. (2005). *Pedagogy of the oppressed*. Translated by M. B. Ramos. Continuum.
- Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking and computer conferencing: A model and tool to access cognitive presence. *American Journal of Distance Education*, 15(1), 87–105.
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020, March 27). The difference between emergency remote teaching and online learning. *Educause Review*. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>
- Johnson, K. E. & Golombek, P. (2002). *Teachers' narrative inquiry as professional development*. Cambridge University Press.
- Joyce, B. & Showers, B. (2002). Designing training and peer coaching: Our needs for learning. In B. Joyce & B. Showers, *Student achievement through staff development* (3rd ed.) Association for Supervision and Curriculum Development.
- Kemmis, S. & McTaggart, R. (1988). *The action research planner*. Deakin University Press.
- Lantolf, J. (2000). *Sociocultural theory and second language learning*. Oxford University Press.
- Liu, J. & Berger, C. M. (2015). *TESOL: A guide*. Bloomsbury.
- Mertler, C. A. (2008). *Action research: Teachers as researchers in the classroom*. Sage.
- Murray, D. E. & Christison, M. A. (2017). Going online: Affordances and limitations for teachers and teacher educators. In L. L. C. Wong & K. Hyland (Eds.), *Faces of English education: Students, teachers, and pedagogy* (pp. 215–230). Routledge.
- Murray, D. E. & Christison, M. A. (2019). *What English language teachers need to know volume I: Understanding learning* (2nd ed.). Routledge.
- Myers, M. & Clark, S. (2002). CPD, lifelong learning and going meta. In J. Edge (Ed.), *Continuing professional development: Some of our perspectives* (pp. 50–62). IATEFL.
- Richards, J. C. & Farrell, T. S. C. (2005). *Professional development for language teachers: Strategies for teacher learning*. Cambridge University Press.
- Richards, J. C. & Farrell, T. S. C. (2011). *Practice teaching: A reflective approach*. Cambridge University Press.
- Richards, J. C. & Nunan, D. (1990). *Language teacher education*. Cambridge University Press.
- Rourke, L. & Kanuka, H. (2009). Learning in communities of inquiry: A review of the literature. *Journal of Distance Education*, 23(1), 19–48.
- Sagor, R. (2000). *Guiding school improvement with action research*. ASCD. www.ascd.org/publications/books/100047/chapters/What-Is-Action-Research%C2%A2.aspx
- Sampson, A. (2012). Learner code-switching versus English only. *ELT Journal*, 66(3), 293–303.
- Sparkes, D. (2002). *Designing powerful professional development for teachers and principals*. National Staff Development Council. <https://files.eric.ed.gov/fulltext/ED470239.pdf>
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Education Change*, 7, 221–258.
- Vygotsky, L. (1986). *Thought and language*. MIT Press.
- Wallace, M. (1994). *Training foreign language teachers: A reflective approach*. Cambridge University Press.
- Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating communities of practice*: Harvard Business Review Press.
- Wong, M. S. (2011). Fifty ways to develop professionally: What language educators need to succeed. *Language Education in Asia*, 2(1), 142–155.
- Yates, L. & Brindley, G. (2000). Editorial. *Prospect*, 15(3), 1–4.



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Part III

Listening and speaking



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Teaching listening

Dichotomies, choices and practices

Anne Burns and Joseph Siegel

Purpose and focus

Most people, if asked to select any one language skill as the foundational one for all other language learning, would be likely to say that it is listening. From birth, young humans are exposed to extensive language input through natural interaction with significant others, parents, relatives, siblings, friends and eventually pre-school teachers. Under normal circumstances, through all these encounters, interaction occurs in social contexts that are meaningful, where no conscious development of listening is needed. However, when it comes to listening in another language, to which learners have not had early exposure, there may be little direct emphasis placed on teaching this skill in the language classroom (Siegel, 2014a). Siegel argues that this may be because language teachers consider listening difficult to teach; he agrees with Nemtchinova (2013) that there are few explicit rules that can be used to lead to success in listening. Over the years, however, in the field of English Language Teaching (ELT) different theoretical perspectives and practical ideas on listening and how it should be taught have been put forward (e.g., Brown, 1990; Field, 2008; Flowerdew & Miller, 2005; Graham & Santos, 2015; Mendelsohn, 1994; Rost, 1990; Rubin, 1994; Vandergrift & Goh, 2012). In this chapter, we aim to locate listening within its wider context of language teaching and learning, cover some of the key debates and developments, both theoretical and practical, and point towards some further directions for the teaching of listening.

Listening within the field of language teaching and learning

From both teaching and learning perspectives, the skill of listening has long been considered to be one of the four major 'macro' skills – listening, speaking, reading, writing – in the language teaching field. Alongside these skills, focus is also placed on grammar, pronunciation and vocabulary, although it is relevant to say that these features of language learning are an integral part, in various ways, of the four major skills. In many educational contexts, these macro skills are considered within the curriculum as separate areas and may be taught in isolation. In addition, in many of the major testing systems (e.g., IELTS, TOEFL) or standard frameworks used internationally (e.g., CEFR), they are generally assessed separately, with different scores or levels being allocated to each of the skills or competences.

Over the last few decades as more research has been focused on particular skills, and theoretical concepts relating to these skills have developed, there has been a move away from this kind of strict segregation. It is self-evident, for example, that in authentic interactions, listening and speaking are closely entwined, as the one must interact with and support the other. Similarly, reading is often

necessary before one is able to move towards writing, especially in academic contexts (Hirvela, 2013). Moreover, listening may lead on to writing about something, while speaking about a topic may be a pre-cursor and preparation for writing about it. As such, the four skills often operate in conjunction and combination with one another in the real world, which can be reflected in classroom pedagogy.

One idea in the field that moves away from segregating the macro skills is that they can be categorised as ‘receptive’ and ‘productive’. Receptive skills are seen as those to do with receiving communication (i.e., listening and reading), while productive skills are to do with producing communication (i.e., speaking and writing) (Harmer, 2015; Scrivener, 2011). Some writers have also referred to the connections between the skills of listening–speaking and reading–writing as ‘reciprocal’ (Nation, 2009; Newton & Nation, 2020), while others point out that these skills are complementary and interrelated and should not be taught separately (e.g., Grabe & Zhang, 2013; Hirvela, 2013; Newton, 2016; Rost, 2001). Changes have also occurred in the ways the macro-skills are described. In the past it was common to treat listening and reading as ‘passive’, mainly because the cognitive processes and strategies involved in using these skills were not observable. On the other hand, speaking and writing were considered ‘active’ as the products of these skills were more obvious. Research over the last few decades has shown that all the skills actively require particular kinds of metacognitive and cognitive processes, certain types of linguistic knowledge, and awareness of cultural and social norms and expectations (Hinkel, 2006; McCarthy & Carter, 1994; Richards & Burns, 2012).

A further development in viewing listening in relation to the other macro-skills is to see them as ‘integrated’ (Hinkel, 2010). Hinkel points out that this view goes back as far as the early decades of the 20th century, and was widely used in the 1950s to 1970s, where the ‘situational teaching approach’ (e.g., Hornby, 1950) proposed that though speaking was primary, all four skills should be taught. It was further reinforced in publications such as Widdowson (1978) which took a discourse-based perspective on how language was used ‘situationally’ in everyday life (Widdowson, 1978). Nevertheless, it is the case that in some educational contexts, and also teaching materials, the idea of integration is somewhat revolutionary, and skills are still treated separately (Newton & Nation, 2020). The integration of skills has both advantages and disadvantages. As Rost and Wilson (2013) point out, integration may strengthen language acquisition in that using the different skills can strengthen language development. Students can also draw on their own strengths, learning styles and preferences. Integration also creates variety and lessens the pressure of focusing on only one skill. In contrast, focusing on one skill allows for more in-depth learning where learners may have weaknesses. More attention can be placed on specific areas, such as the grammar, vocabulary, accuracy or fluency that relates to that skill (see also Hinkel, 2010).

It is useful for language teachers working in various educational contexts to be aware of how and where listening is located in their syllabus, how it is juxtaposed with the learning of other skills and how it is treated in the course books and language materials they are using. Analysing one’s own beliefs as a teacher about the skill of listening and being aware of the distinctions or separations that may be made in treating the four skills can also allow for reflection on the most appropriate approaches to use with specific groups of learners. Weighing up the importance of attending to specific processes and features of listening, as described further in this chapter, vis-à-vis helping students to integrate listening with other skills, helps teachers to articulate their own position on the place of listening in their instruction.

In the contemporary global environment, the ability to listen as part of communicative ability has become ever more important. Speakers of English, in particular, must now operate in an interconnected and technologically mediated world. Different varieties of English across the world, that have accelerated dramatically in recent times, mean that the ability to listen to and comprehend others requires not only ‘technical’ language knowledge and competence, but the capacity to interpret, infer and locate other people’s utterances for social and cultural meaning. Listening is now not only

interrelated with speaking (and other skills) but with intelligibility, comprehensibility and interpretability for mutual understanding. Moreover, many exchanges no longer take place face-to-face, particularly at this time of writing (the age of the covid-19 pandemic) where intercultural understanding and collaboration have become even more vital. The ability to listen and communicate through multiple technological tools and media are further contexts that need consideration in the teaching and learning of listening.

In the sections that follow, we pick up some of the themes covered here and examine them further. Our aim is to identify the most important developments that have taken place in the teaching and learning of listening as well as to outline some of the current practices we believe to be useful for teachers and productive for the learning of listening in another language.

Developments, trends and traditions

Despite the fact that listening is the core skill in L1 development and an essential macro-skill in L2 education (as emphasised earlier in terms of pedagogy and assessment), the way that it is viewed and taught in L2 classrooms ranges widely in terms of practice. Theoretical perspectives behind how listening occurs are generally more stable, although the amounts of attention different theoretical components receive in L2 materials and classrooms also suggests some debate over the best ways to teach listening. This section begins with a brief overview of listening from a theoretical perspective, following which a set of important considerations are laid out. Several of these topics are presented as dichotomous; that is, they are discussed as ‘either-or’. Teachers can benefit from recognising both ends of the continuum when it comes to these issues and use the descriptions that follow to better understand their current and desired practices. Following this discussion, the chapter moves on to cover the impacts that technology is having on listening.

When considering how listening occurs from a theoretical perspective, various models have been put forth. From a cognitive perspective, Clark and Clark (1977) introduced a model in which listening begins by perception of sounds at the phoneme level, which leads to the second step of parsing the incoming speech stream into meaningful chunks. Once this linguistic material has been processed, the third step, utilisation, occurs, which involves the listener drawing on background knowledge and contextual factors to understand the meaning behind an utterance (i.e., not just the words themselves). This model suggests a progressive understanding that begins with actual acoustic sounds and concludes with an individual’s ability to interpret those sounds in a given physical and interactive situation. In other words, listening from this perspective moves from the smaller parts to a holistic meaning. Siegel (2015) built upon this model and suggests that there is an initial stage in which listeners build up expectations within any situation (in relation to topic, interlocutor, location) and then attend to the actual input to compare it to expectations. A final ‘bird’s ear’ view checks to ensure a logical interpretation within the context is achieved.

These models draw on the notions of bottom-up (BU) and top-down (TD) processing, a distinction which represents the first dichotomy covered in this chapter. The former refers to the gradual building up of discrete items of information, from individual phonemes that form words, to words that form phrases and clauses, to utterances, and so on. In this sense, listening comes from the bottom-up. Without the actual input, no understanding can happen. The TD perspective involves a listener’s schema (i.e., their background knowledge and life experience), which provides the listener with predictions, expectations, and interactional patterns that prepare the mind to interpret the upcoming input. TD processing begins with a broad concept of the message and processes it in a downward direction by breaking utterances into words, words into phonemes, etc. (Lynch & Mendelsohn, 2002).

Teachers and listening textbook materials may place varying degrees of emphasis and attention on BU and TD processing respectively. Pre-listening activities such as predicting what one will hear

or brainstorming key words prior to listening are examples of TD processing. These are common activities in many listening lessons, and for decades, this was viewed as ‘listening’ practice. While it is agreed that these are beneficial techniques to activate a listener’s background knowledge, too much emphasis on TD can mean overlooking the actual linguistic signal. After all, the listener should activate background knowledge but then must compare their expectations to the ‘nuts and bolts’ of the acoustic input they receive (e.g., Field, 2008). Specific exercises that target decoding the acoustic input from a BU perspective, such as dictation activities, have sometimes been viewed as mechanistic and inauthentic in the past and were overlooked in favor of TD activities. However, recent pedagogical work strongly suggests that BU attention is needed. Scholars such as Field (2008) and Siegel and Siegel (2015) have generated numerous activities that can be applied to any listening text that draws learners’ attention to features of spoken language. Goh’s (2000) research on the most common causes of L2 listener misunderstandings shows that BU is particularly challenging and thus deserving of more classroom attention. Such activities are intended not to replace TD but instead to co-exist so that a holistic view of listening including both TD and BU are acknowledged in the classroom and in listening materials. The overwhelming contemporary view on this issue is that a balanced theoretical approach that acknowledges both TD and BU is recommended.

A second and related dichotomy contemplates the extent to which current classroom practices teach or test listening. Our view is that much of the time when teachers and textbook materials intend to *teach* listening, they are in fact applying *testing* techniques. Field (2008) describes the ‘comprehension approach’ and Siegel (2014b) explains a common ‘listen-answer-check-repeat’ sequence in classroom practice as examples of a testing approach. These views of what happens in listening lessons indicate a familiar pattern in which teachers play or read audio texts and students answer comprehension questions (e.g., gap fill, multiple choice, etc.). The teacher and students then check the answers before applying the same cycle to another text. This is precisely the same questioning routine used on tests of listening proficiency. The approach lacks pedagogic value unless teachers draw students’ attention to locations in the text that lead them to correct/incorrect answers. Students merely display their present ability without focused avenues for improvement. Understanding the difference between teaching and testing listening is crucial. There is a time and place for both, but one would reasonably expect much more class time and attention on the teaching of listening (including both TD and BU perspectives) than is spent on testing listening.

A third dichotomy relates to how listening material is treated; in other words, what are learners meant to do with it? An approach to listening instruction that emphasises correct answers to discrete-item questions can be labeled *intensive* listening. It is intensive in that the listener is more interested in locating single facts or pieces of information within the text rather than necessarily understanding the overall gist and/or appreciating the content at a personal level. With intensive listening, all students would listen to the same text, selected by the teacher or the materials writer, for the same purpose. Extensive listening (EL) contrasts with this traditional intensive approach in several ways. Drawing on an idea that originated with extensive reading (Day & Bamford, 1998), EL involves students choosing their own materials to listen to, at their own general level of understanding, for pleasure and/or interest, and with little to no evaluative procedures attached to the listening experience. Some authors (e.g., Renandya & Farrell, 2011; Chang et al., 2019) promote the practice of EL while others (e.g., Siegel, 2011) caution that relying solely on EL for L2 listening development may be insufficient and that teachers can play important roles in modeling listening activities and providing specific practice. Like with BU and TD processing, a balance of intensive and extensive listening activities is likely ideal, depending on course and individual objectives, learner traits, ages, and proficiency levels.

The distinction between teaching and testing listening then leads to questions about what exactly can be taught when it comes to listening. BU and TD perspectives provide some relevant and useful answers. Taxonomies of listening skills and strategies are also helpful. In a seminal early work on

listening, Richards (1983) outlined 33 separate sub-skills involved in conversational listening and an additional 18 related to academic listening. Many of those for conversational listening include explicit understanding of the acoustic signal and therefore have connections to BU: “recognizing reduced forms of words”; “recognizing word boundaries” and “distinguishing between minor and major constituents” in spoken output (p. 228). In academic listening (i.e., listening to lectures and academic discussions), Richards (1983) suggests listeners need to be familiar with different registers, recognise relevant from irrelevant matter and notice cohesive and transition markers (pp. 229–230). Several scholars have provided similar lists of listening strategies (e.g., Graham & Santos, 2015; Siegel, 2015; Vandergrift, 1997).

Lists of listening strategies like those mentioned in the previous paragraph have provided a basis for broader strategic pedagogic frameworks for listening instruction. Vandergrift and Goh (2012), for example, introduced a teaching model based on the notion of metacognition. The sequence includes: multiple chances to listen, monitoring, identifying areas of difficulty, problem-solving, reconstructing the texts with peers, verifying understanding and finally reflecting and setting goals for upcoming listening events (p. 109). Siegel (2015) promotes listening strategy instruction with the aim of demonstrating to students *how* to listen (for example, how to identify key words, attend to intonation, generate expectations while listen and recognize generic patterns in spoken texts). Graham and Santos (2015) also provide teaching ideas for listening strategies and suggest a diagnostic stage to determine individual learner’s strengths and weaknesses when listening so that a targeted (rather than general) strategic approach can be developed.

Selection of texts to include in listening lessons is another topic that teachers need to be aware of and touches on a further dichotomy. Most listening texts used in classrooms come either from commercially published ELT materials or in the form of authentic content, such as that from the internet, podcasts, songs, etc. Several distinctions between these two types of materials have important influences on the quality of the listening experience and have advantages and disadvantages for the L2 teacher and learner. Listening material that accompanies published textbooks (typically in the form of CDs or online audio/video content) is created by the publishing company for the purposes of L2 teaching and learning. As such, it typically aligns closely with the printed material in the respective textbook. The content may include specific emphasis on using certain grammatical structures and/or be clearly articulated in ways that diverge from naturally spoken English. These aspects can be beneficial for learners at lower proficiency levels since they present and focus on specific linguistic aspects and are delivered in ways that can be easier to understand, thereby increasing uptake and building confidence. However, such material can be demotivating for students and may hold little interest for them. This carefully scripted and delivered material also often lacks features that L2 learners encounter in life beyond the classroom, including a high rate of speech, blending of sounds, false starts and mid-sentence changes and corrections (Richards & Burns, 2012). Many publishers now try to make their recorded material more natural, and they are often successful to some degree. Developments in the field of corpus linguistics, where analysis of databanks of natural spoken language have revealed more about the linguistic features and communicative strategies used in spoken language and the important role of ‘listenership’ in natural communication (O’Keefe et al., 2007), make exposure to natural language a greater priority for listening pedagogy.

Given the drawbacks of scripted material specifically for L2 learning, especially for intermediate and advanced proficiency listeners, authentic materials are often viewed favourably by teachers and students. Material taken from the internet, often in the form of videos, provides a wide array of topics, accents and viewpoints that can make the text selection more meaningful and appropriate for certain groups of learners. These materials are ‘authentic’ in the sense that they were created by proficient L1 English users with the intent to communicate to other L1 English users; in other words, there is a natural and ungraded flow and rate of speech. This type of material provides advantages in terms of motivation, variety and authenticity (see Emerick, 2019, for research on authenticity in

listening materials). However, drawbacks include a lack of language control, and sometimes unstructured output that can be difficult for L2 listeners to follow and comprehend. Like with other issues discussed in this section, it is important for teachers to be aware of both ends of the continuum and to consider these issues when selecting texts for listening instruction.

Related to listening materials is the issue of who is being listened to. In the past, one could generally expect that the voices heard on L2 listening materials would be native speakers using sometimes exaggerated articulation and rates of speech that were slower than those of normal speech between proficient L1 users. With the rise of the World Englishes movement (e.g., Kachru, 1997) and the increasing and deserved recognition of non-native users, teachers need to consider who their students are listening to. Some students might prefer to listen to native speakers with the intention of mimicking accents, for pleasure, or to become familiar with a certain variety of English. However, exposure to multiple varieties of English, produced by both native and non-native users, presents students with a more realistic overall listening experience that is reflected in the real world. Our position is that teachers should actively avoid selecting only texts delivered by native speakers from so-called native English-speaking countries (e.g., Canada, the UK). In addition to these, non-native speakers of English from any context as well as from a range of English-speaking countries (e.g., India, Nigeria, among many others) deserve to be included in order to familiarise students with the wide ranges in tone, rhythm, pausing, rate, cultural considerations, etc. that are involved in becoming a proficient listener in a broad sense.

Whereas in the past, listening typically only involved audio materials, with ample amounts of video material available online and increasingly included in listening textbooks, incorporating multimodal aspects of listening is becoming a trend. Non-verbal communication, including facial expression, hand gestures and body language, helps speakers reinforce their messages to listeners. In addition, visuals such as PowerPoint slides and still and moving images contribute to a listener's comprehension. At the same time, too much visual stimulation can lead to cognitive overload and distract the listener from the message they are trying to decode. Teachers and students should account for these multimodal aspects when working with video material, recognising where what is seen contributes to what is heard.

As described in this section, there are a number of core issues for the listening teacher to be aware of not only in terms of theoretical perspectives but also how those perspectives are realised in classroom practice. Conceptual issues related to how listening is viewed can lead to a range of methods and priorities, including the extent to which listening is taught or tested, which aspects receive explicit attention in the classroom and how listening texts are selected. This discussion has described a shift in listening pedagogy from one that once focused exclusively on test-related approaches, intensive listening and inauthentic texts to expanding pedagogic views, more student choice and use of authentic texts.

Current practices: a pragmatic, informed approach

Based on the discussion of core issues in the previous section, our own position is to emphasise the importance of a pragmatic, informed approach to the teaching of L2 listening. A pragmatic approach is recommended to account for the range of individual listening needs within any group of learners. Since groups will vary in terms of individual learner traits, motivation, interests, age and proficiency level, promoting a single model or type of listening activity would be insufficient. Instead, we highly recommend that teachers become informed about the range of options currently in the field in relation to pedagogic approaches, specific aspects of the listening process to target and factors connected to text selection. Being knowledgeable about this range of options can help teachers to

make informed and justifiable decisions about what texts they ask their students to listen to and what activities and exercises they (or materials writers) attach to those texts.

One-way or two-way listening

Depending on the class goals for listening, students may need to become familiar and comfortable with decoding and extracting information from a range of texts and in a variety of formats. Conversational listening will inevitably involve many common, everyday topics, force the listener to quickly switch roles from listener to speaker and offer opportunities to provide feedback and ask follow up questions. This is two-way listening, in that the listener is a participatory actor who rotates roles with the interlocutor. In contrast, one-way listening, such as that which takes place in many academic settings and while watching movies, TV and videos, does not involve such interaction. Instead, the listener must concentrate on the words (and multimodal effects) of the input they receive, but they have neither the pressure to formulate and deliver an immediate response nor the opportunity to interrupt or ask for clarification. Since L2 listeners need to be prepared for both types of listening, we recommend explicit discussion of and practice in one-way and two-way listening. Many of the pedagogy options mentioned in the previous section can be applied to both types of listening.

Comprehension approach

A traditional manner of using one-way listening texts is to determine the amount of information contained that students understand. This is most often done in conjunction with textbook material that provides questions (e.g., multiple choice, gap fills, matching) in relation to a scripted or semi-authentic listening text. The comprehension approach is widely used for listening practice but can become a repetitive task where students are seldom provided with scaffolding and developmental support to improve their listening. Instead, the comprehension approach is similar to testing present listening ability and/or preparing for listening proficiency tests that include such question types. In other words, teachers initiate a sequence where a text is played while questions are answered by students. Afterwards, students might check answers with classmates and/or the teacher. Answers are either right or wrong. Right answers might confirm a student's accurate comprehension, but correct answers could also come from guessing or a process of elimination. The comprehension approach has been criticised for its potentially non-developmental methods and its lack of attention on listening itself (e.g., Field, 2008; Siegel, 2014b). One way to add a developmental component to the comprehension approach would be to use student responses to questions to trace and identify parts of the text that helped them choose the correct response as well as those that may have resulted in incorrect answers. In this way, teachers and students can become aware of which aspects of the text and the listening process (e.g., TU or BU) may require more specific practice.

Pre-, while- and post-listening

This is a widely recognised three-stage model for planning lessons for receptive macro-skills (i.e., for listening and reading). At the pre-listening stage, teachers encourage students to activate their background knowledge concerning the topic of the upcoming text and to generate predictions about what they may hear. In other words, the pre-listening stage aims to stimulate TD processes for listening to prepare the listener to be an active participant in deciphering the incoming message. Pre-listening can include picture and/or topic speculation, brainstorming key words and discussing

similar personal experiences. Pre-teaching vocabulary and expressions that arise in the listening text but which the students may not be familiar with is also common at the pre-listening stage. While-listening can include answering comprehension questions, taking notes and monitoring understanding (see Hedge, 2000; Wilson, 2008 for additional activities). A text can and probably should be played multiple times during the while-listening stage, each time with a specific focus. For example, students can listen a first time to get a sense of the main idea and gist of the input and then listen again to focus on smaller details. Multiple listenings can be especially beneficial with lower proficiency students, as they not only build exposure to the L2 but can increase confidence as well. At the post-listening stage, students can check the outcomes in comparison to the predictions they made at pre-listening, react to the content, discuss their opinions and experiences, reflect on their level of comprehension and consider if any changes in listening approach might be beneficial in the future.

Focus on the speech signal

In the past, TD processing received significant attention from teachers and materials writers in the form of ‘prediction’ activities. This was based on the idea that students’ background knowledge and expectations about a text could make listening easier. While we agree that TD is helpful in engaging students beforehand, involvement with the actual acoustic input is also crucial. Recent pedagogic literature has strongly suggested a return in emphasis to BU aspects of listening, specifically phoneme perception and parsing of the speech stream. Field (2008), partly to offset the overwhelming use of the comprehension approach, suggests using a diagnostic approach to determine which sound combinations are challenging for certain students and recommends short, targeted exercises aimed at those particular sounds. For example, students might have trouble distinguishing between “He said he waited” and “He’d said he’d wait” (Field, 2008, p. 89). Teachers can introduce a set of sentences mirroring this distinction and students need to identify which refer to the past and which to the future. Siegel and Siegel (2015) provide descriptions of several additional activities that focus exclusively on the speech signal, including counting the number of words in an utterance, identifying lexical differences (e.g., “We bought cookies” and “We buy cookies”) and short dictations. Cauldwell (2013) offers further pedagogic activities aimed at increasing listener awareness of compressed sounds within the speech stream.

Strategy-focused models

Drawing on ideas originally presented by O’Malley and Chamot (1990) and Oxford (1990; updated in 2017), listening strategies have received attention as being potentially beneficial to students. Sometimes presented as a rather ambiguous area of language learning and pedagogy, various models have attempted to make listening strategies more ‘classroom-friendly’ and achievable for teachers and students. Vandergrift and Goh (2012) focus on metacognitive strategies for listening and present a teaching cycle that includes understanding personal difficulties in L2 listening, understanding listening tasks and monitoring listening performance. The sequence also includes: multiple chances to listen, problem-solving, rebuilding a text in collaboration with classmates, verifying understanding and finally reflecting and setting goals for upcoming listening events (p. 109). Siegel (2013, 2015) presents instruction that focuses on both metacognitive and cognitive strategies by incorporating listening demonstrations, textual analysis in combination with listening, and teacher ‘think alouds’ in which teachers talk students through their thought processes while listening. Specific strategies of emphasis include identifying key words, recognising shifts in topic and tone and making predications (Siegel, 2015, p. 66). Graham and Santos (2015) include an initial diagnostic stage in their pedagogic sequence in which a listener’s strengths and weaknesses are probed in order to create strategy training aimed at the individual level.

Teaching materials for listening

As we have suggested in this chapter, listening is a skill that is sometimes overlooked or downplayed in English language programs, partly because of the strong emphasis usually placed on reading, writing and speaking in academic contexts. Listening is almost taken for granted by some teachers and learners. Nunan (2002), among others, has noted that listening is often the most overlooked of the four main language skills. It is valuable, therefore, for teachers to scrutinise the materials they are using to identify to what extent and in what ways they support the learning of listening and the acquisition of discrete listening skills (e.g., distinguishing between phonemes, parsing the speech stream, listening for gist, recognising transitions, etc.). It may be the case that few listening materials are included at all in a particular coursebook or that they focus primarily on the products of listening rather than the processes and strategies (Nguyen & Abbott, 2016).

Teachers can consider questions such as the following (adapted from Zhang, 2020):

1. What do the materials aim to do? How do these aims coincide with the needs of the students?
2. What kinds of activities are included? Are they mainly comprehension exercises or is there a variety of different types of development practice?
3. Is there a meaningful context for activities?
4. Are there pre-, while- and post-listening stages included for activities?
5. Does the recorded resource for the activity consider: a) sound quality; b) speed of delivery; c) accent; d) authenticity?
6. Are any video materials included? Do they also take into account the aspects in 5 above?
7. How do visual materials incorporate facial expression and gesture? Will these be recognisable and comprehensible to students?
8. How are specific listening skills and strategies selected and practised? To what extent do they match students' needs?
9. How are these skills and strategies sequenced to scaffold listening development?
10. Do the listening materials assist students to achieve the goals of and assessments in the curriculum?

Teachers can also consider how listening activities are embedded in and sequenced with other activities. Richards (2008) notes that listening can be taught for both comprehension and learning, meaning that listening activities do not have to be stand-alone but can be integrated with other skills to extend them for language acquisition. Nguyen and Abbott (2016) suggest the value of 'dual-focus' follow up activities in textbooks, whereby a listening activity may first be followed by a speaking activity where learners get a chance to discuss the content in relation to their own experiences or opinions (and listen to others do so). Then, second, to follow up, further activities can focus exclusively on the grammar, vocabulary and/or pronunciation required for the activity just completed so that students have an opportunity to work on specific skills.

Over the last two decades the availability of authentic materials for listening has accelerated dramatically. Given internet access, teachers can now select a wide range of sources for listening including movies, streamed television programs, YouTube videos, podcasts, songs, audio-literature, as well as internet tools for connecting students (zoom, online webcasts). While teachers have an almost unlimited choice of authentic materials, the questions posed earlier apply equally when evaluating options for classroom instruction. It is also important to consider: i) what communicative goals the resources serve (learning purpose), ii) how accessible it is for students and teachers (accessibility); iii) how relevant it is to students' age, needs and interests (appropriateness); iv) whether it relates to the teaching-learning context and its objectives (applicability); v) whether it can be adapted easily to suit the stage of student learning (adaptability) (Laamri, 2009, cited in Ekawati & Yusef, 2018).

These are questions that can be used to demonstrate pedagogic consideration on the teacher's part when it comes to selection of materials for listening.

Feedback and assessment

According to Hughes (1989), there are four main purposes for assessing students: to measure proficiency; to diagnose specific strengths and weaknesses; to place students in a course or program; and to assess their achievement in a course or program. Throughout a listening program, teachers need to consider how they will provide feedback to students and assess the development of their skills to help them progress further. Engaging students in the kinds of listening activities we have described earlier can at the same time provide a means for teachers to consider assessment issues. In fact, our own view is that explicit feedback should be an integral part of listening instruction if learning is to be effectively scaffolded (e.g., as in the practice mentioned earlier on discussing correct and incorrect answers with students in relation to listening texts). Teachers can identify what aspects of listening (e.g., vocabulary, rate of speaking, topics or text structure) the student is able or not able to perform as they undertake listening activities. Feedback can be formative (providing a sense of how successful they are and how to improve) or summative (summarising or scoring their performance to reflect overall current ability). Formative feedback in particular can involve strategies students might wish to adopt and/or types of focused practice students should work on (i.e., sound combinations or blends that cause confusion). Both types of assessment are important and can be incorporated through various processes such as written evaluations and recommendations, teacher–student conferencing interviews or discussions, or self and peer feedback whereby individuals, pairs or groups of students analyse and comment on their own and each other's performances (Richards & Burns, 2012).

Where teachers decide to employ self-assessment activities, it is valuable to induct students into using them, for example, explain their purposes, how to go about doing them and what benefits they may have for learning. When assessing, teachers should also bear in mind the appropriacy of the activity to the way it is assessed. For example, assessing understanding of casual conversation through a dictation test would be misplaced. However, asking students to take notes while listening to a lecture-style presentation would be appropriate. The listening assessment should also be meaningful; students should be aware of the possible context for the listening, and who the speakers are and be able to identify some new information as they might in real-life listening, as long as this information is not overwhelming given their current skills.

In summary, as noted earlier, our view is that a pragmatic approach to listening should be taken due to variations in student age, current proficiency, individual factors and goals. The pedagogic options presented here all have benefits depending on the context in which the listening development is intended to take place. These options allow for integration of other macro-skills so that emphasis can be placed more on listening or so an even balance can be placed on the macro-skills that teachers and/or students deem necessary. Within these broad descriptions of practice, individual lessons can focus on specific sub-skills and/or listening strategies. Whatever the choices made, teachers should also be aware of the importance of integrating feedback and assessment into their teaching practices in order to scaffold their students' progress.

Future directions

In the last two years of the covid-19 pandemic, it seems clear that listening skills in language classrooms have become ever more important. In many international situations confronting students at all stages of their education, face-to-face teaching has been replaced by online learning. While these changes may not have been planned or intentional, it seems inevitable that online classrooms are set

to remain for some time, either in full, or a hybrid form combined with face-to-face instruction. Students' listening abilities and teachers' ability to teach listening are therefore being tested out in unprecedented ways.

More than ever students must listen to learn as well as learn to listen (Vandergrift, 2004). They will need to develop skills as active listeners, where they are required to decode the incoming stream of speech, understand the speakers' intentions, both of their teachers and other students, and react appropriately. These abilities will need to be fostered in a medium where there are fewer physical and contextual clues than those afforded in a classroom. If students are to maintain their progress in such environments, it is important that they also learn to expand their exposure to the language to maximise their listening input.

In these virtual spaces, teachers will need to utilise their time, not only to assist students to develop their listening but also to mediate and scaffold the listening process by fine-tuning the instructional language they use. It is therefore important that teachers raise their awareness of their interactional styles through professional development on listening so that they are well equipped to support their students. Field (2012) has argued that there is a lack of understanding of listening in current teacher educational manuals and training programs which suggests there are at least three areas where future teacher education programs need to be reconfigured. These are specific training in phonetic characteristics of the language that cause difficulties; knowledge of expert listening processes and how they differ from those of novices; and awareness of the types of strategies that can be used when student knowledge and proficiency are inadequate. Another challenge for teachers will be to expose their students to more diversified language input that more closely reflects the internationalised use of language. In this respect teachers will be challenged increasingly to move away from normative native speaker models and decontextualised uses towards more situated and contextualised interactions with a diversity of interlocutors (Chvala, 2020).

Conclusion

In this chapter, we have surveyed the field of listening and listening instruction, and argued for a pragmatic and informed approach to teaching listening. We have suggested a number of areas where teachers can extend their own knowledge of listening and consider expanding their teaching practices. We have covered these areas in the hope that listening can come 'out of the shadows' in the teaching of the four macro-skills and take its place in a more defined and deliberately taught way among these other important skills. Labelled a 'Cinderella' skill in the past, it is time for listening to be invited to the ball.

References

- Brown, G. (1990). *Listening to spoken English* (2nd ed.). London: Longman.
- Cauldwell, R. (2013). *Phonology for listening: Teaching the speech stream*. Birmingham, UK: Speech in Action.
- Chang, A., Millett, S., & Renandya, W. A. (2019). Developing listening fluency through supported extensive listening practice. *RELC Journal*, 50(3), 422–438.
- Chvala, L. (2020). Teacher ideologies of English in 21st century Norway and new directions for locally tailored ELT. *System*, 94.
- Clark, H. & Clark, E. (1977). *Psychology and language: An introduction to psycholinguistics*. Orlando, FL: Harcourt Brace Jovanovich.
- Day, R. R. & Bamford, J. (1998). *Extensive reading in the second language classroom*. New York: Cambridge University Press.
- Ekawati, D. & Yusef, F.N. (2018). Authentic materials in fostering EFL students' listening comprehension. *Advances in Social Science, Education and Humanities Research*, 25(4), 1–5.
- Emerick, M. R. (2019). Explicit teaching and authenticity in L2 listening instruction: University language teachers' beliefs. *System*, 80, 107–119.

- Field, J. (2008). *Listening in the language classroom*. Cambridge: Cambridge University Press.
- Field, J. (2012). Listening instruction. In A. Burns & J. C. Richards (Eds.), *The Cambridge guide to pedagogy and practice in second language teaching* (pp. 207–217). Cambridge: Cambridge University Press.
- Flowerdew, J. & Miller, L. (2005). *Second language listening: Theory and practice*. New York: Cambridge University Press.
- Goh, C. (2000). A cognitive perspective on language learners' listening comprehension problems. *System*, 28, 55–75.
- Grabe, W. & Zhang, C. (2013). Reading and writing together: A critical component of English for Academic Purposes teaching and learning. *TESOL Journal*, 4(1), 9–24.
- Graham, S. & Santos, D. (2015). *Strategies for second language listening: Current scenarios and improved pedagogy*. Basingstoke: Palgrave Macmillan.
- Harmer, J. (2015). *The practice of English language teaching*. (5th ed.). London: Pearson.
- Hedge, T. (2000). *Teaching and learning in the English classroom*. Oxford: Oxford University Press.
- Hinkel, E. (2006). Current perspectives on teaching the four skills. *TESOL Quarterly*, 40(1), 109–131.
- Hinkel, E. (2010). Integrating the four skills: Current and historical perspectives. In R. B. Kaplan (Ed.), *The Oxford handbook of applied linguistics* (2nd ed.) (pp. 110–126). Oxford: Oxford University Press.
- Hirvela, A. R. (2013). *Connecting reading and writing in second language writing instruction*. Michigan: University of Michigan Press.
- Hornby, A. S. (1950). The situational approach in language teaching. *ELT Journal*, 4(4), 98–103.
- Hughes, A. (1989). *Testing for language teachers*. Cambridge: Cambridge University Press.
- Kachru, B. B. (1997). World Englishes and English-using communities. *Annual Review of Applied Linguistics*, 17, 66–87.
- Lynch, T. & Mendelsohn, D. (2002). Listening. In N. Schmitt (Ed.), *An introduction to applied linguistics* (pp. 193–210). London: Arnold.
- McCarthy, M. & Carter, R. (1994). *Language as discourse: Perspectives for language teaching*. Cambridge: Cambridge University Press.
- Mendelsohn, D. (1994). *Learning to listen*. San Diego CA: Domine Press.
- Nation, I. S. P. (2009). *Teaching ESL/EFL reading and writing*. New York: Routledge.
- Nemtchinova, E. (2013). *Teaching listening*. Alexandria, VA: TESOL International Association.
- Newton, J. (2016). Teaching language skills. In G. Hall (Ed.), *The Routledge handbook of English language teaching* (pp. 428–440). New York: Routledge.
- Newton, J. & Nation, I. S. P. (2020). *Teaching ESL/EFL listening and speaking* (2nd ed.). New York: Routledge.
- Nguyen, H. & Abbott, M. L. (2016). Promoting process-oriented listening instruction in the ESL classroom. *TESOL Canada Journal*, 34(1), 72–86.
- Nunan, D. (2002). Listening in language learning. In J. C. Richards & W. Renandya (Eds.), *Methodology in language teaching: An anthology of current practice* (pp. 238–241). Cambridge: Cambridge University Press.
- O'Keefe, A., McCarthy, M., & Carter, R. (2007). *From corpus to classroom*. Cambridge: Cambridge University Press.
- O'Malley, J. & Chamot, A. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- Oxford, R. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle & Heinle.
- Oxford, R. (2017). *Teaching and researching language learning strategies* (2nd ed.). New York: Routledge.
- Renandya, W. & Farrell, T. (2011). "Teacher, the tape is too fast!": Extensive listening in ELT. *English Language Teacher Journal*, 65(1), 52–59.
- Richards, J. C. (1983). Listening comprehension: Approach, design, procedure. *TESOL Quarterly*, 17(2), 219–240.
- Richards, J. C. (2008). *Teaching listening and speaking: From theory to practice*. Cambridge: Cambridge University Press.
- Richards, J. C. & Burns, A. (2012). *Tips for teaching listening*. New York: Pearson.
- Rost, M. (1990). *Listening in language learning*. London: Longman.
- Rost, M. (2001). *Teaching and researching listening* (2nd ed.). Harlow: Longman.
- Rost, M. & Wilson, J. J. (2013). *Active listening*. London: Pearson.
- Rubin, J. (1994). A review of second language listening comprehension research. *The Modern Language Journal*, 78(2), 199–221.
- Scrivener, J. (2011). *Learning teaching: The essential guide to English language teaching*. Oxford: Macmillan Education.
- Siegel, J. (2011). Thoughts on L2 listening pedagogy. *ELT Journal*, 65(3), 318–321.
- Siegel, J. (2013). Methodological ingenuity for second language listening. In J. Schwieter (Ed.), *Studies and global perspectives of second language teaching and learning* (pp. 113–139). Charlotte: Information Age Publishing.

- Siegel, J. (2014a). Exploring listening instruction: Examinations of practice. *English Language Teaching Journal*, 68(1), 22–30.
- Siegel, J. (2014b). Advice in listening instruction: Degrees of transferability. *International Journal of Innovation in ELT and Research*, 3(2), 121–138.
- Siegel, J. (2015). *Exploring listening strategy instruction through action research*. Basingstoke: Palgrave Macmillan.
- Siegel, J. & Siegel, A. (2015). Getting to the bottom of L2 listening instruction: Making a case for bottom-up activities. *Studies in Second Language Learning and Teaching*, 5(4), 637–662.
- Vandergrift, L. (1997). The comprehension strategies of second language (French) listeners: A descriptive study. *Foreign Language Annals*, 30(3), 387–409.
- Vandergrift, L. (2004). Listening to learn or learning to listen? *Annual Review of Applied Linguistics*, 24, 3–25.
- Vandergrift, L. & Goh, C. C. M. (2012). *Teaching and learning second language listening: Metacognition in action*. New York: Routledge.
- Widdowson, H. G. (1978). *Teaching language as communication*. Oxford: Oxford University Press.
- Wilson, J. (2008). *How to teach listening*. Essex: Pearson Education.
- Zhang, X. (2020). Evaluation of suitability of a listening Textbook for English majors in universities of China. *Advances in Language and Literacy Studies*, 11(4), 87–94.

Second language listening

Michael Rost and Steven Brown

Introduction

Listening is a cognitive transformation process. It involves the intentional conversion of external stimuli into meaningful information. Listening involves a primary audio source, but typically it integrates additional input. A listener typically aims to integrate all potentially relevant external stimuli, such as environmental sounds, graphics, and text.

As a real-time process, successful listening depends on rapid, complementary processes acting in unison. The listener must integrate contributions from multiple cognitive operations: **linguistic**, **semantic**, and **pragmatic**. First language (L1) and second language (L2) listening are similar in most aspects but differ in important ways as well. This chapter examines relevant research in these listening processes, focusing on the key L1-L2 differences, in order to recommend instructional approaches that can best assist L2 learners in becoming more proficient listeners.

Linguistic processing

Linguistic processing is making sense of language as it is being heard. The goal of linguistic processing is to transform the incoming language signal into a propositional model. A proposition model is a mental representation of all words that are recognized and how these recognized words relate to each other. Linguistic processing involves what are often referred to as “bottom-up” operations: phonological organization, word recognition, and syntactic parsing.

This integration of phonological, lexical, and syntactic elements happens very rapidly and continuously. Because of the time pressure in spoken language perception, any deficits or delays in linguistic processing will result in problematic comprehension of the input. For fluent L1 and L2 listeners, most gaps and inaccuracies in this bottom-up linguistic processing can be compensated for through “top-down” semantic and pragmatic processes that are less dependent on accurate perception of the incoming signal. In most situations, it is not necessary for a listener to process the input thoroughly at a linguistic level. If some input pieces are bypassed, the listener can employ inferential processes to attain adequate “situational comprehension” (Ferreira & Yang, 2019; Ferreira & Patson, 2007). These semantic and pragmatic processes will be discussed in later sections of the chapter.

Phonological processes

Phonological processing refers to a combination of segmental and suprasegmental operations that take place in the auditory cortex of the brain. Phonological processing occurs any time that a listener

consciously pays attention to an input, and thereby receives both segmental (sequential) and non-segmental (non-linear) sources of information. Segmental refers to the sequential arrangement of phonemes (perceptually distinct units of sound in a language) that are in the input; non-segmental refers to the continuous connective aspects of the input that bind the sequence together. These suprasegmental aspects are the metrical distribution (tempo and loudness), tone boundaries (grouping and pauses), and prosodic weighting (stress, paralinguistic voice settings, and intonation), as well as contextual sounds (such as doors closing or hands clapping) that may not be directly linked to input coming from the primary audio source.

The listener's goal in phonological processing is not to decipher the phonology, but rather to utilize the phonological signal to inform overall linguistic processing. More specifically, this means using phonology to facilitate word recognition and proposition formation. In addition, phonological processing of stress and intonation will provide cues to assist in semantic and pragmatic processing, such as determining emphasis and speaker attitude.

Segmental processes

From the perspective of the speaker, the phonology of a language operates according to **the principle of maximization** (optimizing the amount of information that can fit in a spoken utterance) and **the principle of minimization** (reducing the amount of effort required to produce an utterance). Just as the speaker utilizes these efficiency principles, the listener must also utilize skills at minimizing processing effort in decoding an utterance and maximizing the information value in that utterance. In accordance with these principles, speakers generally employ assimilation (blending of consonant sounds), reduction (simplification of vowel sounds), and ellipsis (omissions of sounds and words in formulaic constructions) whenever they believe their listeners will be able to recover any missing information. This coordination between speaker and listener on pacing and signal clarity is essential for sustaining effective communication: making speech *too slow or too explicit* may actually *reduce* communicative effectiveness (Smilanic, 2021; Bradlow & Bent, 2002).

L1 listeners typically master these phonological perception systems incrementally as they are acquiring their native language oral abilities and utilize them symmetrically as they listen — what is known as “the native advantage” (Scharenborg & van Os, 2019). L2 listeners, on the other hand, will encounter consistent interference — a “non-native disadvantage” — when they undertake phonological processing in their L2 (Archibald, 2021; Cutler, 2012; Hendrickson et al., 2020). As a result of their trained expectations for their L1 phonological system, L2 listeners will experience more gaps and distortions in perception as they listen to speech in their second language, particularly in areas where the L1 and L2 phonology systems are markedly different. As described by the Critical Period Hypothesis, learners acquiring their L2 after puberty tend to encounter systematic obstacles in L2 phonology perception (and production) because during this developmental period the brain lateralizes and receptivity to new phonological systems decreases (DeKeyser, 2018; Ozcelik, 2019).

At a segmental level, the most critical issues for L2 learners concern the decoding of assimilations and reductions in the speech stream.

Assimilation

Assimilations are sound alterations that occur frequently in the co-articulation (overlapping articulation) of consonants. Consonant assimilations take place when the pure sound (citation form) of the consonant is changed due to phonological context. **Assimilation** occurs in several forms (see Table 17.1).

Consonant assimilation, which is governed by the principles of maximization and minimization, also allows consonant clusters to be abridged. When two or more consonants, often of a similar

Table 17.1 Sample of assimilations in spoken English

/t/ changes to /p/ before /m/, /b/, or /p/ (labialization)	basket maker mixed bag post mortem pocket money
/n/ changes to /m/ before /m/, /b/, or /p/ (nasalization)	Common Market open prison cotton belt pen pal
/t/ changes to /k/ before /k/ or /g/ (velarization)	credit card cut glass
/d/ changes to /g/ before /k/ or /g/ (glottalization)	bird call hard copy
/s/ changes to /ʃ/ before /ʃ/ or /j/ (palatalization)	space shuttle less yardage

articulatory nature (that is, produced with the same vocal gestures, like tongue and lip placement), occur together in rapid sequence, the clusters will be simplified, sometimes by completely eliding one of the phonemes.

Vowel reduction

Vowel reduction refers to various changes in the acoustic *quality* of vowels in syllables — their stress, duration, loudness, and precision of articulation in relation to other syllables. Typically, vowel reduction is a necessary byproduct of the stress timing of English: all vowels in unstressed syllables will be reduced from their isolated forms. Vowel reduction is perceived as a weakening, because the pure vowel is neither fully stressed, nor fully articulated in its ideal position in the mouth.

Because all vowels occurring in *unstressed* syllables will be articulated with less effort by centralizing the tongue position in the mouth, less acoustic evidence is present for the listener in decoding. The experience for the listener of this centralization is vowel reduction, which can make perception of the target phonemes problematic (Fletcher, 2010; Zhang & Francis, 2009). It is worth noting that this same phenomenon of identification difficulty occurs in computer recognition of natural language samples (Meister et al., 2020). Since accurate perception of vowels is the basis of efficient word recognition, it is important for L2 learners to undertake deliberate practice in correctly identifying words with reduced vowels in order to improve linguistic processing (Baker & Trofimovich, 2005).

Supra-segmental processes

While segmental perception decodes the sequence of sounds, at the suprasegmental level of processing (literally “above the sequence”), listeners are able to obtain useful decoding information from distribution (tempo and loudness), temporal boundaries (grouping and pauses), and prosodic weighting (stress, intonation, and vocal modulations). An additional suprasegmental process that serves to identify a speaker in terms of language background is accent, the systematic variations in style that vary regionally and socioeconomically (Gafos & Goldstein, 2012).

Word recognition

The focus of linguistic processing is **word recognition**. Recognizing words in fluent speech is the basis of both spoken language comprehension and language acquisition (Joyce, 2013; Segalowitz, 2010; Weber & Broersma, 2012). Because some aspects of phonological processing may be degraded or ambiguous, the listener will tend to rely on lexical recognition as the most stable source of information during linguistic processing (Du et al., 2020; Kieffe & Nearey, 2019).

Reliable recognition of individual lexical units (a word or a sequence of words that functions as a single item) needs to occur in rapid succession in order for the listener to keep up with the stream of speech. The two synchronous sub-tasks for the listener in word recognition are (1) identifying words and lexical phrases (Bonk, 2000) and (2) activating knowledge associated with those words and phrases (Gonzalez-Fernandez & Schmitt, 2017; Qian & Lin, 2020). For L2 listeners, lexical knowledge is the most significant variable contributing to listening proficiency, so in order to become more skilled, it is important for L2 learners to be able to recognize words they do know, and to increase their “listening lexis” — words they can readily recognize in spoken input (Carney, 2020; Lancaster, 2018; van Zeeland, 2013, 2018; Zhang & Graham, 2020).

Although word recognition would seem to be sequential — the listener should identify words in an incremental manner in the order that the sound comes in — research reveals a more complex, lattice-like process. Instead of relying solely on linear decoding, the fluent listener utilizes a phonological hierarchy, a kind of temporal mesoscale, to identify multiple groupings of sounds to decipher words (Poeppel & Assaneo, 2020).

Identification of words in the stream of speech is a process of quickly estimating lexical units and boundaries within larger phonological groupings, utilizing context to make rapid guesses about any ambiguous words (Weber & Broersma, 2012). Unlike in reading continuous text, in listening to continuous speech there is no direct auditory equivalent to the white spaces between words encountered, so the listener cannot utilize **boundary effects** in the same way that readers can. Because there are not completely reliable cues marking every word boundary, word recognition is often marked by continual uncertainty.

Word recognition often does not succeed due to external factors (degradation of the signal) or internal factors (distraction of the listener, limited vocabulary, lack of familiarity with the content) (Hickok & Poeppel, 2012). However, even with adequate vocabulary and content familiarity, strategic use of vocabulary knowledge is essential for comprehension (Matthews & Cheng, 2015). Spoken language comprehension can usually continue successfully even if some words are not recognized because the listener is able to make inferences about the meaning of an utterance through other sources of information, particularly the pragmatic context (Cicourel, 2006; Kursat & Degen, 2020). The pragmatic context will determine how much word recognition is needed for comprehension.

Once a word is recognized, semantic knowledge associated with that word must be activated immediately in order for comprehension to occur. Semantic knowledge is the neural network of concept maps, or **schemata** (or **schemas**), associated with each content word that a person knows (De Deyne & Storms, 2008; Morais et al., 2013; Siew et al., 2019). At the neural level, **schemas** involve a network of connections between the medial prefrontal cortex (mPFC) and the hippocampus, so connections between these two areas are highly active during language comprehension (Kuperberg & Jaeger, 2016).

Based on neural research, it is assumed that a concept map associated with a word is accessed through **phonological tagging** in a person’s L1 or L2 (or L3, etc.). This map would contain a node for every piece of information that the listener has acquired related to this concept, and each node would be connected with countless other nodes in the person’s lexical network. When a word

is recognized, all related nodes would be activated, through a process called **spreading activation** (Butcher & Kintsch, 2012).

In terms of knowledge activation during word recognition, L2 listening is like L1 listening in that concept maps are non-verbal: the semantic knowledge that a person gathers through the L1 or the L2 is stored in the same neural nodes, as this knowledge is non-linguistic in nature (Wallace & Lee, 2020; Boroditsky, 2018). In other words, there is a common store (or single coding) of semantic, real-world information in memory that is used in both L1 and L2 speech comprehension. But there is **dual coding**, a separate coding of phonological access for each language (Paivio, 2014). To listen efficiently, without constant code shifting, the bilingual listener has to suppress the phonological code of the “off” language during the listening event. The listener can actively use phonological processing in only one language at a time (Heredia & Cieslicka, 2018).

Syntactic processing

As a listener comes to recognize words in the speech stream, a **context effect** begins to build. A context effect is a psychological “top-down” influence that organizes input by amplifying attention to narrow expectations. Knowledge of syntax creates context effects because recognition of certain words triggers expectations of other words that are likely to occur. Prediction of incoming words becomes easier because the “search space” becomes more constrained.

Indeed, satisfactory semantic comprehension and pragmatic interpretation can take place through word recognition alone, with the listener doing only cursory analysis of the syntax, or “shallow processing” (Sanford & Graesser, 2006; Clahsen & Felser, 2018). However, for more detailed comprehension and interpretation of content, a thorough syntactic processing needs to take place.

Syntactic processing is simultaneous with lexical processing and actually facilitates word recognition through context effects (Vafaei & Suzuki, 2019). The primary goal of syntactic processing is forming propositions using the words recognized. The term “proposition” is used in linguistics to refer to a calculation of **variables** (content items) and **operators** (relational functions) that are bound to each other based on agreed upon rules of the language. Using grammatical rules, the listener assigns **grammatical roles** to the units that are recognized in the incoming speech, a process known as **grammatical parsing** (Van Petten & Luka, 2014).

Grammatical parsing is considered to involve two simultaneous passes in linked parts of the brain (Friederici & Mecklinger, 1996). These complementary passes operate across differing time spans (different temporal units) and with complementary priorities. As is inferred from neural imaging studies, the first pass involves a broader time frame — typically six to eight seconds (the span of two to three pause units, the average duration of the **phonological loop** in short-term memory) — while the second pass involves a more constrained time frame — typically just the two or three seconds of a single pause unit. The convergence of these two analyses, which correspond to sentence parsing (determining the interdependence of word elements) and discourse parsing (determining the interdependence of sentence elements) informs the syntactic processing of the incoming speech (Clahsen & Felser, 2018; Osterhout et al., 2012).

Propositional models

The integrated goal of linguistic processing — combining information from phonological, lexical, and syntactic operations — is to produce propositional models of the input. A propositional model of speech represents, in the listener’s verbal working memory (vWM), a symbolic relationship of text referents (lexical items in the spoken text) that the listener has attended to (Deschamps et al., 2020).

The propositional model of input allows the listener to hold a hierarchy of relationships in short-term memory (in an auditory buffer store, the phonological loop) while computing the meaning

of the information it represents (Baddeley & Hitch, 2019). The relationships between items are bound through connections that can be described in semantic grammars, such as **case grammar** (van Trijp, 2016), **systemic grammar** (Halliday & Webster, 2009), and **construction grammar** (Fillmore, 2008), which aim for psychological validity. These grammar systems focus on the relational frame of an utterance, the link between the verb as the organizing center of a sentence, and other elements in the sentence.

Context includes **case relations** among elements such as **Agent**, **Object**, and **Recipient**, which are considered “obligatory”: every verb requires either an agent or an object or a recipient. In addition, other case relations that may be realized, though not required, are most commonly **Instrument**, **Goal**, **Temporal**, and **Locative**. For instance, if the listener identifies a verb such as *give*, the listener will know that it requires a giver (Agent), a person given to (Recipient), and a gift (Object), and can also, optionally, entail a time (Temporal) and a place (Locative). Based on a map of these relationship expectations, the listener can reconstruct the propositional meaning of an utterance.

Semantic processing

Semantic processing, which occurs simultaneously with linguistic processing, recruits connections from the pre-frontal cortex of the brain, where memories are stored. Semantic processing supplements linguistic processing by making connections with prior experiences of the listener. When consciously attending to input, the listener naturally attempts to build meaning based on these memory connections. The goal of semantic processing is to construct an objective model of the propositions derived from the input.

Semantic processing involves activation of three operations. These are **knowledge (schema) activation**, **comprehension building**, and **inferencing**. While linguistic processing is oriented toward creation of **propositional models** to show how items in the input relate to each other, semantic processing is designed to create **structural models** that connect information in the input to previously understood concepts. The main goal of semantic processing involves relating the input to a much larger cognitive network and integrating what is new in the input (“new information”) with what knowledge is already in the listener’s long-term memory (“old information”).

Knowledge activation

Semantic knowledge is organized to facilitate comprehension, so that related concepts in one’s memory are made active in order to connect with references in the real world as they are triggered through the senses. It is hypothesized that all of the real-world knowledge of any listener is stored and accessed in networked structures of related semantic knowledge, called **schemata**.

People use schemata as prototypes for previously learned concepts. Each schema contains associations with fillable slots to categorize components, attributes, and relationships that may be encountered during the comprehension process. For example, if a listener hears “The *Mona Lisa*, which has been housed at the Louvre since 1797, is viewed by millions of patrons every year”, several schemata will be activated: “*Mona Lisa*”, “house”, “Louvre”, “1797”, “view”, “millions of patrons”, “every year”. Each schema that a listener activates during comprehension — “the *Mona Lisa*” (an object), “housed” (a concept), “Louvre” (a place), “view” (an event), “millions of patrons” (person), “every year” (time) — will trigger associated knowledge with each lexical item. Unless the speaker provides information that conflicts with the prototype, items that are associated with the schema will be assumed to have a default value (i.e., the most neutral or most common possibility).

Schemata are organized hierarchically, in topical domains, for easy access during the comprehension process. Within each schema will be links to pathways of knowledge relating both “upward” to

the superordinate content (e.g., *Mona Lisa* relates “upward” to paintings and artwork) and “downward” to the subordinate content (e.g., *Mona Lisa* relates “downward” to other paintings the listener has seen). How the specific knowledge links are arranged and interconnected is influenced to a large extent by individual differences in experiences and preferences (Canevello, 2020; Wallace, 2020).

All of our schemata contain a **shorthand code** for our personal cumulative experiences and their inter-relationships, a retrieval system that will consist of both linguistic and non-linguistic aspects. Activation of schemata related to references in the input is the basis of comprehension, as it allows us to invoke the presence of people, events, static and dynamic imagery, and other sensory data that are assumed but not explicitly referred to in the input. Activation of schemata is likely to be inaccurate in terms of depicting the actual event or experience the speaker is referring to, but the **prototypes** can be used to generate default values when specifics are left unspoken. Prototypes also allow speaker and listener (one or both of whom may be an artificial intelligence entity) to communicate sensibly about concepts that are unfamiliar to them, about which neither has any direct experience (Weicke & Sutcliffe, 2005).

The speaker and the listener do not need to have identical schemata relating to the conversational topics in order for adequate understanding to take place. Indeed, only individuals with nearly identical ages, cultural backgrounds, and life experiences would have similar schemata for common referents in discourse. Simply activating an appropriately related schema to key lexical items (verbs and nouns) allows the listener to create “semantic frames” which allow for “good enough” inferences in order to comprehend a text satisfactorily (Baker 2014; Ferreira et al., 2002). Lapses in knowledge activation will occur when the listener encounters a new lexical item (particularly a verb) or an unfamiliar concept (typically associated with a noun). However, fluent listeners can recover from a relatively small number of schematic lapses without serious loss of comprehension, if they are able to tolerate ambiguity during semantic processing (Norton, 1975; Trabanco, 2017).

Comprehension building

Although the term “listening comprehension” is widely used to refer to all aspects of listening, the term **comprehension** is used in a more specific sense in semantic processing. Comprehension — for listening, reading, or viewing — is considered to be the process of **structure building** (Britt et al., 2018; Cohn, 2013; Sanders & Gernsbacher, 2004). This entails assembling a working representation of connections that integrates the input coherently (Kintsch, 1998). In educational terms, comprehension means forming an **understanding** of all of the propositions in the input in a way that can be communicated with others (Hattie, 2012).

The essential work of comprehension building is to link one proposition with another, and to do so recursively, in real time, utilizing short-term memory as a calculation space to keep up with the pace of the input (Gallese & Lakoff, 2005). Comprehension building can be especially challenging for both L1 and L2 listeners when they are presented with unfamiliar input. The less familiar the input, the more gaps there will be in schema activation. Similarly, when the input is presented at a rapid pace, with little pausing, comprehension building will be incomplete.

Comprehension is almost never perfect, and in most cases it does not need to be. Acceptable comprehension is based on calculating the *plausible* links, patterns, and relationships between propositions and deciding upon a representation that is most coherent or is most useful to whatever task is at hand (Rost, 2020). For any extended listening experience beyond a series of several sentences, arriving at an acceptable level of comprehension is seemingly a daunting task because of the vast number of plausible links between propositions. Because of the overwhelming challenge in dealing with quantities of propositions and relationships, competent listeners develop strategies for managing extended discourse through summarization strategies and by “negotiating” with the speaker as necessary to fill in gaps in their understanding (Vandergrift & Goh, 2018b).

Inferencing

Inferencing is a vital aspect of semantic processing. Inference building is based primarily on logical deductions, which is an evolved tool of the human mind for reaching conclusions. Psychologists contend that inferencing is hard-wired into the human brain. Inferencing takes place in the frontal cortex, which is not fully developed until a person is in their mid-twenties (Christiansen & Kirby, 2003).

In classical terms, logical inferencing is usually described as either **inductive** or **deductive reasoning**, processes which differ on the dimension of certainty. **Inductive reasoning** is the method of approximative reasoning in which the premises (what is assumed to be true) are viewed as supplying some evidence, but not full assurance, of the truth of the conclusion. With **deductive reasoning**, this conclusion is more certain; it always follows the stated premises. However, most inferencing that humans do, and most inferencing required in comprehension of everyday speech, is a combination of the two, which is called **abductive inferencing**. Abductive inferencing starts with an observation or set of observations and then seeks to find the most straightforward and most likely conclusion from the observations (Johnson-Laird, 1999; Dragoni et al., 2002).

Inferences that the listener decides to make during semantic processing are largely determined by intuition (Kahneman & Frederick, 2002). In a sense, the listener is attempting to “tune in” to the speaker, trying to determine the speaker’s mental state — effectively, trying to understand the speaker’s intentions.

During extended discourse, comprehension building is always incomplete and inferencing is always uncertain. Nevertheless, the motivated listener will aim to arrive at a workable set of inferences that make sense of the incoming discourse and attempt to align with the speaker’s situational representations (Garrod et al., 2018). As with comprehension, listeners learn to manage lengthy or complex input with approximative inferencing. The number of possible underlying semantic relations between two propositions is relatively small, so a listener will usually be able to calculate and weigh possible inferential connections during real-time speech comprehension. These connections include: amplifying, adversative, alternative, background, bonding, causal, contrastive, dismissive, elaborative, evaluative, enablement, temporal (Crombie, 1985; Kintsch & van Dyke, 1983).

Pragmatic processing

Pragmatic processing is an aspect of social cognition, a set of processes that enable us to interpret social information and behave appropriately in a social environment (Toth & Davin, 2016). Pragmatic processing involves more than simply comprehending input in an *objective* sense; it also involves interpreting how the listening experience relates to the social environment in a *subjective* sense. This subjective perspective encompasses interpreting the speaker’s intentions and becoming aware of the **perlocutionary effect** — the personal impact of what the speaker is saying. Pragmatic processing occurs in parallel with linguistic and semantic processing, but it involves the listener in a more dynamic, “embodied” fashion, engaging personal affect and interpersonal responsiveness (Zwaan, 2014).

Social cognition is informed by psychological processes that allow us to make inferences about what is going on *inside other people* — their intentions, feelings, and thoughts (Spunt & Adolphs, 2019). Pragmatic processing is then the activation of this social cognition in real-time discourse. Competence with pragmatic processing involves personal, interpersonal, and social awareness when encountering a new socio-linguistic experience (Kecskes, 2019; Verschuere, 2011). Pragmatic processing may also involve an additional step of interactively “negotiating” with other participants about the meaning of the events.

Pragmatic processing for L2 learners has been widely discussed in the context of communicative competence, and as such includes raising awareness and development of communication skills: **pragmatic comprehension**, an awareness of a speaker’s intention and interpreting implicatures (Roever

& Kasper, 2018; Taguchi, 2011); **interactional competence**, a mindfulness of individual and cultural differences in perspectives, and an ability to find common ground in communication (Balboni & Caon, 2014; Hinkel, 2014; Clark, 2015); and **symbolic competence**, a cognizance of individual and cultural differences, including noticing cues that indicate miscommunication (Kramsch, 2014).

Researchers in the area of L2 pragmatics concur that there are three key notions that are integral to a listener's understanding of discourse: (1) situational framing, which is the anchoring of language to a real context; (2) speaker intention, which is the indicating of the desired result of the language used; (3) communication strategies, which are the communicative plans and tactics being used by conversational participants.

Situational framing

The primary focus of pragmatic processing is to frame the listening experience and anchor the understood propositions as part of a larger event. In order to have social cognition of an event that is unfolding, the listener needs to know the deictic dimensions of the experience, not just understand the language being used. These dimensions have been referred to in sociolinguistics by these terms:

- **Addressor**, the speaker of the utterance; **addressee**, the intended **recipient** of the speaker's utterance who has some interaction rights; **audience**, intended recipient of the speaker's utterance with no (or limited) interaction rights; **overhearers**, unintended recipients of the speaker's utterance
- **Topic**, what is being talked about, primarily and tangentially
- **Setting**, where the event is situated in place and time
- **Code**, the language use and any special (marked) linguistic features of the utterance
- **Channel**, how the communication is initiated and maintained, by speech, gestures and other non-verbal behavior, writing, texting, images, etc.
- **Event**, the social norms affecting the interaction and its interpretation
- **Genre**, the conventional categories of speech events
- **Key**, the tone, manner, and spirit of the event
- **Register**, the level of formality, stylistic choices and dialect used by speaker
- **Purpose**, the intended outcome of the event

(Hymes, 1972; Labov, 1972)

Not all of these elements may be clearly operational in any discourse event, but they all contribute to a communication system that the listener is attempting to understand. The more that the listener can understand of these contributing variables, the deeper the understanding of the discourse will be — independently of the actual language being processed. Particularly in intercultural communication, becoming aware of these variables and how they impact communication is enormously helpful for learners, as pragmatic awareness can compensate for any deficits in the listener's knowledge of the language being used.

Inferring speaker intention

The pivotal component of pragmatic processing is aligning with the speaker. This primarily involves inferring the speaker's intention or intentions and the relative weighting of those intentions (Spencer-Oatey & Kadar, 2021).

Speaker intention in discourse is most often simply an “expression” of a state, as in “the speaker expresses (a fact) about (topic)” or “the speaker expresses a belief about (situation).” In these turns of

simple expression, the speaker simply intends for the listener to accept the truthfulness and sincerity of the statement, and simply to “confirm receipt” of the expression (Stokke, 2014).

Part of socialization in any languaculture (a culture with a shared language) entails learning basic conversational maxims, the principles of social cooperation: maxim of quality (truthfulness), maxim of quantity (brevity), maxim of relevance (pertinence), maxim of manner (clarity). These conversational maxims can serve as guidelines for **politeness**: orderly exchanges between speaker and listener. In real-life practice, of course, speakers do not always adhere to these maxims. Ample conversational data reveal that speakers contravene cooperative maxims frequently, and for a variety of purposes (Westera, 2013). Understanding both the norms and the means of violating them is part of communicative competence (Spencer-Oatey & Kadar, 2021).

Because much of social discourse involves expression of facts, values, and policies (“representatives” in speech act theory), understanding speaker intention in expressing those ideas is critical to pragmatic comprehension and pragmatic competence. The most critical type of inference about speaker intention occurs in the arena of understanding the claims that a speaker makes, and the grounds and warrants that the speaker is assuming (Hitchcock, 2005).

Together, the three basic elements of an argument determine whether a representative speech act is logically and socially valid. The competent listener will realize that in almost all cases the grounds and the warrants will not be stated and therefore must be inferred by the listener. In this system of social reasoning, there are also backings (additional warrants), qualifiers (indicators of probability), and rebuttals (counter claims), but use of this essential claim-ground-warrant relationship is required for the listener to make satisfactory inferences (Toulmin, 2003; Freeman, 2011).

Providing a personal response

Because the listener has a personal stake in most live, person-to-person interactions, the listener will have a personal, affective response to what the speaker says and how the speaker says it. This responsiveness has two aspects: weighing affective involvement and formulating a response.

Weighing affective involvement

In every culture, how interlocutors in a conversation consider their status relative to the other will determine a great deal about how they will communicate with each other, the style they will adopt in the conversation, as well as the topics they will and will not introduce. Not only will this role relationship influence the conversational language, it will also influence the **affective involvement** of both participants (Bonvillain, 2019).

One aspect of affective involvement in an interaction is the raising or lowering of anxiety and self-confidence, and thus the motivation to participate in interactions in meaningful, open, and self-revelatory ways. For listeners, particularly for L2 listeners, greater affective involvement promotes better understanding through better connection with the speaker, while lower affective involvement typically results in less connection, less understanding and minimal efforts to evaluate and repair any misunderstandings that arise (Chang & Zhang, 2021; Rost, 2014).

Formulating a response

Pragmatic processing encompasses the listener formulating a response, whether or not that response is externally communicated. After the speaker initiates an act in conversation, the listener has the choice of **uptaking** the initiating move or ignoring it. According to the **Cooperative Principle** in pragmatics (Davies, 2007), the speaker intends or expects the listener to uptake the act in a “preferred” way, in a way that is considered normal and collaborative within the discourse community.

In discourse analysis parlance, the speaker intends to elicit a **preferred response** in order to keep the conversation controlled and efficient.

In transactional conversations, in which the speaker needs the listener's response to accomplish a purpose, if the listener does not provide a preferred response to the speaker's initiating move, this creates a **challenge**. By not responding with an expected gambit, the listener, intentionally or not, is challenging the **preconditions** of the speech act. The listener is challenging the presupposition that the addressee has the information or resource the speaker needs, that the addressee is willing and able to provide it, or that the speaker has the right to make the initiating move (Bavelas & Gerwing, 2011).

Challenges are **face-threatening**: they upset the speaker's self-image and assumed power in the interaction. People in all cultures have an awareness of self-image, or "face", as they communicate. Protecting face is important for interacting successfully with others. A **face-threatening act** (FTA) is one that would make someone possibly lose face, or damage it in a significant way (Sifianou, 2012).

Another type of listener response is **backchannelling**, which occurs when the listener sends short messages back during the partner's speaking turn or immediately following the speaking turn. These messages may include brief verbal utterances (e.g., *Yeah, right*), brief semi-verbal utterances (e.g., *uh-huh, awww*), smiles, laughs, or chuckles (transcribed in various ways, often as *hhhhh*), postural movements such as shrugs, and facial signals such as nods, to show attentiveness and adaptability (Buschmeier & Kopp, 2018). Backchannelling, which differs in form from culture to culture and within subcultures, reveals a number of listener states: reception of messages, adaptivity to novel information, readiness for subsequent messages, turn-taking permissions, projections, and empathy for the speaker's emotional states and shifts during the conversation (Maynard, 2005).

A third class of listener response in discourse is the **follow-up act**. Follow-up acts are responses to a discourse exchange and can be provided either by the listener or the speaker from the previous exchange. Follow-up acts can be **endorsements** (positive evaluations), **concessions** (negative evaluations), or **acknowledgments** (neutral evaluations).

Although L2 speaking instruction is often approached separately from listening instruction, pragmatic competence encompasses an integration of the two modalities, especially in face-to-face interactions. Learning strategies for how to respond in interactions — uptaking, backchanneling, and engaging in follow-up acts — are part of the cultural knowledge that the learner needs to acquire at all stages of development (Lantolf et al., 2014).

Best instructional practices for developing L2 listening

This chapter has outlined the essential processes of listening, with a particular focus on the challenges faced by L2 learners. As this chapter has described, there are three complementary systems that contribute to listening ability: linguistic processing, semantic processing, and pragmatic processing. Each of these cognitive systems presents potential difficulties for L2 listeners.

In linguistic processing, which encompasses phonological decoding, word recognition, and syntactic parsing, there are many systematic challenges. The most consistent input factors are: unexpected speaker **accents**, an unfamiliar **phonotactic pattern**, **rhythm and intonation** systems, **length** of input, number of speakers, rapid **speech rate** and lack of **pauses**, and **connected speech** phenomena (reductions and assimilations).

Instructional practices that have been shown to develop linguistic processing include:

Text preparation: selection of "optimal input" for comprehension (Krashen & Mason, 2020); simplification of texts (Rets & Rogaten, 2020; Siddharthan, 2014); input "flooding" (Hernandez, 2018).

Phonological training: rhythm and intonation training (Lee, 2020; McAndrews, 2019); segmental perception training, including minimal pairs (Sun et al., 2020; Qian et al., 2018); bottom-up listening strategy instruction (Vandergrift & Tafaghodtari, 2010).

Noticing tasks: while-listening noticing tasks (Brown, 2018; Kang, 2020; Leow, 2018), dictation variations (Davis & Rinvoluceri, 2002); dictogloss (collaborative recall) (Jibir-Daura, 2013); shadowing practices (Hamada, 2018).

Integration with reading: use of audio books, including graded readers (Chang & Millet, 2014; Popescu, 2020; Rabbidge & Lorenzutti, 2013; Vu & Peters, 2020).

Multimodal support: multimodal amplification including variations of subtitles and transcripts (Charles & Trenkic, 2015; Lee et al., 2019; Perez, 2020); audio-based mobile apps, including VR (virtual reality) and AR (augmented reality) (Alrumayh et al., 2021).

For semantic processing, several **text factors** may pose challenges to L2 learners: length of input; cognitive load, that is, the information density and lack of “orality” features (such as pauses and redundancy); complexity of grammatical structures, particularly hypotactic structures (embeddings), hypotheticals, conditionals, and multiple negatives; lack of concreteness; and non-linear organization (Bloomfield et al., 2011). In addition to text factors, the **response characteristics** of following listening tasks or assessment items will also influence ease of semantic processing (Ockey & Wagner, 2018; Sweller, 2020).

In the area of pedagogy targeting the development of semantic processing, which includes comprehension and inferring, there are several effective instructional practices that have been researched. These include:

Text selection: use of academic listening texts (Wingrove, 2017); use of authentic online video texts with selective listening tasks (Yin, 2015); construction of narrow listening and viewing experience (multiple sources on the same “narrow” topic); use of captioning in videos (Hsieh, 2020).

Listening strategy instruction: direct instruction in inferential listening strategies (Brown, 2011; Graham & Santos, 2015; Vandergrift & Goh, 2018a).

Task design: task cycles (Rost, 2016); pre-listening activation tasks (Madani & Kheirzadeh, 2022); collaborative note-taking (Harbin, 2020); summarization tasks (Graf & Birkenstein, 2014); multiple listening with progressive tasks (Monteiro & Kim, 2020); script exploitation during and after listening or viewing (Cross, 2017).

Self-access listening: audio-based vocabulary building (Matthews, 2020; van Zeeland & Schmitt, 2013); extended listening and viewing (on topics of personal interest) with appropriately supported tasks (Kiliçkaya, 2018; Ivonne & Renandya, 2019); listening journals (Chen, 2019).

For pragmatic processing, several affective and interactive factors have been identified that contribute to L2 listener difficulty. These are: **resistance** to understanding new cultures (Shaules, 2019), **unfamiliarity** with L2 interaction styles (Hinkel, 2014), lack of **willingness** to communicate (WTC) to explore cultural challenges, inadequate guidance and lack of discussion strategies for exploring cultural differences (Zwiers, 2019), and lack of confidence and inadequate strategies for live listening in face-to-face encounters (Jamshidnejad, 2020).

In the area of pragmatic processing, three main types of instructional interventions have been researched:

Input selection: use of lingua-culture texts (written and audio-visual) for developing awareness (Lou & Noels, 2019); use of texts highlighting interpersonal conflicts for awareness raising of personal and cultural differences (Buder et al., 2017); use of literary texts that involve creative conflict resolution (Khatib & Rahimi, 2012; Maley & Kiss, 2017).

Interaction tasks: utilizing progressive questioning leading toward integration of diverse perspectives (Shaules, 2019); teaching of active listening strategies (Stengel et al., 2019); use of intercultural exchange tasks (Taguchi & Yamaguchi, 2020).

Active listening training: interaction development and empathy practices (Meyerhuber, 2019; Rost & Wilson, 2013); appropriation tasks (Armbruster, 2009); probing conversations following provocative input (Singer, 2018; Zwiens, 2020).

The development of listening in all three of these domains is an essential aspect of language instruction. As research continues in L2 listening processes and instructional practices, along with advances in technology, teachers are being provided with helpful resources for helping learners make advances in L2 listening.

References

- Alrumayh, A., Lehman, S. & Tan, C. (2021). Emerging mobile apps: Challenges and open problems. *CCF Transactions on Pervasive Computing and Interaction*. <https://doi.org/10.1007/s42486-020-00055-x>
- Archibald, J. (2021). Ease versus difficulty in L2 phonology: A mini-review. *Frontiers in Communication: Language Sciences*, 6, 18–21.
- Armbruster, B. (2009). Notetaking from lectures. In R. Flippo & D. Caverly (Eds.), *Handbook of college reading and study strategy research* (pp. 220–224). New York: Routledge.
- Baddeley, A. & Hitch, G. (2019). The phonological loop as a buffer store: An update. *Cortex*, 112, 91–106.
- Baker, C. (2014). FrameNet: A knowledge base for natural language processing. *Proceedings of frame semantics in NLP: A workshop in honor of Chuck Fillmore (1929–2014)* (pp. 1–5). Baltimore, MD: Association for Computational Linguistics.
- Baker, W. & Trofimovich, P. (2005). Interaction of native- and second-language vowel systems in early and late bilinguals. *Language and Speech*, 48, 1–27.
- Balboni, P. & Caon, F. (2014). A performance-oriented model of intercultural communicative competence. *Journal of Intercultural Communication*, 35. www.immi.se/intercultural/nr35/balboni.html, 20.04.201
- Bavelas, J. & Gerwing, J. (2011). The listener as addressee in face-to-face dialogue. *International Journal of Listening*, 25, 178–198.
- Bloomfield, A., Wayland, C., Rhoades, E., Blodgett, A., Linck, J. & Ross, S. (2011). What makes listening difficult? Factors affecting second language listening comprehension. Manuscript: University of Maryland, Center for Advanced Study of Language (CASL).
- Bonk, W. (2000). Second language lexical knowledge and listening comprehension. *International Journal of Listening*, 14, 14–31.
- Bonvillain, N. (2019). *Language, culture, and communication: The meaning of messages*. London: Rowman and Littlefield.
- Boroditsky, L. (2018). How language shapes the way we think. *UNSL Open Resources Collection*. <https://irl.umsl.edu/oer/13/>
- Bradlow, A. & Bent, T. (2002). The clear speech effect for non-native listeners. *Journal of the Acoustic Society of America*, 112, 272–284.
- Britt, M., Rouet, J. & Durik, A. (2018). *Literacy beyond text comprehension: A theory of purposeful reading*. New York: Routledge.
- Brown, S. (2011). *Listening myths*. Ann Arbor, MI: University of Michigan Press.
- Brown, S. (2018). Task-based approach to listening. *The TESOL Encyclopedia of English Language Teaching*. Wiley Online Library. <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781118784235.eelt0613>
- Buder, J., Buttlere, B. & Cress, U. (2017). The role of cognitive conflicts in informational environments: Evidence from the learning sciences and social psychology. In J. Buder & F. W. Hesse (Eds.), *Informational environments: Effects of use, effective design* (pp. 53–74). Berlin: Springer.
- Buschmeier, H. & Kopp, S. (2018). Communicative listener feedback in human-agent interaction: Artificial speakers need to be attentive and adaptive. In M. Dastani, G. Sukthankar, E. André & S. Koenig (Eds.), *Proceedings of the 17th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2018)*. Stockholm, Sweden.
- Butcher, K. & Kintsch, W. (2012). Text comprehension and discourse processing. In *Experimental psychology: Language and information processing*. New York: Wiley. <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781118133880.hop20402>

- Canevello, A. (2020). Gender schema theory. In V. Zeigler-Hill & T. Shackelford (Eds.), *Encyclopedia of personality and individual differences*. Berlin: Springer.
- Carney, N. (2020). Diagnosing L2 listeners' difficulty comprehending known lexis. *TESOL Quarterly* online. <https://onlinelibrary.wiley.com/doi/abs/10.1002/tesq.3000>
- Chang, A. & Millett, S. (2014). The effect of extensive listening on developing L2 listening fluency: some hard evidence. *ELT Journal*, 1, 1–10.
- Chang, P. & Zhang, L. (2021). A Complex Dynamic Systems Theory perspective on variability in foreign language learners' listening development. *Frontiers in Psychology*, 21. doi.org/10.3389/fpsyg.2021.601962
- Charles, T. J. & Trenkic, D. (2015). Speech segmentation in a second language: The role of bi-modal input. In Y. Gambier, A. Caimi, & C. Mariotti (Eds.), *Subtitles and language learning: Principles, strategies and practical experiences*, (pp. 173–198). Bern: Peter Lang.
- Chen, C. (2019). Guided listening with listening journals and curated materials: A metacognitive approach. *Innovation in Language Learning and Teaching*, 13, 133–146.
- Christiansen, M. & Kirby, S. (2003). Language evolution: consensus and controversies. *Trends in Cognitive Sciences*, 7, 300–307.
- Cicourel, A. (2006). The interaction of discourse, cognition and culture. *Discourse Studies*, 8, 25–29.
- Clahsen, H. & Felser, C. (2018). Critical commentary: Some notes on the shallow structure hypothesis. *Studies in Second Language Acquisition*, 40, 693–706.
- Clark, E. (2015). Common ground. In B. MacWhinney & W. O'Grady (Eds.), *The handbook of language emergence* (pp. 328–353). Wiley.
- Cohn, N. (2013). Visual narrative structure. *Cognitive Science*, 37(3), 413–452.
- Crombie, W. (1985). Semantic relations between propositions. In *Process and relation in discourse and language learning* (Chapter 2). Oxford University Press.
- Cross, J. (2017). Help options for L2 listening in CALL: A research agenda. *Language Teaching*, 50, 544–560.
- Cutler, A. (2012). *Native listening*. Cambridge MA: MIT Press.
- Davies, B. (2007). Grice's Cooperative Principle: Meaning and rationality. *Journal of Pragmatics*, 39, 2308–2331.
- Davis, P. & Rinvulucru, M. (2002). *Dictation: New methods, new possibilities*. Cambridge: Cambridge University Press.
- De Deyne, S. & Storms, G. (2008). Word associations: Network and semantic properties. *Behavior Research Methods*, 40, 213–231.
- Dekeyser, R. (2018). The critical period hypothesis: A diamond in the rough. *Language and Cognition*, 21, 915–916.
- Deschamps, I., Courson, M. & Dick, A. (2020). The phonological loop: is speech special? *Experimental Brain Research*, 238, 2307–2321.
- Dragoni, A., Giorgini, P. & Serafini, L. (2002). Mental states recognition from communication. *Journal of Logic and Computation*, 12, 119–136.
- Du, G., Hasim, Z. & Chew, F. (2020). Contribution of English aural vocabulary size levels to L2 listening comprehension IRAL/DeGruyter online. www.degruyter.com/docume.t/doi/10.1515/iral-2020-0004/html
- Ferreira, F., Bailey, K. & Ferraro, V. (2002). Good-enough representations in language comprehension. *Current Directions in Psychological Science*, 11, 11–15.
- Ferreira, F. & Patson, N. (2007). The 'good enough' approach to language comprehension. *Language and Linguistics Compass*, 1, 71–83.
- Ferreira, F. & Yang, Z. (2019). The problem of comprehension in psycholinguistics. *Discourse Processes*, 56(7), 485–495.
- Fillmore, C. (2008). Border conflicts: FrameNet meets construction grammar. *Proceedings of the XIII EURALEX International Conference*, 49–60. Barcelona: EURALEX.
- Fletcher J. (2010). The prosody of speech: timing and rhythm. In W. Hardcastle, J. Laver & F. Gibbon (Eds.) *The handbook of phonetic sciences* (pp. 523–602). Wiley.
- Freeman, J. (2011). *Argument structure: Representation and theory*. Berlin: Springer.
- Friederici, A. & Mecklinger, A. (1996). Syntactic parsing as revealed by brain responses: First-pass and second-pass parsing processes. *Journal of Psycholinguistic Research*, 25, 157–176.
- Gafos, A. & Goldstein, L. (2012). Articulatory representation and organization. In A. C. Cohn, C. Fougeron & M. K. Huffman (Eds.), *The Oxford handbook of laboratory phonology* (pp. 220–231). Oxford: Oxford University Press.
- Gallese, V. & Lakoff, G. (2005). The brain's concepts: The role of the sensory-motor system in conceptual knowledge. *Cognitive Neuropsychology*, 22, 455–479.
- Garrod, S., Tosi, A. & Pickering, M. (2018). Alignment during interaction. In S. Rueschmeyer & M. Gaskell (Eds.), *The Oxford handbook of psycholinguistics* (2nd ed., pp. 573–591). Oxford: Oxford University Press.

- Goh, C. C. & Vandergrift, L. (2018). Reflective and Effective Teaching of Listening. In *Issues in Applying SLA Theories toward Reflective and Effective Teaching* (pp. 179–197). Brill.
- Gonzalez-Fernandez, B. & Schmitt, N. (2017). Vocabulary acquisition. In S. Loewen & M. Sato (Eds.), *The Routledge handbook of instructed second language acquisition* (pp. 280–298). New York: Routledge.
- Graf, G. & Birkenstein, C. (2014). *They say, I say: The moves that matter in academic writing*. (4th ed). New York: Norton.
- Graham, S. & Santos, D. (2015). *Strategies for second language listening: Current scenarios and improved pedagogy*. London: Palgrave Macmillan.
- Halliday, M. & Webster, J. (2009). *Continuum companion to systemic functional linguistics* (Chapters 1–3). London: Continuum.
- Hamada, Y. (2018). Shadowing: What is it, how to use it, where will it go? *RELC Journal*, 50, 386–393.
- Harbin, M. (2020). Collaborative note-taking: A tool for creating a more inclusive college classroom. *College Teaching*, 68, 214–220.
- Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. London: Routledge.
- Hendrickson, K., Spinelli, J. & Walker, E. (2020). Cognitive processes underlying spoken word recognition during soft speech. *Cognition*, 198, 104196.
- Heredia, R. & Cieslicka, A. (2018). Bilingual mental models. In J. Altarriba & R. Heredia (Eds.), *An introduction to bilingualism: Principles and Processes* (pp. 37–67). Mahwah NJ: Erlbaum.
- Hernandez, T. (2018). Input flooding. In *The TESOL Encyclopedia of English Language Teaching: Teaching Grammar*. New York: Wiley. <https://doi.org/10.1002/9781118784235.eelt0073>
- Hickok, G. & Poeppel, D. (2012). The cortical organization of speech processing. *Journal of Communication Disorders*, 45, 393–402.
- Hinkel, E. (2014). Culture and pragmatics in language teaching and learning. In M. Celce-Murcia, D. Brinton & M. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 394–408). Boston, MA: Cengage.
- Hitchcock, D. (2005). Good reasoning on the Toulmin model. OSSA Conference Archive. 63. <https://scholar.uwindsor.ca/ossaarchive/OSSA6/papers/63>
- Hsieh, Y. (2020). Effects of video captioning on EFL vocabulary learning and listening comprehension. *Computer Assisted Language Learning*, 33. <https://doi.org/10.1080/09588221.2019.1577898>
- Hymes, D. (1972). Models of the interaction of language and social life. In J. J. Gumperz & D. Hymes (Eds.), *Directions in sociolinguistics: The ethnography of communication* (pp. 35–71). New York: Holt.
- Ivonne, F. & Renandya, W. (2019). Extensive listening and viewing in ELT. *TEFLIN Journal*, 30, 2. <http://journal.teflin.org/index.php/journal/article/view/729/320>
- Jamshidnejad, A. (2020). The nature and functions of communication strategies in L2 oral communication. In A. Jamshidnejad (Ed.), *Speaking English as a second language* (pp. 229–251). Palgrave Macmillan.
- Jibir-Daura, R. (2013). Using dictogloss as an interactive method of teaching listening. *Advances in Language and Literature Studies*, 4, 112–116.
- Johnson-Laird, P. (1999). Deductive reasoning. *Annual Review of Psychology*, 50, 109–135.
- Joyce, P. (2013). Word recognition processing efficiency as a component of second language listening. *International Journal of Listening*, 27, 13–24.
- Kahneman, D. & Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 49–81). Cambridge: Cambridge University Press.
- Kang, H-Y. (2020). Effects of focus on form instruction through listening in blended learning on the development of grammar and listening skills. *Korean Journal of English*, 20, 662–691.
- Keckes, I. (2019). The interplay of prior experience and actual situational context in intercultural first encounters. *Pragmatics & Cognition*, 26, 112–134.
- Khatib, M. & Rahimi, A. (2012). Literature and language teaching. *Journal of Academic and Applied Studies*, 2, 32–38.
- Kiefe, M. & Nearey, T. M. (2019). Theories and models of speech perception. In W. Katz & P. Assmann (Eds.), *The Routledge handbook of phonetics* (pp. 289–313). New York: Routledge.
- Kiliçkaya, F. (2018). Information and communications technology (ICT) in listening instruction. In *Teaching Listening, Pedagogical Perspectives on Listening. TESOL Encyclopedia of Language Teaching*. New York: Wiley.
- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. Cambridge, UK: Cambridge University Press.
- Kintsch, W. & van Dyke, T. (1983). *Strategies of discourse comprehension*. New York: Academic Press.
- Kramsch, C. (2014). The challenge of globalization in the teaching of foreign languages. *Electronic Journal of Foreign Language Teaching*, 11, 249–254.

- Krashen, S. & Mason, B. (2020). The optimal input hypothesis: Not all comprehensible unput is of equal value. *CATESOL Newsletter*, May 2020. <http://beniko-mason.net/content/articles/2020-the-optimal-input-hypothesis.pdf>
- Kuperberg, G. & Jaeger, T. (2016). What do we mean by prediction in language comprehension? *Language, Cognition and Neuroscience*, 31, 32–59.
- Kursat, L. & Degen, J. (2020). Probability and processing speed of scalar inferences is context-dependent. *Proceedings of Research in the Cognitive Sciences Conference*, Stanford University.
- Labov, W. (1972). The study of language in the social context. In J. Pride & J. Holmes (Eds.), *Sociolinguistics*. London: Penguin.
- Lancaster, A. (2018). *Lexical competition in native and non-native auditory word recognition*. [Ph.D. dissertation. College Park, MD: University of Maryland].
- Lantolf, J., Thorne, S. & Poehner, M. (2014). Sociocultural theory and second language development. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition: An introduction* (pp. 207–226). New York: Routledge.
- Lee, B. (2020). Enhancing listening comprehension through kinesthetic rhythm training. *RELC Journal*, Sage Publications. <https://doi.org/10.1177/0033688220941302>
- Lee, P., Liu, Y. & Tseng, W. (2019). One size fits all? In search of the desirable caption display for second language learners with different caption reliance in listening comprehension. *Language Teaching Research*. <https://doi.org/10.1177/1362168819856451>
- Leow, R. (2018) The noticing hypothesis. *The TESOL Encyclopedia of English Language Teaching*. Wiley online. <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781118784235.eelt0086.pub2>
- Lou, N. & Noels, K. (2019). Promoting growth in foreign and second language education: A research agenda for mindsets in language learning and teaching. *System*, 86, 102126.
- Madani, B. & Kheirzadeh, S. (2022). The impact of pre-listening activities on EFL learners' listening comprehension. *International Journal of Listening*, 36, 53–67.
- Maley, A. & Kiss, T. (2017). *Creativity and English language teaching: From inspiration to implementation*. Springer.
- Matthews, J. (2020). The potential of mobile technology in testing and enhancing L2 word recognition from speech. In S. Madya, F. Hamied, W. Renandya, C. Coombe & Y. Basthomi (Eds.), *ELT in Asia in the digital era: Global citizenship and identity* (pp. 359–364). Routledge.
- Matthews, J. & Cheng, J. (2015). Recognition of high frequency words from speech as a predictor of L2 listening comprehension. *System*, 52, 1–13.
- Maynard, S. (2005). *Expressive Japanese: A reference guide to sharing emotion and empathy*. Honolulu, HI: University of Hawaii Press.
- McAndrews, M. (2019). Short periods of instruction improve learners' phonological categories for L2 suprasegmental features. *System*, 82, 151–160.
- Meister, C., Vieira, T. & Cotterell, R. (2020). Best-first beam search. *Transactions of the Association for Computational Linguistics*, 8, 795–809.
- Meyerhuber, S. (2019). Active listening as a key competence in intercultural communication education – an academic classroom example with conceptual and theoretical embedding. *Journal of Linguistic and Intercultural Education*, 1, 91–114.
- Monteiro, K. & Kim Y. (2020). The effect of input characteristics and individual differences on L2 comprehension of authentic and modified listening tasks. *System*, 20, 102336.
- Morais, A., Olsson, H. & Schooler, L. (2013). Mapping the structure of semantic memory. *Cognitive Science*, 37, 125–145.
- Norton, R. (1975). Measurement of ambiguity tolerance. *Journal of Personality Assessment*, 39, 607–619.
- Ockey, G. & Wagner, E. (2018). *Assessing listening: Moving toward authenticity*. John Benjamins.
- Osterhout, L., Kim, A. & Kuperber, G. (2012). The neurobiology of sentence comprehension. In M. Spivey, M. Joannisse & K. McRae (Eds.). *The Cambridge handbook of psycholinguistics*. Cambridge: Cambridge University Press.
- Ozcelik, O. (2019). The scope of the Prosodic Transfer Hypothesis. *Linguistic Approaches to Bilingualism*, 9, 878–882.
- Paivio, A. (2014). Intelligence, dual coding theory, and the brain. *Intelligence*, 47, 141–158.
- Perez, M. (2020). Multimodal input in SLA research. *Studies in Second Language Acquisition*, 42, 653–663.
- Poepfel, D. & Assaneo, M. (2020). Speech rhythms and their neural foundations. *National Review of Neuroscience*, 21, 322–334.
- Popescu, C. (2020). *The benefits of audio books for ESL students*. [M.A. Dissertation. Madrid, Spain: Universidad Nacional de Educación a Distancia]. http://e-spacio.uned.es/fez/eserv/bibliuned:grado-Filologia-EI-Cpopescu/Popescu_Cristina_TFG.pdf

- Qian, D. & Lin, L. (2020). The relationship between vocabulary knowledge and language proficiency. In S. Webb (Ed.), *The Routledge handbook of vocabulary studies* (pp. 66–80). New York: Routledge.
- Qian, M., Chukharev-Hudilainen, E. & Levis, J. (2018). A system for adaptive high-variability segmental perceptual training: Implementation, effectiveness, transfer. *Language Learning & Technology*, 22, 69–96.
- Rabbidge, M. & Lorenzutti, N. (2013). Teaching story without struggle: Using graded readers and audio packs in the EFL classroom. *English Teaching Forum*, 3, 28–34.
- Rets, I. & Rogaten, J. (2020). To simplify or not? Facilitating English L2 users' comprehension and processing of open educational resources in English using text simplification. *Journal of Computer Assisted Learning*. Wiley online. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jcal.12517>
- Roever, C. & Kasper, G. (2018). Speaking in turns and sequences: Interactional competence as a target construct in testing speaking. *Language Testing*, 35, 331–355.
- Rost, M. (2014). Listening in a multilingual world: The challenges of second language (L2) listening. *International Journal of Listening*, 28, 131–148.
- Rost, M. (2016). *Teaching and researching listening* (3rd ed.). New York: Routledge.
- Rost, M. (2020). Listening: Instructional design and assessment. In D. Worthington & G. Bodie (Eds.), *The handbook of listening* (Chapter 7). New York: Wiley.
- Rost, M. & Wilson, J. J. (2013). *Active listening: Research and resources in language teaching*. New York: Routledge.
- Sanders, T. & Gernsbacher, M. (2004). Accessibility in text and discourse processing. *Discourse Processes*, 37, 78–89.
- Sanford, A. & Graesser, A. (2006). Shallow processing and underspecification. *Discourse Processes*, 42, 99–108.
- Scharenborg, O. & van Os, M. (2019). Why listening in background noise is harder in a non-native language than in a native language: A review. *Speech Communication*, 108, 53–64.
- Segalowitz, N. (2010). *Cognitive bases of second language fluency* (Chapter 4, pp. 74–105). New York: Routledge.
- Shaules, J. (2019). *Language, culture and the embodied mind: A developmental model of linguaculture learning*. Berlin: Springer.
- Siddharthan, A. (2014). A survey of research on text simplification. *International Journal of Applied Linguistics*, 165, 259–298.
- Siew, C., Wulff, D., Beckage, N. & Kenett, Y. (2019). Cognitive network science: A review of research on cognition through the lens of network representations, processes, and dynamics. *Complexity*, Article ID 2108423.
- Sifianou, M. (2012). Disagreements, face, and politeness. *Journal of Pragmatics*, 44, 1554–1564.
- Singer, T. (2018). *EL excellence every day*. Los Angeles: Corwin.
- Smilanic, R. (2021). Clear speech perception: Linguistic and cognitive benefits. In J. Pardo, L. Nygaard, R. Remez, & D. Pisoni (Eds.) *The handbook of speech perception* (2nd ed.). Wiley.
- Spencer-Oatey, H. & Kadar, D. (2021). *Intercultural politeness: Managing relations across cultures*. Cambridge University Press.
- Spunt, R. P. & Adolphs, R. (2019). The neuroscience of understanding the emotions of others. *Neuroscience letters*, 693, 44–48.
- Stengel, M., Nolan, L., Donnick, D., Skym, W. & Wright, A. (2019). Best practices for teaching discussion as part of high school common core state standards. *Journal of Communication Pedagogy*, 2, 111–118.
- Stokke, A. (2014). Insincerity. *Notis*, 48, 496–520.
- Sun, H., Saito, K. & Tierney, A. (2020). A longitudinal investigation of explicit and implicit auditory processing in L2 segmental and suprasegmental acquisition. *Studies in Second Language Acquisition*, ISSN 0272-2631.
- Sweller, J. (2020). Cognitive load theory and educational technology. *Educational Technology Research and Development*, 68, 1–16.
- Taguchi, N. (2011). The effect of L2 proficiency and study-abroad experience on pragmatic comprehension. *Language Learning*, 61, 904–939.
- Taguchi, N. & Yamaguchi, S. (2020). Intercultural pragmatics in English as a Lingua Franca. In Z. Tajeddin & M. Alemi (Eds.), *Pragmatics pedagogy in English as an international language*. New York: Routledge.
- Toth, P. & Davin, K. (2016). The socio-cognitive imperative of L2 pedagogy. *The Modern Language Journal*, 16, 148–168.
- Toulmin, S. (2003). *The uses of argument* (2nd ed.). Cambridge: Cambridge University Press.
- Trabanco, A. (2017). *Tolerance of ambiguity and L2 listening comprehension*. [MA Thesis, University of Delaware].
- Vafaei, P. & Suzuki, Y. (2019). The relative significance of syntactic knowledge and vocabulary knowledge in second language listening ability. *Studies in Second Language Acquisition*, 42, 383–410.
- Van Petten, C. & Luka, B. (2014). Prospective and retrospective semantic processing: Prediction, time, and relationship strength in event-related potentials, *Brain and Language*, 135, 115–129.
- Van Trijp, R. (2016). *The evolution of case grammar*. Berlin: Language Science Press.

- van Zeeland, H. (2013). *Second language vocabulary knowledge in and from listening*. [Unpublished Doctoral Dissertation: University of Nottingham.]
- van Zeeland, H. (2018). Vocabulary in listening. *The TESOL Encyclopedia of English Language Teaching*. Wiley online. <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781118784235.eelt0614>
- van Zeeland, H. & Schmitt, N. (2013). Lexical coverage in L1 and L2 listening comprehension: The same or different from reading comprehension? *Applied Linguistics*, 34, 457–479.
- Vandergrift, L. & Goh, C. (2018b). How listening comprehension works. In J. M. Newton, D. R. Ferris, C. C. M. Goh, W. Grabe, F. L. Stoller & L. Vandergrift (Eds.), *Teaching English to second language learners in academic contexts: Reading, writing, listening, and speaking* (pp. 125–144). New York: Routledge.
- Vandergrift, L. & Goh, C. M. (2018a). *How listening comprehension works: Teaching English to second language learners in academic contexts*. New York: Routledge.
- Vandergrift, L. & Tafaghodtari, M. (2010). Teaching L2 learners how to listen does make a difference: An empirical study. *Language Learning*, 60, 470–497.
- Verschueren, J. (2011). Interactional sociolinguistics. In J. Jaspers, J. Ostman & J. Verschueren (Eds.), *Society and language use* (pp. 169–175). Amsterdam: John Benjamins.
- Vu, D. & Peters, E. (2020). Learning vocabulary from reading-while-listening. *RELC Journal*. <https://doi.org/10.1177/0033688220911485>
- Wallace, M. (2020). Individual differences in second language listening: Examining the role of knowledge, metacognitive awareness, memory, and attention. *Language Learning*, 10.1111/lang.12424.
- Wallace, M. & Lee, K. (2020). Examining second language listening, vocabulary, and executive functioning. *Frontiers in Psychology*. www.ncbi.nlm.nih.gov/pmc/articles/PMC7283586/
- Weber, A. & Broersma, M. (2012). Spoken word recognition in second language acquisition. In C. Chapelle (Ed.), *The encyclopedia of applied linguistics*. New York: Wiley.
- Weicke, K. & Sutcliffe, K. (2005). Organizing and the process of sensemaking. *Organization Science*, 16, 409–421.
- Westera, M. (2013). Attention, I'm violating a maxim! A unifying account of the final rise. In *17th Workshop on the Semantics and Pragmatics of Dialogue (DialDam)*. Amsterdam, The Netherlands: University of Amsterdam.
- Wingrove, P. (2017). How suitable are TED talks for academic listening? *Journal of English for Academic Purposes*, 30, 79–95.
- Yin, M. (2015). *The effect and importance of authentic language exposure in improving listening comprehension*. [M.A. Thesis, Culminating Projects in English, St. Cloud State University 33]. https://repository.stcloudstate.edu/eng_etds/33
- Zhang, P. & Graham, S. (2020). Learning vocabulary through listening: The role of vocabulary knowledge and listening proficiency. *Language Learning*, 70, 1017–1053.
- Zhang, Y. & Francis, A. (2009). The weighting of vowel quality in native and non-native listeners' perception of English lexical stress. *Journal of Phonetics*, 38, 260–271.
- Zwaan, R. (2014). Embodiment and language comprehension: Reframing the discussion. *Trends in Cognitive Science*, 18, 229–234.
- Zwiers, J. (2019). *Next steps with academic conversations: New ideas for improving learning with classroom talk*. Portsmouth NH: Stenhouse.
- Zwiers, J. (2020). Moving beyond “popcorn” discussions. *Educational Leadership*. www.ascd.org/publications/educational-leadership/apr20/vol77/num07/Moving-Beyond-Popcorn-Discussions.aspx

Teaching Speaking to Language Learners in the 21st Century

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Introduction

The ability to speak clearly and fluently and communicate effectively in interpersonal situations in both virtual and face-to-face (f2f) contexts is a worthy goal for second and foreign language (SFL) learners in the 21st century (Zielinski & Yates, 2014). Even though there is no doubt that speaking (also referred to as oral language production; Levelt, 1989) is an important skill from the perspective of language learners, it has often been neglected in English language teaching (Darcy, 2018). In academic contexts, a greater emphasis is often placed on the development of literacy skills (i.e., reading and writing) rather than speaking skills. Testing can also influence how much teachers emphasize speaking. For example, if tests, which are deemed important by both teachers and learners, do not include oral language production as a component, both teachers and learners may view the development of speaking skills as less important than other skills, such as reading and writing. It is also true that even if teachers recognize the importance of speaking for their learners, they may feel insecure about their own spoken language or may not have the necessary pedagogical skills to teach speaking effectively (Burns, 2019). Johnson (1996) describes speaking as a “combinatorial skill” (p. 155), and Hinkel (2006) states that learners must simultaneously attend to many different components of language, such as vocabulary, grammar, discourse, and register. Because the skills that teachers need to teach speaking are quite extensive, it is understandable that some teachers may feel underprepared.

Brown and Lee (2015) provide a rather extensive list of skills involved in speaking. These skills are as follows:

- produce of the sounds, stress patterns, rhythmic structures, and intonation of the target language;
- use grammatical structures accurately;
- assess characteristics of target audiences accurately, including shared knowledge or shared points of reference related to status and power relations of participants, their interest levels;
- select vocabulary that is understandable and appropriate for the audience, the topic being discussed, and the setting in which the speech act occurs;
- use appropriate strategies to enhance comprehensibility, such as emphasizing key words, rephrasing, or checking for listener comprehension;
- use gestures or body language appropriately;
- pay attention to the success of an interaction; and
- make adjustments in the rate of speech delivery, choice of vocabulary, and complexity of grammatical structures.

This list can serve as a guide for English language teachers as they think about developing skills for teaching speaking, particularly for teaching language learners at different levels of language proficiency (see ACTFL, 2012; Council of Europe, 2001). In order to teach speaking to beginning English learners, teachers need to be well acquainted with the phonemic inventory of the language they are teaching (i.e., the target language) and the phoneme combinations that are possible (Bailey, 2005). Speaking activities for beginning level proficiency students in English may revolve around the pronunciation of specific words and word families or practice with sentence stress and intonation patterns. In order to teach these skills effectively in English, teachers need to know about *morphology* (i.e., the system of words) and *prosody* (e.g., the patterns of stress and intonation in English). When teaching intermediate and advanced proficiency level language learners, additional knowledge and skills must be included. To help learners work together in small groups to solve problems and complete tasks, teachers need an understanding of *pragmatics* (i.e., how language is used in specific contexts), *sociolinguistics* (i.e., language in relation to social factors), and sensitivity to *register* (i.e., the way language is used in different circumstances, for example, with friends or business associates). To teach learners at advanced levels of language proficiency, teachers may need skills for helping learners organize their ideas into meaningful and logical sequences for classroom presentations to peers; thereby, making it necessary for teachers to understand both discourse and specific rhetorical structures (Goh & Burns, 2012). To teach speaking effectively, language teachers must be equipped with a broad array of skills from recognizing sounds and handling pronunciation problems to understanding culturally appropriate language in a variety of communicative encounters.

The purpose of the chapter is to help language teaching professionals understand how to develop skills for teaching speaking effectively. To this end, the chapter provides an overview of teaching speaking in terms of relevant theories that have influenced the teaching of speaking in classroom contexts and the research that supports some of the different approaches that have been used. Because clear speech is an important component of speaking, the chapter includes a section on pronunciation instruction (PI). Also addressed are practical considerations, such as options for incorporating speaking in curriculum design and development, responding to spoken language, and managing interaction. Because many teachers are interested in interactive tasks and activities for speaking, the chapter concludes with a number of classroom activities for promoting speaking for language learners with varied levels of language proficiency.

Theoretical Concepts That Underpin Teaching Speaking

Comprehensible Input

It may seem counterintuitive to approach the skill of speaking, which is depicted in the literature as oral language production or output, from the perspective of input; however, it is important for language teachers to recognize that comprehensible input plays an important role in the development of speaking skills (Krashen, 1985). Flege's (1995) research supports this position as it shows that large amounts of target language input are necessary for learners to make improvements in their pronunciation skills. Other researchers (e.g., Gass & Mackey, 2006, 2007; Long, 1981; Rogerson-Revell, 2011) view input as one of several variables, such as interaction, that contribute to the development of speaking skills.

Beginning language learners may find it difficult to obtain large amounts of comprehensible input (CI) from real-world contexts. Language teaching classrooms, therefore, play an important role in providing learners with input that is comprehensible because skilled teachers are able to *scaffold* input (e.g., use simple sentences, repetition of speech) and model conversational modifications (such as comprehension checks and clarification requests; Pica et al., 1987) to make input comprehensible, consistently and over a duration of time. It is possible that beginning language proficiency learners

may get more CI in 10 hours in a classroom with a skilled language teacher than they could get in three months in real-world contexts outside of the classroom.

Comprehensible Output

While recognizing the importance of input in the process of second language acquisition, the Output Hypothesis (Swain, 1993, 1995) also identified three primary roles for output in learning an additional language. The primary roles for output are: (a) noticing or consciousness raising, (b) metalinguistic reflection, and (c) hypothesis testing. Schmidt (1990) posited the importance of noticing specific features of language that occur within the input stream. He stated that only features in the input that are noticed by the learner will actually be acquired. Responding to spoken language requires that learners focus on and notice specific features in the input. Swain also stated that output primes learners for metalinguistic reflection and allows them to test hypotheses as they determine how to make better use of input and replace or repair inadequate interlanguage forms. Teaching speaking in classroom contexts should include features of both comprehensible input and guided output, as both are crucial in creating a solid foundation for the development of speaking skills.

Speaking as Skill Acquisition

For some researchers and teachers, teaching speaking to language learners, particularly the teaching of pronunciation, is viewed as the acquisition of new physical skills, which necessitate practice and repetition. This position seems to stand in contrast to communicative approaches to language learning in which the focus of teaching speaking is on classroom activities that promote opportunities for interaction and social uses of language. According to DeKeyser (2015), it is through practice and repetition that the automatization of language skills occurs, and it is automaticity that makes it possible for learners to develop fluency. Rogerson-Revell (2011) takes a comparable position relative to the acquisition of new physical skills, stating that “[i]f a sound or feature does not exist in the L1 [first language], the learner will need to develop new muscular habits to produce new articulations” (p. 20), and the development of these habits takes repetition and sustained practice over time. Flege (2009) also points out that L2 learners do not start the process of learning another language from scratch; they begin the process by utilizing the familiar “articulatory motor routines” (p. 176) from their L1 or in the case of multilingual learners, from other languages with which they are familiar.

Sociocultural Theory

While it seems that repeated practice over extended periods of time is useful for the development of speaking, particularly in response to PI (see Lee et al., 2015, for a meta-analysis on the benefits of explicit pronunciation teaching), it is also important for teachers to keep in mind that pronunciation practice should not be limited to mechanical drills or decontextualized language (Jones, 1997). Language learners need to be given opportunities to participate in language tasks that are used in real-world communication outside of the language teaching classroom (Henrichsen, 2017). According to sociocultural theory (see, for example, Lantolf & Poehner, 2008; Vygotsky, 1978) language is learned in its social context through interaction and collaboration. Sociocultural theorists see value in classroom environments in which learners cooperate with teachers and peers while participating in tasks that require speaking, such as solving problems, negotiating meanings, and elaborating knowledge (Fitzsimmons-Doolan et al., 2017).

Form-focused Instruction

Although some form-meaning connections can be learned implicitly through intensive and extensive input, teaching speaking through input-based methodology is thought to be insufficient (Swain, 1995, 2005) for making form-meaning connections. The most effective way for learners to notice and grasp form-meaning connections is for these connections to be explicitly identified and practiced (Norris & Ortega, 2000). When processing L2 input, learners tend to focus on meaning, often to the exclusion of form (Han et al., 2008). Explicit, form-focused instruction (FFI) has been shown to provide an effective counterbalance to this tendency. In addition, carefully designed FFI can target language structures that can contribute to building both academic language and content knowledge (Valeo, 2013).

Approaches to Teaching Speaking

Language teaching professionals take different positions relative to how speaking skills develop and the role that speaking plays in an L2 classroom, just as they might with other skills, such as listening, reading, or writing. Burns (2019) makes the distinction between two different approaches to speaking in classroom contexts: “doing” speaking and “teaching” speaking. In “doing” speaking, the focus is on participating in a variety of tasks and activities that require speaking so that learners have more opportunities for meaningful communication and interaction. In “teaching” speaking the focus is on the practice of specific features of language (e.g., sounds, prosodic features, grammatical structures) and the use of strategies (i.e., cognitive, metacognitive, interactional). “Doing” speaking gives learners meaningful communicative practice, which allows learners to generalize and transfer skills to contexts outside of the language classroom where speech is used spontaneously. “Teaching” speaking contributes to the development of automaticity for L2 phonological processing.

In order to teach speaking skills to language learners, teachers need to know what second language (L2) speaking competence entails. In their model for second language speaking competence, Goh and Burns (2012) conceptualize the knowledge and skills that underpin “doing” and “teaching” speaking according to three components: (a) knowledge of language and discourse, (b) core skills, and (c) communication strategies. Knowledge of language and discourse covers specific features of language, such as sound patterns, grammatical features, lexis, and an understanding of how discourse is connected. Core skills are characterized as the ability to process speech quickly, manage the flow of speech, and negotiate with others. Communication strategies include cognitive strategies, which can be used to compensate for limitations in knowledge of language; metacognitive, which are used for thinking consciously and planning in advance; and interactive, which include checking for understanding and rephrasing. L2 speaking is complex and may be even more cognitively demanding than speaking in an L1. The model suggests that teaching speaking in a classroom context should include both “doing” speaking and “teaching” speaking and instruction needs to be structured to include all three components of the model. Over the last two decades, scholars have taken an interest in notions of language complexity, particularly as it relates to speaking in an SFL (Bygate, 2001; Ellis, 2003; McCarthy, 1998; Skehan, 1998) and, as a result, there has been a resurgence of interest in the *teaching* of speaking, particularly pronunciation instruction (PI).

Pronunciation Instruction

Accurate, intelligible pronunciation is a crucial part of speaking and becoming an effective communicator in an SFL (Gilbert, 2012; Levis & Grant, 2003), and both language learners and teachers continue to express the desire for an increased focus on pronunciation (Derwing & Munro, 2005;

Zielinski & Yates, 2014). Language teachers recognize that SFL learners who speak with a strong foreign accent may experience negative psychological and social consequences in some contexts, even when their accent is intelligible (Derwing & Munro, 2009). The internal stress associated with the fear of being misunderstood can create feelings of social insecurity (Lippi-Green, 1997), and these feelings can impede learners' academic progress and also create barriers to success in their careers (Hewings, 2004).

Derwing and Munro (2009) state that when language learners reach a plateau in their phonological learning, continued progress depends on intervention with a skilled practitioner. Darcy (2018) and Thomson and Derwing (2015) take the position that PI is effective in the short term. In addition, a meta-analysis conducted by Lee et al. (2015) showed robust effects for PI, with larger effects resulting from longer interventions. Despite these promising results, the myth that PI is not effective still persists (Purcell & Suter, 1980), especially for the effects of PI on L2 speaking over the long term (Darcy et al., 2011; Krashen, 2013). Research over the past several decades has shed some light on specific methods for PI that enhance intelligibility, such as the instruction that reinforces the inter-relationship between perception and production (Derwing & Munro, 2015). Learners who received both form-focused and meaning-focused instruction during PI demonstrated greater improvement (Park, 2000). PI that is disconnected from communication and authentic language learning is destined to fall short (Derwing & Munro, 2015). One of the most enduring contributions of PI may be to teach learners metacognitive strategies and techniques for improving pronunciation on their own time (Henrichsen, 2017). These findings support the importance of including the three different components in Goh and Burns' (2012) model of L2 speaking competence in teaching speaking.

Planning Lessons and Designing Curriculum for Teaching Speaking

The different beliefs that teachers hold about teaching speaking determines how speaking skills are incorporated in lesson planning and curriculum design. From a structural linguistics point of view, language is separated into the four distinct skills. Teachers who view language from a structural perspective may also see language learning as a linear process relative to the acquisition of the four skills with listening and speaking (i.e., oral language) providing the foundation for the development of reading and writing (literacy skills). Goodman (1982) notes that literacy instruction is most effective when it was built on oral language competence (listening and speaking). From this point of view, language skills would be presented in a linear sequence with listening and speaking followed by reading and writing. Another view of teaching speaking is an integrated one. In planning for a language lesson, speaking is considered along with the other three language skills (i.e., listening, reading, and writing). In this view, all four modalities are taught together (Christison & Murray, 2021). This view seems quite reasonable if one considers that even in a lesson that focuses principally on speaking, it is likely that learners will also need to listen, read, and possibly write in the target language.

Yet a third view is that speaking follows naturally from CI, so there is little need to systematically teach speaking in a classroom context. Instead of creating language-learning activities that require learners to speak and interact, the focus is on providing learners with varied and sustained CI. Interaction is useful if it contributes to the variation or duration of CI. The opportunities that learners have to negotiate with others and participate in complex academic tasks and problem solving activities together contributes to the variety of CI learners receive and its duration. This view is similar to Burns' (2019) notion of "doing" speaking. Regardless of the differing views language teaching professionals have about teaching speaking and the different ways in which to incorporate speaking in lesson planning and curriculum design, they agree that teaching speaking is a critical piece of what language teachers are expected to do.

Language Teacher Education

To teach speaking to language learners in different contexts, and do so effectively, is a difficult task. Teachers need linguistic knowledge relative to the sound system of English and its phonological properties, a conscious understanding of their own pedagogical beliefs relative to teaching speaking, as well as an understanding of how those beliefs influence practice, particularly in terms of how they incorporate well established strategies and techniques for teaching speaking into their classrooms.

Linguistic Knowledge

What components (e.g., courses, workshops, modules, teaching experiences, reflections) of the teacher education program are designed to help teachers develop linguistic knowledge? To teach speaking effectively, language teachers must have a solid understanding of the sound system of English. This knowledge comprises the individual sounds (e.g., the phonemes or segmentals) and the prosodic phenomena (e.g., suprasegmentals, such as intonation in English) that occur when segments are joined together into syllables, words, phrases, sentences, and discourses. Teachers of speaking must also be able to explain in simple terms the sorts of changes that segments undergo in specific linguistic contexts. This phonological information is particularly important when teaching beginning language learners or when teaching PI specifically. Grant (2014) notes that “[s]ounds are subject to change based on their position in the word, the influence of sounds in adjacent words, the relative importance of their words in an utterance, and the role of words in discourse” (p. 27). Teachers need an understanding of the articulatory processes involved in the production of speech sounds. In addition, they must also be aware of complex phonological interrelationships (Dickerson, 2009). Because of these interrelationships, there is no clear step-by-step type of progression when learning English phonology as phonological change is dependent on the linguistic context.

Teacher Beliefs

What components (e.g., courses, workshops, modules, teaching experiences, reflections) of a teacher education program are designed to help teachers understand their beliefs and how their beliefs influence practice? Beliefs are judgments that we make about ourselves and others. Nation and Macalister (2009) stressed that what teachers do is a reflection of their beliefs and that what teacher believe has a greater effect on instructional design and implementation than teacher knowledge. The decisions that teachers make in their classrooms are strongly affected by their own learning experiences and the beliefs they have about teaching and learning in general (Borg, 2006; Phipps & Borg, 2009), and more specifically about teaching speaking. For example, teacher beliefs likely determine which components of speaking are taught, which components are considered the most essential to clear speech, in which order they should be taught, and which activities would be the best ones to use (Levis, 2005). When teachers understand how their own beliefs influence their instructional choices, they are more likely to be open to considerations of practices that derive from research and are associated with positive learner outcomes. In order to prepare teachers to teach speaking successfully, teacher education programs and professional development opportunities need to focus on helping teachers understand and reflect on their beliefs.

Established Classroom Practices

What components (e.g., courses, workshops, modules, teaching experiences, reflections) of a teacher education program are designed to help teachers understand established classroom practices

for teaching speaking? For teaching speaking and PI, there is already an impressive body of established classroom techniques and activities that appear in a variety of publications (e.g., see Cauldwell, 2013; Celce-Murcia et al., 2010; Gilbert, 2012; Grant, 2017; Hewings, 2004; Rogerson-Revell, 2011), and these published materials serve as essential resources for teachers. Teachers also need to be aware of the ongoing results of research, so they can compare the findings from ongoing research with established and prevailing practices.

Responding to Spoken Language

Corrective feedback has been shown to play an essential role in the development of speaking skills (Darcy, 2017, 2018). In PI, larger effect sizes are associated with interventions that include corrective feedback (Lee et al., 2015), and corrective feedback that includes *recasts* (i.e., reformulations or expansions on ill-formed or incomplete utterances) was found to be most effective. When providing corrective feedback to language learners, Lyster and Mori (2006) suggest that teachers follow the *counterbalance* principle, which orients learners to doing the opposite of what they are used to in order to balance learning, such as providing explicit, metalinguistic feedback (i.e., form-focused instruction) in the context of communicative activities. For corrective feedback to be effective, teachers must use it strategically. In other words, teachers should not correct or comment on all errors but reserve corrections for the most prominent ones. At the same time, learners should be encouraged to use a similar process with their own L2 output as research confirms that learners also benefit from this process (Jenkins, 2002).

There are six different feedback types that teachers have used successfully with L2 learners (Lyster, 1998; Russell, 2009; Tedick & de Gortari, 1998). These types are the following:

- Clarification. The teacher lets students know that they have not understood and that repetition or reformulation is necessary.
- Elicitation. The teacher elicits the correct form from students by asking questions and helping students to complete a phrase or question.
- Explicit correction. The teacher lets students know that the utterance contains an error, and the teacher provides the correct form.
- Recasting. The teacher reformulates a portion of a student's utterance that contains an error but does not correct the error.
- Repetition. The teacher draws a student's attention to the error, corrects it, and has the student repeat the correct form.
- Metalinguistic clues. The teacher asks the learners yes/no questions about their utterances, such as, *Are you certain that's how we say it in English?*

Clarification, elicitation, and metalinguistic cues lead learners to correct their own errors, while explicit correct, recasts, and repetition do not. The types that are least likely to result in self-repair are recasts and explicit correction (Lyster & Ranta, 2006); however, these two types are most frequently used by teachers (Wilén et al., 2007). These data are useful for teachers to consider as they determine how to provide effective corrective feedback to their students.

Interaction in the Classroom

Opportunities for interaction and negotiation of meaning in language classrooms are important for second language acquisition (Long, 1981, 1985) and the development of speaking skills. In order for learners to experience successful interactions, language classrooms should foster opportunities for interaction and help students develop appropriate skills for working together in groups. To this

end, language teachers must be knowledgeable about *group dynamics* (i.e., the structure and purposes of groups) and develop skills for selecting the appropriate group structures to facilitate interaction as appropriate for the instructional activity, proficiency level of the learners, and previous experiences with working in collaborative groups.

Group Dynamics

Christison and Bassano (1995) offer a set of six strategies for structuring group dynamics to promote interaction. In their system of group dynamics, they encourage language teachers to begin the process of developing skills for collaboration with restructuring activities because language learners may be unfamiliar with student–student interaction and small group work. Restructuring activities are designed to facilitate one–on–one interaction between students for short periods of time in order to complete very specific and well-directed activities. “Find Someone Who” (Moskowitz, 1978) is a restructuring activity. In this activity each student is given a list of statements. The goal is for a student to interact with their peers to obtain signatures next to statements that are true for them (e.g., *has blue eyes, likes ice cream, can recite a poem*). In dyads, students are given an opportunity to work one–on–one with each student in the class before they branch out to work in small or large groups. Small groups are defined as groups of between three to six students. Dyads and small groups help students develop confidence and feel more comfortable with other students in the class. Large groups are defined as seven plus students. One–centered activities focus attention on one student for a short period of time for the purpose of giving each student an experience of success. These activities encourage shy students to do more speaking and verbal students to do more listening. Unified group activities require that all members of the group work together in order to complete a task successfully. To promote interaction in the classroom, teachers of speaking should vary group dynamics to promote interaction and create a positive affective climate for language learning.

Activities to Promote Speaking

One purpose of speaking activities is to help language learners develop the skills necessary to handle the complexities of spontaneous speech in real-world contexts outside of the classroom. Even though explicit form-focused interventions, such as drills and pronunciation exercises, can be effective (Lee et al., 2015), language learners also want opportunities to interact with others and improve their skills for communicating with others. The example activities promote interaction among students, give students varied experiences with spoken language, and provide opportunities for students to speak spontaneously in a classroom context. The activities are presented as generic activities. In other words, they can easily be adapted for students’ level of language proficiency, age group, and content.

Discussions

Creating successful discussion groups with language learners is a result of careful planning and following a set of principles. These principles include the following:

1. Establish a purpose for the discussion activity. If students know why they are being asked to participate in a discussion, they are more likely to contribute relevant ideas to the discussion.
2. Give clear and specific step-by-step instructions so that learners know how to participate in the discussion.
3. Small groups are generally more effective than large groups. Quiet students may avoid contributing in large groups.
4. Vary the methods you use for getting students in groups.

5. Speaking turns should be divided among the learners as evenly as possible.
6. Encourage students to ask questions.
7. Choose topics for discussion that are intrinsically interesting to learners and structure questions so that there are no right or wrong answers.
8. Topics or questions should require learners to defend their opinions or points of view.

Brainstorming or Conferencing

Students are given a specific topic and a limited time to generate ideas. One person is selected as the scribe and is the taskmaster who keeps the group on task. Students are given a limited time (e.g., one or two minutes) to make a list of 15 to 20 items that fit into a certain category, for example, is made of paper, can be folded, or lives in the ocean.

Information Gap

Information gap activities are activities in which learners are missing some of the information they need to complete a task. To get the missing information, they need to talk to each other to find it. For example, Student A has information that Student B does not have and vice versa. The goal is for students to use strategies to get the information they need from their partner. Once students get the information they need, they can solve a problem or answer a set of questions together. Each partner plays an important role in the completion of the task because the task cannot be completed unless both partners provide information. Each person has the opportunity to speak and contribute.

Interviews

Interviews are excellent ways to get students talking. They can be implemented in small groups or as one-centered activities (see Group Dynamics section earlier in this chapter). The learner being interviewed receives a set of questions in advance so that they know what type of questions they will be asked to answer. Interview questions can be teacher or student created, but the questions should be constructed in such a way that there are no right or wrong answers. The purpose of interviews is to give learners opportunities to speak so that they can gain confidence in speaking.

Story Retelling

In contexts outside of the language classroom, retelling is common. Teachers and learners alike are often inclined to retell stories to friends or family (Fisher & Frey, 2007). Retelling occurs in many different cultures, so the structure with its beginning, middle (where the story is developed), and end seems natural for most language learners. Language learners can benefit from using story maps to guide them in the process of retelling. A story map may be characterized in terms of *wh-* questions—*who*, *what*, *when*, *where*, and *why*. In the process of story retelling, all of these *wh-* questions would be answered, but the ordering may vary. The stories used in retelling may come from personal experiences, news, short stories, books, movies, social media, and multiple sources of digital media online.

Roleplaying

Roleplaying is another technique for getting students to speak and interact in the context of a classroom, and it encourages students to practice speaking and interacting in semi-structured conversations within small groups. Typically, learners receive guidance in creating their role play: a description of the social context, a list of characters, personal information about the characters,

examples of phrases and language that might be used, and the intended outcome. Because of the guidance they receive and the time they have for planning, roleplaying can be effective in helping learners make appropriate choices for language use in particular social settings and for specific audiences or situations.

Future Directions/Conclusion

As the world is becoming increasingly multilingual, language teachers have begun to see a shift in the composition of learners in their classrooms. In English language teaching classrooms, there are many learners who are multilingual and come to the task of learning English as an additional language (EAL), meaning that English is a third, fourth, or even fifth language in their linguistic repertoires. Traditional practices of teaching speaking in classroom contexts have predominantly revolved around the target language use. For example, the American Council of Teaching Foreign Languages (ACTFL) recommends that teachers use the target language 90% of the time (ACTFL, n.d.). While most researchers and language teaching practitioners agree that exposure to the target language is essential for second language acquisition to occur, there is also research to support the fact that the use of an L1 in learning a target language is useful (e.g., García & Kleyn, 2016; Hult, 2017). Cenoz and Gorter (2017) also focus on the importance of including learners' full linguistic repertoires in learning an additional language in a classroom context.

Teachers of speaking, particularly teachers in classrooms where English is the target language, have a unique challenge. This challenge is to determine how to enact the multilingual turn (May, 2019) and create a pedagogical approach to teaching speaking in a target language that includes the use of learners' complete language backgrounds as they acquire English. Such an approach requires a unique pedagogical framework (Alisaari et al., 2019; Haukås, 2016) and a collective body of research to determine its overall effectiveness.

The ability to speak clearly and effectively and engage with others in contexts outside of the language classroom is an important goal for learners. If language teachers are to help learners achieve this goal, it is essential that target language classrooms provide a rich environment where meaningful communication can take place and learners can also receive explicit instruction to develop their linguistic knowledge. This chapter has considered the complex nature of teaching speaking and its theoretical underpinnings. In addition, it has explored different views on teaching speaking, pronunciation instruction, the role of speaking in lesson planning and curriculum design and corrective feedback and responses to spoken language. The chapter also included a section on language teacher education, practical considerations relative to speaking, such as group dynamics, and offered some useful classroom activities to promote speaking and create a classroom climate that focuses on active learning so that learning to speak in another language can be meaningful and rewarding.

References

- ACTFL. (2012). *ACTFL proficiency guidelines 2012*. www.actfl.org/resources/actfl-proficiency-guidelines-2012
- ACTFL. (n.d.) *Guiding principles*. www.actfl.org/resources/guiding-principles-language-learning/use-target-language-language-learning
- Alisaari, J., Heikkola, L. M., Commins, N., & Acquah, E. O. (2019). Monolingual ideologies confronting multilingual realities. Finnish teachers' beliefs about linguistic diversity. *Teaching and Teacher Education*, 80, 48–58.
- Bailey, K. (2005). *Practical English language teaching: Speaking*. McGraw Hill.
- Borg, S. (2006). *Teacher cognition and teacher education: Research and practice*. Continuum.
- Brown, H. D. & Lee H. (2015). *Teaching by principles: An interactive approach to language pedagogy* (4th ed.) Pearson.
- Burns, A. (2019). Concepts for teaching speaking in the English language classroom. *LEARN Journal*, 12(1), 1–11.
- Bygate, M. (2001). Speaking. In R. Carter and D. Nunan (Eds.), *The Cambridge guide to the teaching English to speakers of other languages* (pp. 14–20). Cambridge University Press.

- Cauldwell, R. (2013). *Phonology for listening: Teaching the stream of speech*. Speech in Action.
- Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2010). *Teaching pronunciation: A course book and reference guide* (2nd ed.) Cambridge University Press.
- Cenoz, J. & Gorter, D. (2017). Minority languages and sustainable translanguaging: Threat or opportunity? *Journal of Multilingual and Multicultural Development*, 38, 901–912.
- Christison, M. & Murray, D. E. (2021). *What English language teachers need to know: Designing curriculum* (Vol. 3, 2nd ed.). Routledge.
- Christison, M. A. & Bassano, S. K. (1995) *Look who's talking* (2nd ed.) Alta Book Center Publishers.
- Council of Europe. (2001). *Common European Framework of Reference (CEFR)*. www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions
- Darcy, I. (2017). *A psycholinguist walks into a classroom: A road-map for bridging research and practice in pronunciation teaching*. <http://speechlab.utah.edu/Darcy%20PSLLT%202017%20Keynote.pdf>
- Darcy, I. (2018). Powerful and effective pronunciation instruction: How we can achieve it. *The CATESOL Journal*, 30, 13–45.
- Darcy, I., Ewert, D., & Lidster, R. (2011). Bringing pronunciation instruction back into the classroom: An ESL teacher's pronunciation "toolbox". In J. Levis & K. LeVelle (Eds.), *Proceedings of the 3rd pronunciation in second language learning and teaching conference* (pp. 93–108). Iowa State University.
- DeKeyser, R. (2015). Skill acquisition theory. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition: An introduction* (2nd ed., pp. 97–113). Routledge.
- Derwing, T. M. & Munro, M. J. (2009). Putting accent in its place: Rethinking obstacles to communication. *Language Teaching*, 42(4), 476–490. <https://doi.org/10.1017/S026144480800551X>
- Derwing, T. M. & Munro, M. J. (2015). *Pronunciation fundamentals: Evidence-based perspectives for L2 teaching and research*. John Benjamins Publishing Company.
- Dickerson, W. (2009). Walking the walk: Integrating the story of English phonology. In J. Levis & K. LeVelle (Eds.), *Proceedings of the 1st pronunciation in second language learning and teaching conference* (pp. 10–23). Iowa State University.
- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.
- Fisher, D. & Frey, N. (2007). *Checking for understanding: Assessment techniques for your classroom* (2nd ed.). Association of Supervision and Curriculum Development (ASCD).
- Fitzsimmons-Doolan, S., Grabe, W., & Stoller, F. L. (2017). Research support for content-based instruction. In M. A. Snow & D. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (pp. 21–35). University of Michigan Press.
- Flege, J. E. (1995). Second-language speech learning: Theory, findings, and problems. In W. Strange (Ed.), *Speech perception and linguistic experience: Theoretical and methodological issues* (pp. 233–277). York Press.
- Flege, J. E. (2009). Give input a chance. In T. Piske & M. Young-Scholten (Eds.), *Input matters in SLA* (pp. 175–190). Multilingual Matters.
- García, O. & Kleyn, T. (2016). Translanguaging theory in education. In O. García & T. Kleyn (Eds.), *Translanguaging with multilingual students: Learning from classroom moments* (pp. 9–33). Routledge.
- Gass, S. M. & Mackey, A. (2006). Input, interaction and output: An overview. *AILA Review*, 19(1), 3–17.
- Gass, S. M. & Mackey, A. (2007). Input, interaction, and output in second language acquisition. In B. VanPatten, G. D. Keating, & S. Wulff (Eds.), *Theories in second language acquisition: An introduction* (3rd ed., pp. 192–222). Routledge.
- Gilbert, J. B. (2012). *Clear speech: Pronunciation and listening comprehension in North American English: Student's book* (4th ed.). Cambridge University Press.
- Goh, C. C. M. & Burns, A. (2012). *Teaching speaking: A holistic approach*. Cambridge University Press.
- Goodman, K. (1982). *Language, literacy, and learning*. Routledge.
- Grant, L. (2014). Prologue to the myths: What teachers need to know. In L. J. Grant (Ed.), *Pronunciation myths: Applying second language research to classroom teaching* (pp. 1–33). University of Michigan Press.
- Grant, L. (2017). *Well said: Pronunciation for clear communication* (4th ed.) National Geographic Learning.
- Han, Z., Park, E. S., & Combs, C. (2008). Textual enhancement of input: Issues and possibilities. *Applied Linguistics*, 29(4), 597–618. <https://doi.org/10.1093/applin/amn010>
- Haukás, A. (2016). Teachers' beliefs about multilingualism and a multilingual pedagogical approach. *International Journal of Multilingualism*, 13(1), 1–18.
- Henrichsen, L. (2017). Advanced English pronunciation for undergraduate and graduate students. In J. Murphy (Ed.), *Teaching the pronunciation of English: Focus on whole courses* (pp. 197–217). University of Michigan Press.
- Hewings, M. (2004). *Pronunciation practice activities*. Cambridge University Press.
- Hinkel, E. (2006). Current perspectives on teaching the four skills. *TESOL Quarterly*, 40(1), 109–131.

- Hult, F. M. (2017). More than a lingua franca: Functions of English in a globalised educational language policy. *Language, Culture and Curriculum*, 30, 265–282.
- Jenkins, J. (2002). A sociolinguistically based, empirically researched pronunciation syllabus for English as an international language. *Applied Linguistics*, 23(1), 83–103. <https://doi.org/10.1093/applin/23.1.83>
- Johnson, K. (1996). *Language teaching and skill learning*. Blackwell.
- Jones, R. (1997). Beyond listen and repeat: Pronunciation teaching materials and theories of second language acquisition. *System*, 25(1), 103–112.
- Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Longman.
- Krashen, S. D. (2013). The effect of direct instruction on pronunciation: Only evident when conditions for monitor use are met? *Gist Education and Learning Research Journal*, 7, 271–275.
- Lantolf, J. P. & Poehner, M. E. (2008). *Sociocultural theory and the teaching of second languages*. Equinox.
- Lee, J., Jang, J., & Plonsky, L. (2015). The effectiveness of second language pronunciation instruction: A meta-analysis. *Applied Linguistics*, 36(3), 345–366. <https://doi.org/10.1093/applin/amu040>
- Levelt, W. J. M. (1989). *Speaking: From intention to articulation*. MIT Press.
- Levis, J. & Grant, L. (2003). Integrating pronunciation into ESL/EFL classrooms. *TESOL Journal*, 12(2), 13–19. <https://doi.org/10.1002/j.1949-3533.2003.tb00125.x>
- Levis, J. M. (2005). Changing contexts and shifting paradigms in pronunciation teaching. *TESOL Quarterly*, 39(3), 369–377.
- Lippi-Green, R. (1997). *English with an accent: Language, ideology, and discrimination in the United States*. Routledge.
- Long, M. (1981). Input, interaction, and second language acquisition. In H. Winitz (Ed.), *Native language and foreign language acquisition (Annals of the New York Academy of Sciences)* (pp. 259–278). NYAS.
- Long, M. (1985). Input and second language acquisition theory. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 377–393). Newbury House.
- Lyster, R. (1998). Negotiation of form, recasts, and explicit correction in relation to error types and learner repair in immersion classrooms. *Language Learning*, 48(2), 183–218.
- Lyster, R. & Mori, H. (2006). Interactional feedback and instructional counterbalance. *Studies in Second Language Acquisition*, 28(2), 269–300.
- Lyster, R. & Ranta, L. (2006). Interactional feedback and instructional counterbalance. *Studies in Second Language Acquisition*, 28(3), 269–300. <https://doi.org/10.1017/S0272263106060128>
- May, S. (2019). Negotiating the multilingual turn in SLA. *The Modern Language Journal*, 103, (Supplement, 2019), 122–129.
- McCarthy, M. (1998). *Spoken language and applied linguistics*. Cambridge University Press.
- Moskowitz, G. (1978). *Caring and sharing in the foreign language class*. Newbury House.
- Nation, P. & Macalister, J. (2009). *Language curriculum design*. Routledge.
- Norris, J. M. & Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning*, 50(3), 417–528. <https://doi.org/10.1111/0023-8333.00136>
- Park, J. K. (2000). *The effects of forms and meaning-focused instruction on ESL learners' phonological acquisition* [Doctoral dissertation, University of Pennsylvania]. <http://repository.upenn.edu/dissertations/AAI9976464>
- Phipps, S. & Borg, S. (2009). Exploring tensions between teachers' grammar teaching beliefs and practices. *System*, 37, 380–390.
- Pica, T., Young, R., & Doughty, C. (1987). The impact of interaction on comprehension. *TESOL Quarterly*, 21(4), 737–758.
- Purcell, E. T. & Suter, R. W. (1980). Predictors of pronunciation accuracy: A re-examination. *Language Learning*, 30(2), 271–287.
- Rogerson-Revell, P. (2011). *English phonology and pronunciation teaching*. Continuum.
- Russell, V. (2009). Corrective feedback, over a decade of research since Lyster and Ranta (1997): Where do we stand today? *Electronic Journal of Foreign Language Teaching*, 6(1), 21–31.
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129–158.
- Skehan, P. (1998). *A cognitive approach to language learning*. Oxford University Press.
- Swain, M. (1993). The output hypothesis: Just speaking and writing aren't enough. *The Canadian Modern Language Review*, 50(1), 158–164.
- Swain, M. (1995). Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds.), *Applied linguistics: Principles and practice in applied linguistics* (pp. 125–144). Oxford University Press.
- Swain, M. (2005). The output hypothesis: Theory and research. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 471–482). Lawrence Erlbaum Associates.
- Tedick, D. J. & de Gortari, B. (1998). Research on error correction and implications for classroom teaching. *ACIE Newsletter*, 1(3). www.carla.umn.edu/immersion/acie/vol1/May1998.pdf

- Thomson, R. I. & Derwing, T. M. (2015). The effectiveness of L2 pronunciation instruction: A narrative review. *Applied Linguistics*, 36(3), 326–344. doi.org/10.1093/applin/n076
- Valeo, A. (2013). The integration of language and content: Form-focused instruction in a content-based language program. *The Canadian Journal of Applied Linguistics*, 16(1), 25–50.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.). Cambridge, MA: Harvard University Press.
- Wilén, W., Hutchison J., & Ishler, M. (2007). *Dynamics of effective secondary teaching* (6th ed.) Pearson.
- Zielinski, B. & Yates, L. (2014). Pronunciation instruction is not appropriate for beginning-level learners. In L. Grant (Ed.), *Pronunciation myths: Applying second language research to classroom teaching* (pp. 56–79). University of Michigan Press.

Teaching speaking in L2 contexts

Willy A. Renandya and Minh Thi Thuy Nguyen

Introduction

One of the most important goals of learning English in a second or foreign learning (L2) context is to be able to speak the language for a variety of communicative purposes. However, in many L2 learning contexts, students often find it challenging to express themselves fluently in the target language (TL). They may be able to listen or read with a fair degree of comprehension and they may even be able to communicate in writing, but communicating orally in the language poses a special challenge. They often report experiencing a wide range of speaking-related problems such as lack of vocabulary and grammar knowledge, poor pronunciation skills, lack of knowledge about how to start, maintain and end a conversation politely and lack of confidence when speaking with more competent speakers of English. This chapter discusses the nature of L2 speaking by drawing on the work of L2 speaking scholars such as Goh and Burns (2012), Newton and Nation (2020), and Richards (2008), and also our own experiences teaching English to L2 learners. The chapter explores the kinds of knowledge and skills that L2 learners need to develop during the course of their study, and offers suggestions on how the teaching of speaking can best be approached in L2 classroom contexts. We first begin by discussing speaking as a product and process, highlighting areas that have important implications for teaching and learning.

Speaking as a product and process

Learning to speak in a second language involves learning to produce different types of discourse or speaking genres for different social and communicative purposes. Brown and Yule (1983) distinguish between socially and pragmatically motivated speeches. Socially motivated speech or interactional talk primarily serves social functions such as establishing and maintaining social relationships. Examples of this type of discourse are making small talk, jokes and casual conversations. Pragmatically motivated speech or transactional talk involves exchanging information, or goods and services, and hence has primary information focus. Examples of this type of talk include asking for information at the information centre, ordering food at the restaurant, making a complaint at customer services and so on.

Most interactions in real life involve elements of both types of talk. For example, a business meeting can also involve some interpersonal exchanges even though the primary function of the meeting is transactional (Burns, 2013). Expanding Brown and Yule's (1983) framework, Richards (2008) distinguishes between talk as interaction (e.g. small talk, casual conversations and personal recounts), talk as transaction (e.g. classroom discussion, problem solving, booking accommodation,

exchanging currency, etc.), and talk as performance (e.g. public talk, classroom presentations, lectures, etc.). Each type of talk requires specific skills. For example, the skills involved in using talk as interaction include, among others, knowing how to open and close conversations, using adjacency pairs, turn taking, interrupting and reacting to others. Those involved in using talk as transaction are explaining, describing, asking for clarification and confirming understanding, justifying an opinion, making suggestions and so on. Using talk as performance requires knowledge of appropriate format, maintaining coherence and cohesion, engaging with and creating an effect on the audience and using careful oral language style (Richards, 2008). In order to communicate effectively in the real world, learners need to develop the ability to produce various types of talk not only accurately and appropriately for the sociocultural context in which they are interacting, but also fluently. Hence, speaking is never an easy skill to acquire, especially for foreign language learners who do not get to regularly hear and use the target language in naturalistic settings.

According to Goh (2016, p. 145), as a complex skill, speaking “involves dynamic interactions of mental, articulatory and social processes”. Cognitively, speaking involves the speaker firstly deciding on what to say (the process of conceptualisation) and then constructing (the process of formulation) and uttering (the process of articulation) the message in the TL using necessary linguistic and socio-cultural knowledge (Levelt, 1989). The capacity to select content for the speech requires not only knowledge of the topic but also awareness of the type (e.g. formal presentation versus casual conversation) and context of interaction (e.g. participants, topic and settings) involved. Formulating what to say involves selecting and making use of lexical and grammatical means (e.g. words, phrases and sentences) to make meaning. This process requires effective retrieval of linguistic and sociocultural knowledge from the long-term memory to deliver in real time one’s message. Finally, articulation requires mastery of the sounds and sound patterns to be able to physically produce the speech (Burns & Hill, 2013; Goh, 2016). The three mental processes can take place in a linear manner (learners engaging in mental planning of what to say before formulating and producing it) or at the same time (e.g. in the production of impromptu speeches) (Goh, 2016).

Depending on the learner’s proficiency, the production of speech may not be an automatic process, but a conscious and challenging one (Hardace & Guvendir, 2018). Spontaneous interaction may put a great deal of processing and production demands on learners. Low proficiency learners may have to spend more time on planning and rehearsing their messages to compensate for the lack of fluency (Hardace & Guvendir, 2018), or use communicative strategies to delay the production (Goh, 2016). They may also engage in self-monitoring (checking their message in terms of accuracy and appropriateness) and evaluation (judging how effectively the message is delivered and to what extent communicative goals are achieved), which can happen at the end of an utterance or the whole speech event (Goh, 2016). Due to the processing difficulty and hence risk of face loss involved, the learner may experience anxiety and resistance when speaking. As such, speaking is not only a complex mental process but also a demanding affective process that needs to be adequately addressed in the speaking lesson (Burns & Hill, 2013).

Speaking competence

According to Goh (2016) and Goh and Burns (2012), speaking competence requires the mastery of various enabling skills, strategies and types of knowledge, and developing speaking proficiency which “involves increasing the ability to use these components in order to produce spoken language in a fluent, accurate and socially appropriate way, within the constraints of a speaker’s processing” (Burns, 2013, p. 1967). In terms of knowledge, learners need to understand grammar in relation to spoken language and different types of speaking genres (Goh, 2016; Goh & Burns, 2012). Spoken language has distinct characteristics that reflect the “demands of face-to-face interaction and the real time synthesis of talk” (McCarthy, 1998, p. 77). The basic units of spoken language are not

sentences but clauses (utterances), often linked together by means of conjunctions (*and, then, so*, etc.). It also involves frequent use of formulaic expressions (e.g. *you know, I mean, a bit*), informal language, ellipsis, discourse markers (e.g. *right, so, well*), personal pronouns and other performance-related features such as hesitations, pauses, fillers, false starts, incompleteness and so on (Burns, 2013; Goh, 2007). Knowledge of the typical features of spoken grammar helps learners sound more natural when speaking (Goh, 2016). Knowledge of linguistic and discursive means to produce and structure different speech genres (e.g. personal recounts, debate and argument, service counters, etc.) is also essential in developing speaking proficiency (Goh & Burns, 2012). Genre represents the norms of different types of discourse (Harmer, 2015). Genre knowledge means knowledge of the audience and their expectations of how the communicative event unfolds, as well as knowledge of the linguistic and structural norms of the genre in which we are speaking. Learners of English need to know, for example, that giving a personal account requires the use of the past tense form, while giving instructions or directions requires the use of the imperative form of verbs (Goh, 2016). Since genres of speaking may be culturally variable, learners may find it challenging to produce them in ways consistent with the TL sociocultural conventions.

In terms of enabling skills, learners need to understand how the TL sound system works and develop the ability to produce locally and globally intelligible speeches to convey meaning and achieve comprehensibility (i.e. pronunciation skills) (Goh, 2016). Teaching pronunciation involves not only the teaching of sounds in connected speech but also the teaching of stress patterns, rhythm and intonation. Further, learners need to develop the ability to produce linguistic actions for various communicative and social purposes using appropriate grammar and vocabulary (i.e. speech function skills) (Goh, 2016). Examples of linguistic actions are informing, describing, explaining, requesting, apologising, inviting, advising or engaging in oppositional talk, and so on. Because of variation in communicative styles and norms of appropriateness across languages and cultures, carrying out linguistic actions in a socially appropriate manner can be a challenging task for many learners. In order to achieve the desired communicative goals, learners need to know not only linguistic forms but also their communicative functions and applicable contexts of use. For example, in making requests, learners need to not only possess at their disposal a range of linguistic forms to make meaning (e.g. “Pass the salt please”, “Can you please pass the salt?” or “The salt please”), but also to be able to choose the most appropriate expression for the given speakers’ role relationship. This understanding requires extensive exposure to the target language input and formal instruction (Taguchi & Roever, 2017). The next set of skills that learners need to master is interaction management skills, e.g. how to open and close a conversation, to choose socially and culturally acceptable conversation topics, to not introduce taboo topics, to take turns and change topics during interaction (Goh, 2016). These, too, can be challenging skills to acquire because of cultural variation (see Wong & Waring, 2021). Finally, learners also need to learn discourse organisation skills, that is, how to produce coherent discourse using discourse markers and moves appropriate for the respective genres in the TL (Goh, 2016).

In developing speaking proficiency, learners also need to be able to use a range of communicative strategies to ensure smooth communication. These are cognitive strategies to compensate for inadequate linguistic knowledge and language-related problems such as paraphrasing, using gestures and approximation (using generic terms to substitute more precise terms that are not within their linguistic repertoires), metacognitive strategies such as planning and self-monitoring and interactional strategies such as asking for clarification, checking understanding and reformulation (Goh, 2016). Communication strategies are especially crucial in intercultural encounters where mutual understanding and common grounds need to be established for communication to take place effectively. Research on communication in English as a Lingua Franca (communication among second language speakers with other second language speakers like themselves) has demonstrated that high proficiency L2 speakers can employ various communication strategies to pre-empt or overcome communication difficulties (e.g. see Jenkins et al., 2011).

The role of speaking in second language development

Throughout the history of the field of second language teaching and learning, the role of speaking in L2 development has been viewed vastly differently. One view is that L2 development depends largely on the amount of comprehensible input (input at an appropriate level for the learner) that the learner receives. Output production such as speaking, on the other hand, is not considered effective in developing proficiency (Krashen, 1994). The Natural Approach proposed by Krashen and Terrell (1983) focuses on creating an input rich learning environment where learners are exposed to plentiful comprehensible input so that they can acquire L2 communication skills implicitly and incidentally. One type of input that is particularly useful for beginners is called narrow listening (repeated listening to a restricted range of input on a familiar topic), which according to Krashen (1996) and others (e.g. Rodrigo, 2006; Tsang, 2019), can help these learners acquire a basic speaking proficiency in the TL. Since it is understood that comprehension precedes production, learners are allowed to delay language production until they have acquired some language through comprehending it (Krashen & Terrell, 1983).

Although there is no doubt that input plays an essential role in language learning, other scholars argue that exposure to input alone may not be sufficient because learners may not always notice what is possible and what is not in the target language. The Noticing Hypothesis proposed by Schmidt (1983, 1993) argues that L2 acquisition is not entirely implicit but requires some attention to linguistic forms in the input. This happens when learners receive input that is manipulated in a way that directs or attracts their attention to the target form, or when they receive feedback on their output production.

Further, some scholars also maintain that output production is not only useful but also a necessary part of L2 development (e.g. Long, 1985; Swain, 1985, 1995). For example, Swain's (1985) Output Hypothesis suggests that when learners engage in speaking activities that promote meaningful communication (that is, they produce natural and spontaneous conversation rather than just repeating scripted dialogues), their L2 development is benefitted. This is because interaction affords opportunities for *negotiation for meaning*. That is, as explained in Long's (1985) Interaction Hypothesis, when there is a problem in communication, both participants will try various ways to make communication work again. They may employ a variety of strategies to re-establish mutual understanding such as paraphrasing or correcting their own output, checking understanding, asking the other person to repeat or recasting what the other person says. In so doing, learners become more aware of what they say that works or does not work and learn to adjust their language use accordingly. According to the Output Hypothesis, the opportunities to try out alternative ways of expressing themselves help learners process language forms at a more in-depth level and thus develop a higher level of awareness of how and why particular forms are used (Swain, 1985; Loewen, 2020; Park, 2020).

To date, it is widely accepted in SLA research that L2 development depends on the amount of input that learners receive as well as opportunities they have for output (understood as exchanges of meanings, not repetitive drills without understanding). Output production not only provides opportunities for feedback and promotes noticing of linguistic forms but also helps learners develop control over the forms that they have learned, making them more accessible in real time communication (Ellis & Shintani, 2014).

Approaches to teaching speaking

Despite the importance of speaking in L2 development, this skill was not adequately emphasised or developed in traditional language teaching methods. The grammar-translation method, for example, put a greater emphasis on analysing and memorising grammar rules and reading of literary texts. Spoken language was virtually neglected.

Speaking was taught in the audiolingual method, but primarily as a means for reinforcing grammar. Rather than producing natural and spontaneous conversations, learners practised speaking by repeating and manipulating model sentences. This kind of practice was limited and did not simulate real-life interaction. Classroom interaction typically followed the IRF (Initiation–Response–Feedback) sequence in which the teacher always initiated via ‘test’ questions, learners responded and the teacher provided feedback. As two out of the three moves were controlled by the teacher, learners had very little time to talk (Long, 2018).

In the presentation, practice, production (PPP) procedure, although speaking practice still served to practise grammar, a greater emphasis was put on situational language use. The lesson typically began with the teacher presenting and explaining a new target language structure. After that, learners practised using the new structure in controlled production activities such as substitution or transformation exercises, with guidance and correction from the teacher. The purpose was to get students to master the structure so they were able to apply it in new contexts. The last stage of the lesson involved learners practising the structure in freer production activities where they were able to choose the content of their own messages, with minimal assistance from the teacher. Not every PPP lesson followed a linear sequence as described earlier, however. A variation was the lesson starting with free production activities where learners used their full L2 repertoire. The purpose was to find out how much learners had already known. This stage was then followed by the presentation stage where the previously learned language items were consolidated and new language items taught and practised. The lesson could end with a further round of free language production (Brumfit, 1979; Johnson, 1982). Byrne (1986) suggested that the teacher should carefully monitor learners’ performance during communication and be ready to provide them with further explanation or controlled practice if this was deemed necessary. Despite the criticism that, as with other grammar-based teaching methods, the PPP prioritises language forms over communication, this method continues to be used in some teaching contexts today. Ur (2018) suggested that the PPP is more effective when used in combination with communicative tasks to promote productive use of language for communication (see later in this chapter).

With the arrival of the communicative approach (Hymes, 1971), speaking was treated as one of the four important language skills that needed to be developed from the beginning (Tylor, 2018). The communicative approach is based on a view that language is a means for meaning making and makes use of classroom activities that engage learners in meaningful communication (that is, communication where real information is exchanged; hence there is a purpose for communication). Speaking is taught and practised by means of a variety of interactive activities that focus on developing learners’ knowledge of speech functions, conversational skills, communicative strategies and speaking fluency (Tylor, 2018). Speaking fluency is understood as natural language use that occurs when learners engage in authentic communication. Fluency is developed by creating speaking tasks that allow learners to use language naturally to achieve specific communicative goals (rather than to display linguistic knowledge), especially when they are encouraged to perform at a faster than usual speed (Newton & Nation, 2020). Discussion, debates, role-plays, problem solving, interviews, information gap are examples of these tasks. The tasks involve students in realistic communication where they produce language that may not be totally predictable, and therefore, need to negotiate meaning to achieve communication (Richards, 2006). When carrying out tasks that simulate real-world communicative situations, such as role-plays, learners also need to attend to the context and roles of the speakers involved to make an appropriate choice of communicative styles (Littlewood, 1981).

Fluency practice is often contrasted with accuracy practice, in which the focus is on language forms (Richards, 2006). Writing a scripted dialogue and acting it out, describing pictures using given words and grammatical structures asking and answering questions following a model conversation are examples of accuracy activities. There is always some degree of control over linguistic choice in these activities and students have little freedom in what they say and how they should say it.

Although the accuracy of the language that learners use is less important than the successful achievement of the communicative tasks they are performing, teachers should ensure a balanced focus on both fluency and accuracy development in teaching speaking, and use accuracy activities to support fluency practice (Richards, 2006). For example, in a task-based speaking lesson (a strong version of communicative language teaching) attention to language forms can be integrated at the different stages of the lesson to help learners to proceed with the speaking task at hand. At the beginning of the lesson, the teacher may highlight language that is considered useful to perform the task. Learners may also be given time to prepare how to perform the task, during which stage they may attend to accuracy. Then based on the teacher's observation as the lesson goes on, they may teach more language or assign further accuracy work to deal with the grammatical or pronunciation problems that are observed while learners are performing the task.

In line with the communicative approach, Newton and Nation (2020) propose that an effective approach to teaching speaking should focus on both accuracy and fluency development as well as an integration with other language skills. According to this proposal, a well-balanced speaking course should have four components, none of which should be treated as more or less important than the others. The first component is learning to speak through meaning-focused input, that is learning to speak through reading and listening where learners' attention is on the ideas conveyed by the language rather than on language items in isolation from context. It is understood that through reading and listening for meaning learners acquire relevant ideas and content that are useful to conceptualise their speeches. They may also be encouraged to notice language features specific to various speaking genres (e.g. recounts, lectures, news reports, etc.) and how these discourses are organised, hence enhancing their genre knowledge. The second component of a speaking course is learning through meaning-focused output, that is learning to speak through engaging in communicative tasks. This kind of practice simulates real-world communication where we use language to get things done (e.g. buying train tickets, solving a problem together with friends or colleagues, expressing opinions) and engage in social interaction. Third, learners should have opportunities for language-focused learning, that is learning to speak through feedback and instruction that focuses deliberately on pronunciation, vocabulary, grammar and discourse features as well as communication strategies and strategies for self-regulated learning. This component emphasises the need for learners to attend to language forms (e.g. sounds and sound patterns, discourse markers, words, phrases and sentence structures) and strategies for maintaining smooth communication, hence enabling learners to develop awareness of the new language as well as accuracy of speaking performance. Finally, there should be opportunities for learners to develop speaking fluency through meaning-based activities (see earlier) where language items are within learners' previous experience (e.g. familiar topics and types of discourse, known vocabulary and grammar) and where learners are encouraged to perform at a higher than normal level (e.g. such as the 4/3/2 technique).

In a similar vein, Goh and Burns (2012), Goh (2016) and Sabnani and Renandya (2019) suggest that because speaking is a complex and demanding skill, which can pose a great challenge to learners, practice alone is considered insufficient to develop speaking competence. Learners need some structured learning experiences that combine both direct teaching and oral practice. Teaching should focus learners' attention not only on language (e.g. fixed expressions, routines, discourse markers and so on) and skills (e.g. speech functions, discourse organisation, interaction management and so on) but also strategies for planning, monitoring and evaluating their speeches and maintaining smooth communication (Goh & Burns, 2012). According to Burns (2013), a teaching cycle may begin with learners being guided to think about their goals and plans for overall speaking development as well as how to approach specific speaking tasks. The next step involves providing input and guiding learners to prepare to perform the task. This can include activation of background knowledge and teaching or recycling useful language. This step is followed by learners performing the speaking task and having an opportunity to focus on skills and strategies. Learners can be encouraged to repeat the same

task with a different partner or to perform a similar task to develop fluency. Upon task completion, learners can be guided to reflect on their learning experiences and receive feedback to develop the ability to manage and self-regulate their own speaking development. Although speaking instruction should include a balanced coverage of all types of speaking genres and core speaking skills, it is suggested that each lesson should be planned around only some selected aspects and that the cycle should be extended over a series of lessons in order not to create stress and stretch learners' attention and processing capacities (Burns, 2013).

Speaking tasks

To develop learners' speaking proficiency, Goh and Burns (2012) recommend that teachers make use of three types of communicative tasks: (1) communication gap (tasks requiring learners to describe or explain the missing information or details to each other), (2) discussion (involving learners exchanging views and ideas to achieve an outcome) and (3) monologic (e.g. presentations and stories). Communicative tasks are different from drills in that they focus first and foremost on meaning. They also involve some kind of gap (e.g. missing information or details) that learners need to talk to each other to close (Ellis & Shintani, 2014). This characteristic is based on the idea that participants in real-life interaction seek information they do not know rather than information they already know. To encourage learners to speak, therefore, classroom activities must imitate this condition to give learners an incentive to communicate. Communicative tasks are useful for this purpose because they create a real need for learners to interact meaningfully (Goh & Burns, 2012). Also, unlike drilling exercises, the main purpose of which is for learners to display linguistic knowledge, communicative tasks have communicative outcomes (e.g. data gathering, problem solving, ranking, etc.) and not simply engage learners in practising language (Ellis & Shintani, 2014). These outcomes are often related to real-world activities, hence increasing learners' interest in completing the tasks. Finally, because learners need to engage in exchange of real information, opinions and views (not reading out loud dialogues in the textbook or practise saying out loud sentences given to them), they also draw on a broader range of linguistic resources, which reflects real life, natural language use (Ellis & Shintani, 2014).

Researchers contend that there can be many forms of gap. In *information gap* tasks, each learner may hold a piece of information that the other learner does not know and hence must come together to complete the task (e.g. the *Same or Different* task). Alternatively, one learner may hold all the information that the other learner needs to find out about and hence the exchange of information is largely one way (e.g. creating a shopping list based on someone's recipe) (Ellis & Shintani, 2014). Simple information gap tasks focusing on the here-and-now (e.g. describing a picture that you can see) or involving structured information (e.g. drawing the route of a journey that is described in sequence) are more suitable for low proficiency learners than complex information gap tasks without these conditions (Ellis, 2019).

In *context gap* tasks, every learner is given the same set of information but uses it to construct new content for their listener. An example is giving learners a set of randomised pictures or words and asking each to create their own story. When one learner tells their story, the other needs to listen and put the pictures or words in the order the story unfolds (Goh & Burns, 2012). Although both learners have the same set of pictures or words, their stories might be totally different; hence, they must listen carefully to each other to complete the task successfully. Generally, the context gap tasks are considered more cognitively challenging than information gap tasks (Goh & Burns, 2012) and hence may be more suitable for higher proficiency learners. A story task that involves more elements (e.g. with several characters in different locations) and a topic outside learners' personal experience is also considered more cognitively challenging than a story task involving fewer elements and a familiar topic (Ellis, 2019).

In discussion tasks, learners see the same information that they must use to achieve an outcome. For example, they may be asked to organise information (e.g. ranking items in the order of importance), resolve some issue (e.g. solving a crime using the given clues), evaluate a situation and reach a consensus (e.g. selecting the winner for an art competition) or recommend an action plan (e.g. finding ways to increase household income and reduce utilities bills). The purpose of the discussion tasks is not to exchange information but to create an *opinion* or *reasoning gap* for learners to work together and negotiate an outcome (see Ellis & Shintani, 2014, for further discussion of opinion and reasoning gap tasks). The outcome may be open (e.g. involving more than one solution) or close (e.g. involving a single solution). A discussion task with an open outcome is generally considered more cognitively demanding than one with a close outcome (Ellis, 2019).

Goh and Burns (2012) also note that some tasks may only aim at getting learners to practise expressing themselves creatively and critically (e.g. discussion of an abstract topic) rather than leading to an outcome. Yet, having a clear outcome can give learners a sense of purpose and help them see what work can be done to complete the task. Teachers should keep in mind, however, that the nature of the outcome can affect the type of language used and hence should take learners' proficiency levels into account when planning speaking tasks (Nation, 1989). Adding a challenge (e.g. time pressure, competition, hidden solution, etc.) to make it more difficult for learners to achieve the outcome can increase learners' interest and involvement; however, this too must be carefully considered and planned to avoid making it unlikely for learners to complete the task (Nation, 1989). For a comprehensive list of characteristics that may make a task more or less challenging, see Robinson (2007, 2011, 2015).

Discussions may also occur through simulation in which learners assume different social roles (e.g. doctor, school counsellor, family members) to resolve an issue and must use language appropriately for the speaker role relationship (Goh, 2016). Having a role to play in discussion tasks is important because it can promote more active participation by learners (Nation, 1989). A variation of roles is to assign each learner a specific task to do (e.g. raising problems, asking questions, summarising the views of others) so that everyone must contribute to the discussion. It would also be helpful if the procedure for carrying out the task is made clear to learners (Nation, 1989).

The third type of speaking tasks recommended by Goh and Burns (2012) is monologic tasks in which learners have a chance to present ideas individually or speak extensively on a topic to an audience. Learners may be asked to produce spontaneous speeches or can be given time to plan and rehearse their speeches. Pre-task planning can help increase both complexity and fluency of learners' performance (Ellis & Shintani, 2014). The kinds of tasks and duration of performance may also be tailored according to learning objectives (Goh & Burns, 2012).

The three types of speaking tasks discussed here can be useful to practise how to use talk for different functions. Information gap and discussion tasks, for example, are particularly useful to develop the ability to use talk for sharing and obtaining information and carrying out real-world transactions (Richards, 2008). Information gap tasks are also beneficial to learners' interactional competence development, because the gap in information likely triggers the need to negotiate meaning and through this process learners notice gaps in communication and learn to express themselves more clearly to their interlocutor (Ellis, 2019). Oral presentations and stories, on the other hand, are effective practice activities for using talk as performance (Richards, 2008). Both discussions and monologues can facilitate academic oral communication development because they allow learners to practise skills to communicate meaning explicitly in context-independent situations. These skills are required for performing academic tasks (e.g. explaining abstract concepts or understanding novel information) and hence essential for academic learning (Goh & Burns, 2012).

In lesson planning, Richards (2008) contends that it is important for speaking teachers to identify the kinds of speaking skills that their learners need most and plan speaking tasks accordingly. Interactional skills may be most difficult to teach since they are subtle phenomenon governed by

‘unspoken’ rules (Richards, 2008). To learn to use interactional talk, learners may benefit from observing authentic interaction and paying attention to interactional features and conversational strategies such as initiating and closing conversations, managing small talk, shifting topics, turn taking or reacting to others. Unfortunately, textbook tasks do not always provide opportunities for such learning to occur, as many textbooks tend to present unrealistic conversations and do not teach conversational strategies (Burns & Hill, 2013; Wong & Waring, 2021). Hence, teachers are encouraged to supplement textbooks with natural conversations and speaking tasks that enable learners to practise various interactional features and conversational strategies in spontaneous communication. Learning to produce monologues such as presentations, stories and speeches requires attention to the grammatical and discourse features of such texts as well as their social contexts of use (e.g. goals and audience). Learners may benefit from having abundant samples of texts of various types for deconstruction to understand how different types of texts work (Richards, 2008).

Conclusion and future directions

A critical question in speaking instruction is related to which speaker norms should be used as speaking models for learners to acquire (Burns & Hill, 2013). Given the spread of English as a global language, learners may encounter a broad spectrum of English users in the future. They may need to communicate with not only native speakers but also non-native speakers of various proficiency levels like themselves. In such an increasingly diversified environment, to teach only native speaker varieties of English (e.g. British English or American English) clearly does not help prepare learners well enough for the diverse communicative contexts in which they may find themselves in the future. Learners should be prepared to communicate with native speakers and non-native speakers alike.

Should teachers then try to incorporate speaking materials from other varieties such as Singaporean English, Indian English and so on? This would certainly help increase learners’ exposure to and develop receptive skills in World Englishes (see Canagarajah, 2006, for a similar discussion on this point). However, that is not the whole point about teaching English for intercultural communication. Scholars generally contend that English as a Lingua Franca (ELF) is not a variety in itself but “a process of accommodation” (Harmer, 2015, p. 4) through which global users of English from diverse cultural backgrounds strive to achieve mutual understanding and acceptance. As such, ELF communication is highly fluid and in constant influx as participants negotiate meaning and norms. Several scholars have also pointed out that variation in ELF communication is not only a regional factor but also a contextual and individual factor (see a review in Marlina, 2008). Based on this understanding, language teaching therefore should not simply be about teaching regional varieties *per se*. More importantly, it should be about raising learners’ awareness of the emergent and fluid nature of intercultural communication, and the messiness and unpredictability of English variation as well as enabling them to develop effective communication strategies and negotiation skills (Marlina, 2008).

When applied to teaching speaking skills, some important implications can be drawn. With respect to pronunciation skills, for example, intelligibility (how easy to understand L2 speakers can make their speech) and comprehensibility (how easy to understand interlocutors find L2 speakers’ speech) rather than native speaker-like pronunciation should be seen as the goal for learners to achieve. Researchers generally agree that the teaching of pronunciation should focus on areas which most likely impede communication rather than trying to correct all non-native phonological features to avoid undermining learners’ confidence (Wells, 2008). With regard to this idea, researchers studying interactions among ELF speakers have found that not all phonological variations would lead to communication breakdown (e.g. Jenkins, 2004, 2009). For example, differences in word stress, vowel quality, rhythm or pronunciation of some consonants such as /θ/, /ð/, or dark [ɪ] would not break down communication. On the other hand, there are features that must be articulated as precisely as possible to achieve mutual intelligibility. Jenkins calls these Lingua Franca Core features.

The LFC includes most consonants (except/θ/, /ð/, or dark [ɪ]), initial consonant clusters, vowel length contrasts and nuclear stress. Jenkins (2004) advocates that teachers focus on these core items and “leave the non-core items to the learners’ choice” (p. 40).

In terms of speech function and interaction management skills, research has shown that ELF speakers do not necessarily conform to native speakers’ norms of interaction and politeness, yet manage to successfully communicate their meaning and establish rapport with their interlocutors by employing various interactional resources, shared non-native speaker status and negotiation strategies (e.g. Mugford, 2021; Taguchi & Yamaguchi, 2021). This suggests that rather than insisting on native speaker norms at the expense of learners’ cultural identity and subjectivity, speaking instruction should aim at enabling learners to develop a repertoire of effective communication strategies to achieve their communicative goals. Learners should also be encouraged to utilise their pluralistic resources and reflect on how well these resources support them to accomplish their communicative goals. That means the first language and culture should be seen as a resource rather than hindrance to learning L2 speaking skills (see Jenkins, 2006; McKay, 2012, for a similar discussion on these points).

Finally, teachers should consider using technology to further engage students in the speaking lesson. While the question of whether and to what extent technology can improve speaking proficiency is not known presently, research shows that technology can help students produce more language, interact more freely with their peers and improve on their pronunciation skills (Golonka et al., 2014). Freely available and easy to use video-sharing apps (e.g. Flipgrid), screen-recording apps (e.g. Screencast o matic or Flashback) and speech-to-text apps (e.g. Google Gboard and Speechnotes) can be used to give students ample opportunities to practice speaking and help them become more fluent and confident speakers of the language.

References

- Brown, G. & Yule, G. (1983). *Teaching the spoken language*. Cambridge: Cambridge University Press.
- Brumfit, C. J. (1979). ‘Communicative’ language teaching: An educational perspective. In C. J. Brumfit & K. Johnson (Eds.), *The communicative approach to language teaching*. Oxford: Oxford University Press.
- Burns, A. (2013). A holistic approach to teaching speaking in the language classroom. In M. Olofsson (Ed.), *Symposium 2012* (pp. 165–178). Stockholm: Stockholm University.
- Burns, A. & Hill, D. (2013). Teaching speaking in a second language. In B. Tomlinson (Ed.), *Applied linguistics and materials development* (pp. 231–248). London/New York: Bloomsbury.
- Byrne, D. (1986). *Teaching oral English* (2nd ed.). Harlow: Longman.
- Canagarajah, S. (2006). Changing communicative needs, revised assessment objectives: Testing English as an international language. *Language Assessment Quarterly*, 3(3), 229–242.
- Ellis, R. (2019). *Introducing task-based language teaching*. Jakarta: The Association for the Teaching of English as a Foreign Language in Indonesia (TEFLIN).
- Ellis, R. & Shintani, N. (2014). *Exploring language pedagogy through second language acquisition research*. New York: Routledge.
- Goh, C. (2007). *Teaching speaking in the language classroom*. Singapore: Regional English Language Centre (RELC).
- Goh, C. (2016). Teaching speaking. In W. A. Renandya & H. P. Widodo (Eds.), *English language teaching today. Linking theory and practice* (pp. 143–159). Bern: Springer.
- Goh, C. & Burns, A. (2012). *Teaching speaking: A holistic approach*. New York: Cambridge University Press.
- Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer Assisted Language Learning*, 27(1), 70–105.
- Hardace, B. & Guvendir, E. (2018). Cognitive perspectives in teaching speaking. In J. I. Lintas (Ed.), *The TESOL encyclopedia of English language teaching*. Hoboken, NJ: Wiley. <https://doi.org/10.1002/9781118784235.celt0232>
- Harmer, J. (2015). *The practice of English language teaching* (5th ed.). Harlow: Pearson.
- Hymes, D. (1971). *On communicative competence*. Philadelphia: University of Pennsylvania Press.

- Jenkins, J. (2004). ELF at the gate: The position of English as a Lingua Franca. In A. Pulverness (Ed.), *Proceedings of the 38th IATEFL International Conference* (pp. 33–42). Canterbury: IATEFL Publications.
- Jenkins, J. (2006). Points of view and blind spots: ELF and SLA. *International Journal of Applied Linguistics*, 16(2), 137–162.
- Jenkins, J. (2009). *World Englishes: A resource book for students* (2nd ed.). Oxon: Routledge.
- Jenkins, J., Cogo, A., & Dewey, M. (2011). Review of developments in research into English as a lingua franca. *Language Teaching*, 44(3), 281–315.
- Johnson, K. (1982). The “deep end” strategy in communicative language teaching. In K. Johnson (Ed.), *Communicative syllabus design and methodology*. Oxford: Pergamon.
- Krashen, D. (1994). The input hypothesis and its rivals. In N. Ellis (Ed.), *Implicit and explicit learning of languages* (pp. 45–77). London: Academic Press.
- Krashen, S. D. (1996). The case for narrow listening. *System*, 24(1), 97–100.
- Krashen, S. D. & Terrell, T. D. (1983). *The natural approach: Language acquisition in the classroom*. Oxford: Pergamon.
- Levelt, W. (1989). *Speaking: From intention to articulation*. Cambridge, MA: The MIT Press.
- Littlewood, W. (1981). *Communicative language teaching*. New York: Cambridge University Press.
- Loewen, S. (2020). *Introduction to instructed second language acquisition*. New York: Routledge.
- Long, M. (1985). Input and second language acquisition theory. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 377–393). Rowley, MA: Newbury House.
- Long, M. (2018). Interaction in L2 classrooms. In J. I. Liantas (Ed.), *The TESOL encyclopedia of English language teaching*. Hoboken, NJ: Wiley. DOI: 10.1002/9781118784235.eelt0233
- Marlina, R. (2008). Revisiting the pedagogy of English as an International Language. *RELC Journal: A Journal of Language Teaching and Research*, 49(1), 3–8.
- McCarthy, M. (1998). *Spoken language and applied linguistics*. Cambridge: Cambridge University Press.
- McKay, S. L. (2012). Teaching materials for English as an international language. In L. Alsagoff, S. McKay, G. Hu, & W. Renandya (Eds.), *Principles and practices of teaching English as an international language* (pp. 70–83). Bristol: Multilingual Matters.
- Mugford, G. (2021). Pragmatics of (im)politeness in EIL interactions. In Z. Tajeddin & M. Alemi (Eds.), *Pragmatics pedagogy in English as an International Language* (pp. 117–135). Oxon: Routledge.
- Nation, P. (1989). Speaking activities: Five features. *ELT Journal*, 43(1), 24–29.
- Newton, J. & Nation, P. (2020). *Teaching ESL/EFL listening and speaking* (2nd ed.). Oxon: Routledge.
- Park, E. S. (2020). *Instructed SLA: A practical guide for teachers*. Malang, Indonesia: TEFLIN Press.
- Richards, J. (2006). *Communicative language teaching today*. New York: Cambridge University Press.
- Richards, J. (2008). *Teaching listening and speaking. From theory to practice*. New York: Cambridge University Press.
- Robinson, P. (2007). Criteria for classifying and sequencing pedagogic tasks. In M. P. Garcia Mayo (Ed.), *Investigating tasks in formal language learning* (pp. 7–27). Clevedon: Multilingual Matters.
- Robinson, P. (2011). Second language task complexity, the Cognition Hypothesis, language learning, and performance. In P. Robinson (Ed.), *Second language task complexity: Researching the Cognition Hypothesis of language learning and performance* (pp. 3–37). Amsterdam: John Benjamins.
- Robinson, P. (2015). The Cognition Hypothesis, second language task demands, and the SSARC model of pedagogic task sequencing. In M. Bygate (Ed.), *Domains and directions in the development of TBLT. A decade of plenaries from the international conference* (pp. 87–121). Amsterdam: John Benjamins.
- Rodrigo, V. (2006). The amount of input matters: Incidental acquisition of grammar through listening and reading. *The International Journal of Foreign Language Teaching*, 2(1), 10–13.
- Sabnani, R. L. & Renandya, W. A. (2019). A comprehensive approach to developing L2 speaking competence. *ELTAR-J*, 1(1), 16–25.
- Schmidt, R. (1983). Interaction, acculturation and the acquisition of communicative competence. In N. Wolfson & E. Judd (Eds.), *Sociolinguistics and language acquisition* (pp. 137–174). Rowley, MA: Newbury House.
- Schmidt, R. (1993). Consciousness, learning, and interlanguage pragmatics. In G. Kasper & S. Blum-Kulka (Eds.), *Interlanguage pragmatics* (pp. 21–42). New York: Oxford University Press.
- Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235–256). Rowley: Newbury House.
- Swain, M. (1995). Three functions of output in second language acquisition. In G. Cook & B. Seidlhofer (Eds.), *Principles and practice in applied linguistics* (pp. 125–144). Oxford: Oxford University Press.
- Taguchi, N. & Roever, C. (2017). *Second language pragmatics*. Oxford: Oxford University Press.
- Taguchi, N. & Yamaguchi, S. (2021). Intercultural pragmatics in English as a Lingua Franca. In Z. Tajeddin & M. Alemi (Eds.), *Pragmatics pedagogy in English as an International Language* (pp. 76–94). Oxon: Routledge.

- Tsang, A. (2019). Effects of narrow listening on ESL learners' pronunciation and fluency: An 'MP3 flood' programme turning mundane homework into an engaging hobby. *Language Teaching Research*, 1362168819894487.
- Tylor, S. K. (2018). Development of speaking skills in children versus adult L2 learners. In J. I. Liantas (Ed.), *The TESOL encyclopedia of English language teaching*. Hoboken, NJ: Wiley. <https://doi.org/10.1002/9781118784235.eelt0237>
- Ur, P. (2018). PPP: Presentation, practice, production. In J. I. Liantas (Ed.), *The TESOL encyclopedia of English language teaching*. Hoboken, NJ: Wiley. DOI: 10.1002/9781118784235.eelt0092
- Wells, J. (2008). Goals in teaching English pronunciation. In K. Dziubalska-Kolaczyk & J. Przedlacka (Eds.), *English pronunciation models: A changing scene* (2nd ed., pp. 101–110). Bern: Peter Lang.
- Wong, J. & Waring, Z. (2021). *Conversation analysis and second language pedagogy: A guide for ESL/EFL teachers* (2nd ed.). New York: Routledge.

Effective pronunciation teaching

Donna M. Brinton

As Darcy et al. (2012) note, pronunciation is notoriously difficult to teach given the lack of clear guidelines provided to teachers and the often contradictory practices found in the literature on second language (L2) pedagogy. In fact, relatively little has been written specifically to address effective practice in the L2 pronunciation classroom. A glance at the index of selected L2 methodology texts for teaching pronunciation (see, for example, Celce-Murcia et al., 2010) contributes little to enlighten the reader. Although such volumes typically address the methodology of pronunciation teaching, they do not overtly address the issue of effectiveness.

Fortunately, recent research in the field is beginning to delve into what makes certain practices more effective than others and is creating a foundation upon which we can build. At the heart of this research is the concept of evidence-based pronunciation teaching (Levis, 2019; Levis & Wu, 2018)—the notion that classroom practice should be driven by research in the field as to which practices have been shown to be effective. Although this notion might seem to be common sense, Levis points out that the vast majority of publications in the field lack the close connection of research to practice, addressing either effective practices without adequate research substantiation or research results that lack clear classroom implications.

What is effective L2 teaching practice?

Before proceeding to what *has* been written on effective pronunciation teaching, let us undertake a brief examination of effective L2 teaching in general. In a seminal article, Richards (2012) expounds on the skills possessed by “exemplary language teaching professionals” (p. 46). In the process, he isolates ten dimensions that contribute to L2 teacher competence and performance. These include the teacher’s: target language proficiency; knowledge of the discipline and content area being taught; teaching skills; contextual knowledge and pedagogical adjustments made as a result of this knowledge; identity as a language teacher; learner-focused teaching; pedagogical reasoning skills; reflective practice (referred to by Richards as “theorizing from practice,” p. 51); membership of a community of practice; and professionalism. All of these dimensions bear direct relevance to pronunciation teaching, as we will see:

1. *Target language proficiency*: It goes almost without saying that the vast majority of L2 teachers in the world are not native speakers of the language they are teaching. According to Richards, a threshold level of target language proficiency for effective teaching includes the ability to: be a good language model for students; maintain use of the target language in the classroom; give

appropriate feedback on learners' language; and provide target language input at a level appropriate to learners' L2 proficiency. Teachers with deficits in their target language proficiency may be especially hindered in their attempts to teach pronunciation if their own pronunciation does not serve as an exemplary model for their students. This statement holds true for the segmental aspects of their speech (production of vowels and consonants) as well as the suprasegmental aspects (command of stress, rhythm, and intonation) and overall fluency. It should be noted that target language proficiency alone does not guarantee effective teaching. However, it remains one important quality among others as outlined later.

2. *Knowledge of the discipline and content area:* In the same vein, teachers lacking a thorough knowledge of the sound system of English will be at a distinct disadvantage when attempting to teach pronunciation, as they will lack the ability to explain how the various articulators (such as the tongue, lips, and vocal cords) function to produce the phonemes (or distinctive sounds) in English and how, in certain contexts, these phonemes undergo allophonic variation (i.e., are articulated slightly differently). Examples here are the consonants /p/, /t/, and /k/ which are aspirated (produced with a puff of air) when they occur at the outset of a stressed syllable: *pat* [p^hæt/, *attend* [ə^htɛnd], *candid* [ˈk^hændid]. As well, teachers without adequate linguistic preparation will be hard pressed to explain rule-governed pronunciation phenomena such as stress shifting and vowel variation in parts of speech (e.g., *PHO*·to·GRAPH vs. *pho*·TO·gra·PHY vs. *pho*·to·GRAPH·ic) or dialects (British English *la*·BOR·a·TORY vs. North American English *LAB*·o·ra·TOR·y). Similarly, they would also be unable to properly explain connected speech phenomena such as “don’t you” being pronounced as “dontcha” or assimilation processes such as *grandpa* being pronounced as “grampa.”
3. *Teaching skills:* Concerning the teacher’s skill set, Richards notes that a repertoire of teaching techniques and procedures, performed fluently and automatically, are critical to essential teaching as they enable the teacher to focus on other aspects of the lesson. Flexibility and teacher decision-making also figure into the picture. Applying these criteria to pronunciation teaching, we can surmise that the effective pronunciation teacher can easily explain the issues such as the point and manner of articulation of segmental sounds and conduct listening discrimination practice relevant to the needs of the students in the class. Additionally, this teacher would have facility with the controlled, guided, and communicative stages of practice (Celce–Murcia et al., 2010) and be able to adjust instruction to the first language (L1) pronunciation backgrounds of students in the class (Brinton, 2012).
4. *Contextual knowledge:* Richards adopts a broad view of teaching context, noting that it includes not only the cultural and linguistic setting in which one is teaching but also the setting dynamics, the curricular confines, the school culture, etc. This view is one that is embraced by current pronunciation pedagogy, which stresses the importance of setting in helping to identify the very goal of pronunciation instruction (i.e., whether the target pronunciation should be a “standard” dialect such as British or North American English or whether instruction should instead target a World Englishes pronunciation variant). Here, the linguistic context can assist curriculum designers in determining, for example, whether the communicative setting in which learners will find themselves will primarily involve native speakers or whether it will involve other speakers of English as an international language (EIL).
5. *Identity as a language teacher:* In discussing the language teacher’s identity, Richards notes that the construct is dynamic rather than static and is typically shaped by the linguistic and cultural setting in which one teaches. As a result, identity may change over time; however, it typically entails the social and cultural roles one adopts as a teacher. According to Richards, native or non-native speaker status may color one’s identity. With respect to teaching pronunciation, many non-native speaker teachers falsely assume that pronunciation teaching should be left to the native-speaking teacher—a perception that may even be bolstered by local English language

teacher hiring practices that advantage native speaker status. This perception is a mistaken one, of course. In fact, local teachers with strong English language and training in pronunciation teaching can serve as inspirational (and ultimately, perhaps more attainable) models for their students and can do an excellent job of pronunciation teaching.

6. *Learner-focused teaching*: Learner-focused instruction allows learners to influence the direction of the lesson, thus exerting a positive influence on interactions between learners and their participation in the lesson. As noted by Richards, the positive influence of learner-centeredness on students' learning is borne out both in practice and in research, which underscores the importance of constructing lessons that reflect learners' needs and preferences. Pronunciation teaching today has come a long way from the "kill and drill" repetition practice, devoid of any real meaning, that predominated in earlier eras of teaching. When teaching pronunciation today, communicatively-oriented teachers are guided to select content and contexts that are meaningful and relevant to the lives of their learners.
7. *Pedagogical reasoning skills*: This skill set concerns the teacher's ability to adapt the content and techniques of the lesson to a given student population. Here, the adaptation may be to the students' linguistic ability, their interests, or a host of other factors (such as cultural appropriateness). With regard to pronunciation, there are obvious L1 factors that may figure into the teacher's selection and sequencing of items to be taught. Additionally, there may be issues of how much metalanguage is appropriate to use, whether or not to use phonetic symbols, who the intended target interlocutors are, etc.
8. *Reflective practice*: Richards defines this process of theorizing from practice as "the development of a personal system of knowledge, beliefs, and understandings drawn from the practical experience of teaching" (p. 51). Ultimately, these beliefs culminate in a philosophy of teaching that derives from the sum of the teacher's classroom practice. With respect to pronunciation, this might take the form of teacher beliefs such as "Targeted listening practice can improve students' production efforts" or "Controlled practice is best followed by guided and communicative practice."
9. *Membership of a community of practice*: The community of practice model, in which members unite to share their expertise and develop their skills in a specified area, has become increasingly popular as a means of teacher development. According to Richards, a strength of this model is the new roles it creates for participants, e.g., as mentor, team leader, or critical friend. The model lends itself excellently to teachers developing their skill in the area of classroom pronunciation teaching, as evidenced by the study circle model reported by Echelberger et al. (2018). In this model, participants' goals included articulating connections between pronunciation research and effective classroom practices, exploring new techniques and practices, and sharing useful resources.
10. *Professionalism*: The final hallmark of an effective teacher, according to Richards, is the teacher's degree of professionalism in the field. While professionalism may be institutionally ascribed (such as ensuring that teachers adhere to educational standards), it may also be independently pursued. Thus pronunciation teachers seeking to expand their expertise can find a great deal of guidance through the following means: (a) participating and presenting in professional conferences, (b) joining social media groups such as CATESOL's TOP-IG on Facebook (www.facebook.com/groups/1816786301934258/), (c) becoming active in interest sections such as TESOL's SPLIS (<https://my.tesol.org/communities/community-home?CommunityKey=216797a8-3459-435c-a5df-7434af29f4c3>) and IATEFL's PRONSig (<https://pronsig.iatefl.org/>); (d) reading online blogposts by pronunciation experts such as Robin Walker (<https://englishglobalcom.wordpress.com/>) or Mark Hancock (<http://hancockmcdonald.com/>); and (e) keeping up to date with newsletters and journals dedicated to pronunciation practice and research such as *Speak Out!* or *The Journal of Second Language Pronunciation*.

In a second treatise defining effective L2 teaching practice, Badwan (2018) concurs with Richards regarding the crucial nature of teachers' flexibility and their command of classroom strategies. She further contends that in today's classrooms, a high value needs to be placed on learner inclusivity. As a caveat, she notes that the very concept of effectiveness is colored by many factors, including the local context and the stakeholders' philosophy of language teaching. Ultimately, she suggests that teachers should follow three principles in their quest for effective instruction: (1) view their classrooms as communities of practice and consider their students as co-participants in the teaching/learning process; (2) exercise flexibility in responding to the internal and external complexities of their classroom; and (3) be knowledgeable about their teaching contexts and apply eclectic approaches to address these contexts. Again, all three principles can be directly applied to the teaching of L2 pronunciation, as discussed earlier.

Recommendations from the pronunciation literature

The foregoing recommendations regarding what constitutes effective L2 teaching are useful ones to bear in mind. However, it behooves us here to examine the L2 pronunciation literature for recommendations that are specific to the effective teaching of pronunciation. Pioneers in this quest are Celce-Murcia et al. (2010) and Baker and Murphy (2011), who pose the question "What is the required knowledge base for teaching pronunciation effectively?" (i.e., Richards' dimension two). Celce-Murcia et al. propose a three-part knowledge base consisting of (1) knowledge of pronunciation features (such as the point and manner of consonant articulation or where prominence falls in a tone unit); (2) awareness of potential student problems (such as those stemming from negative transfer of the students' L1 phonological systems or other interlanguage issues); and (3) pedagogical priorities (such as which features should receive priority in the design of the pronunciation curriculum). To this list of components that constitute the pronunciation teacher's required knowledge base, Baker and Murphy (2011) add the following constructs: (1) knowledge of classroom-based research; (2) knowledge of students' perceptions (for example, their goals and aspirations related to pronunciation learning); and (3) perceptions of teacher educators and pronunciation specialists. The authors break this final category down further into factors pertaining to students themselves (such as the role of age, the learner's L1, the type of motivation); the curriculum (such as whether pronunciation is taught as a dedicated skill or integrated into the curriculum, the relative amount of emphasis on segmentals versus suprasegmentals, and the target pronunciation model); and finally the teacher (such as the teacher's knowledge of pronunciation teaching methods and the sound system of English).

Turning our attention to research conducted in the L2 pronunciation classroom, we find emerging evidence of what constitutes effective pronunciation teaching. Kissling (2014) notes that in the Spanish as a foreign language context, the single most important predictor of learners' pronunciation improvement after receiving instruction concerned their pre-test perception of L2 target sounds. Kissling's results suggest that work on perception at earlier stages of pronunciation instruction plays a role in the overall effectiveness of such instruction. Perhaps more powerfully, Lee et al. (2015) investigated 86 primary research studies on L2 pronunciation instruction to investigate its effectiveness. Not surprisingly, they found that the length of treatment corresponded positively with pronunciation improvement, and that learner feedback was an essential element in the studies reported. Additionally, they make the case that effective pronunciation outcomes be calibrated using both controlled and less controlled (i.e., more authentic) outcome measures.

Building on this research into instructed L2 acquisition, Levis and McCrocklin (2018) propose a principled approach to teaching pronunciation coupled with guidelines that encourage follow-up teacher reflection to further enhance lesson effectiveness. As the authors note, "[e]ffective teaching depends on teachers understanding what makes learners more intelligible, why pronunciation is

important to intelligibility, and how students' pronunciation skills can improve" (p. 77). Accordingly, effective pronunciation instruction can be broken down into the following four characteristics:

1. *Effective pronunciation teachers demonstrate knowledge of learner variability.* This includes insights into how age, motivation, a learner's L1, learning style, and many other factors impact learner progress in acquiring pronunciation skills.
2. *Effective pronunciation teachers are able to assess learner's needs.* The process entails determining the non-target-like segmental and suprasegmental issues in a learner's output. Although these needs often arise from the mismatch between the learner's L1 and the English phonological system, other factors come into play as well, such as the learner's proficiency level and other interlanguage factors that cannot be predicted by a simple contrastive analysis of the L1 and the L2 phonological systems. Finally, since time is at a premium in most curricula, the teacher is recommended to prioritize those aspects that most impact intelligibility and to allocate the necessary time to present and practice these aspects in class.
3. *Effective pronunciation teachers are able to formulate appropriate goals for pronunciation instruction.* In a world where one of the primary roles of English is serving as a lingua franca or language of wider communication between speakers of languages other than English, teachers of pronunciation need to consider their students' future goals vis-à-vis the use of English. Increasingly in today's EIL contexts, the standards of British or American English are no longer relevant ones; nor is the goal of attaining a native-like accent in English. Instead, teachers are advised to adopt the goal of intelligibility and to select and sequence pronunciation features in their curriculum with this goal in mind. The authors also suggest applying the principle of functional load, i.e., the relative importance of vowel or consonant phonemes in minimal pair words such as *fit/feet* or *fat/yat* for distinguishing meaning. According to this principle, examples of phonemes carrying a high functional load are /p/ versus /b/ and /i/ versus /ɪ/; /θ/ versus /ð/, on the other hand, carry a low functional load. Applying the functional load principle can thus help teachers determine those elements that are most crucial to include for their students' overall intelligibility.
4. *Effective pronunciation teachers have a repertoire of techniques and make use of a communicative lesson planning framework.* Many pronunciation techniques (such as minimal pair perception/production drills and read-aloud dialogues) are our inheritance from an earlier era of language teaching, such as the Audiolingual era. This is not to say that these techniques are irrelevant to today's classroom; however, they need to be augmented with more communicatively-oriented techniques (such as those involving negotiation of meaning, and problem solving). The application of a communicative lesson-planning framework such as the five-step framework proposed by Celce-Murcia et al. (2010) can further assist teachers in the selection and sequencing process, since it guides learners through the stages of description and analysis of the pronunciation feature, work on perception, and finally the three stages of practice (controlled, guided, and communicative). In addition to a repertoire of techniques integrated into a communicative framework, teachers also need a thorough understanding of how pronunciation interacts with other aspects of language, such as the English spelling system and listening comprehension.

The final piece of Levis and McCrocklin's principled approach involves teacher reflection on lesson delivery. As they note, "Once teachers understand the basic principles of effectively teaching pronunciation, they can improve their teaching through reflective practice" (p. 82). The authors very perceptively note that most teachers reflect on their teaching sporadically—specifically when a lesson goes unexpectedly well or when it fails spectacularly. A principled commitment to reflective pronunciation teaching, however, involves systematic rather than sporadic reflection on one's own

practice; this can be facilitated by asking oneself questions both before and during the act of teaching. Reflective teaching can be furthered by engaging in practices such as journal writing, recording lessons (via audio and/or video), peer observation, and action research. Ideally, a combination of these practices will lead to even deeper reflection, and ultimately more effective practice.

Reconciling theory and practice

Based on research findings in the field of L2 pronunciation acquisition, Brinton (2014, 2018a) summarizes best practices for L2 pronunciation teachers. Accordingly, she proposes the following twelve principles as foundational for effective pronunciation teaching:

Principle #1: Pronunciation instruction requires specialized knowledge, expertise, and commitment

It is well known that many L2 teachers (not only the non-native speakers) shy away from teaching pronunciation, believing it to be a special skill that only certain teachers can address. Quite the contrary, the skills underlying the teaching of pronunciation are eminently learnable, such that any teacher can become proficient in this skill area. However, becoming an effective pronunciation teacher does require solid teacher preparation consisting of a firm grounding in the sound system of English and relevant pedagogical practices (see also Brinton, 2018b). Teacher reluctance and/or anxiety about teaching pronunciation can therefore be overcome through systematic efforts at providing teachers with the necessary linguistic knowledge and pedagogical know-how along with structured, supportive feedback on their classroom practice.

Principle #2: Accent and intelligibility are not directly correlated

A quite common misconception among lay people as well as novice L2 teachers is that having an accent in the L2 is equated to having intelligibility issues. As it turns out, however, accent and intelligibility are two quite different concepts, with having an accent not leading necessarily to lack of intelligibility. Surely most of us are familiar with speakers whose L2 speech is accented yet easy to understand, just as we are familiar with those whose L2 speech is difficult to understand precisely because of their accent.

Pronunciation practitioners typically distinguish between the following three concepts: (1) accent—the degree to which an L2 speaker sounds “foreign” or different from a target language speaker; (2) intelligibility—the ease with which the L2 speaker’s utterances are understood by the interlocutor; and (3) comprehensibility—the amount of effort the interlocutor needs to expend to comprehend the L2 speaker (Moyer, 2018). The distinction between these terms has wide-reaching ramifications for the L2 pronunciation classroom. For one, teachers need to understand that virtually all non-native speakers of a language have an accent when speaking the target language and that hence this term should be neutrally construed. At the same time, if the speaker’s accent makes it difficult for the interlocutor to understand, both the intelligibility and comprehensibility of the speaker’s utterances are compromised, indicating the need for remediation.

Without adequate teacher preparation, L2 teachers may be able to single out students in their class who have “heavy accents” but may at the same time be unaware of the underlying factors contributing to this accent. Nor are they aware of how they should go about helping this student to become more intelligible. Assisting these teachers with concrete techniques and resources for enhancing learner intelligibility is one of the primary goals of teacher preparation programs.

Principle #3: The guiding goal of pronunciation instruction is that of comfortable intelligibility, not accent eradication

In the past, pronunciation instruction was typically equated with accent eradication, with its ultimate goal being the eradication of a learner's "foreign accent." Today's practice aims instead at what is typically referred to as comfortable intelligibility (Abercrombie, 1949; Levis, 2005) rather than non-accented speech. This new goal of accented yet easily understood speech is very much in keeping with today's changing linguistic landscape, where the reality is that the vast majority of the learners in our L2 pronunciation classrooms will be functioning in circumstances where English is a lingua franca and where their interlocutors, like themselves, are non-native speakers of the language. In such a scenario, speaking like a native speaker—for most L2 speakers an unrealizable goal—becomes essentially irrelevant. It is important to note here that standards may vary from region to region. In other words, what constitutes comfortable intelligibility in ELF contexts may differ from the standards expected in contexts where standard variants (such as British English, Australian English, or North American English) are spoken. And we can also expect variations of standards in ELF regions around the globe. As Brinton (2018a) notes, "learner and setting variables will definitely color the decisions we make about what to teach and how to focus our instructional efforts" (p. 287).

Principle #4: The various aspects of pronunciation deserve differential attention in the classroom

When addressing learners' pronunciation needs, teachers and materials developers face difficult selection and sequencing issues. Should one begin with segmental issues or focus instead on suprasegmental ones? Should a focus on word stress precede one on sentence stress/prominence? Since prominence and intonation go hand in hand, should they be dealt with together? Is there time available in the curriculum to address connected speech issues?

These and other questions have no easy answer; they depend, by and large, on the learner population with which one is dealing and the scope and sequence of the curriculum in general. What specialists *can* agree on is that different learner profiles require different teaching priorities. Classes consisting of learners from a particular L1 background have the advantage that contrasts in the sound systems of the two languages can serve as a basis for making certain curricular decisions. Here, resources such as Swan and Smith (2001), which pinpoints key linguistic differences between English and other languages, can be useful. We learn, for example, that when teaching English to speakers from a five-vowel system (such as Spanish or Japanese), learners are likely to experience difficulty acquiring the English vowel system, with its greatly expanded vowel inventory. This may lead to the decision to focus more on vowels than consonants. Similarly, when working with speakers from tonal languages such as Chinese or Thai, we learn that extending intonation contours over entire tone units rather than just over a single syllable will present a challenge. In this case, we may decide to prioritize suprasegmentals over segmentals. Dealing with multilingual classes can compound the decision-making process. In this case, decisions may be made more on the basis of the eventual communicative needs of the target population. For example, will the learners be interacting primarily with native speakers or with other ELF speakers? Which pronunciation standard (ELF, British English, North American English, etc.) is the most appropriate one?

Several other sources of curricular decision-making involve the principle of functional load, that of high-value pronunciation features (Levis & Muller Levis, 2018), and lingua franca common core features (Walker, 2010). Functional load (Catford, 1987), which establishes the relative frequency of segmental sounds in English, can be useful in deciding which consonant or vowel sounds to prioritize in the curriculum. For example, knowing that the contrast /i/ vs. /ɪ/ carries a high functional

load would provide a rationale for including these vowels in the curriculum, just as knowing that the contrast /θ/ vs. /ð/ carries a low functional load might trigger the decision to consider these consonant sounds candidates for omission. A second potentially useful source of decision-making originates in research being done to determine features that have a high impact on listeners' ability to understand L2 speaker speech. As an example, Levis and Muller Levis (2018) report on a study they did documenting the high value of contrastive word stress (e.g., "I'm busy on MONday, but not on THURsday"), which they identify as a highly learnable feature affecting overall comprehensibility. Globally, much research is being done to establish an ELF "core" curriculum (Walker, 2010) consisting of those features which most impact communication breakdowns between ELF speakers. One factor limiting the applicability of this research is the fact that results may differ depending on the L1 of the speakers involved. Thus more data need to be collected for this source of decision-making to be widely applicable. Nonetheless, on a regional basis (e.g., in southeast Asia) results are quite promising (Deterding, 2013).

Principle #5: Both segmental and suprasegmental issues are critical to L2 phonological acquisition

In pronunciation pedagogy, opinion has often been polarized as to which of these two areas (segmentals or suprasegmentals) contributes more to learners' acquisition of a target-like pronunciation. To some extent, the relative emphasis afforded one or the other of these areas has been tied to prevailing methodologies (Celce-Murcia et al., 2010). During the Audiolingual era, with its focus on minimal pair drilling and guided oral production, the focus was almost exclusively on segmentals. However, at the outset of Communicative Language Teaching, importance began to swing toward a focus on suprasegmentals, with the underlying rationale being that these contributed more to effective communication of meaning and attitude (McNerney & Mendelsohn, 1992). Today's pedagogy espouses a more balanced view, recognizing that target-like production of both segmentals and suprasegmentals remain goals of the pronunciation classroom. However, within each of these areas, there is recognition that certain linguistic items may contribute more to the overall intelligibility of the L2 speaker. So for example, consulting a contrastive analysis of English and the learners' L1 can guide us in predicting which sound features will present challenges in a class setting where the learners all share an L1; applying the functional load principle (Catford, 1987) can assist us in prioritizing segmental contrasts that carry a high functional load such as /p,b/, /l,r/, or /æ,ε/; and finally, findings from research on the lingua franca core—such as omitting /θ,ð/ and focusing instead on initial consonant clusters, vowel length, and prominence (Walker, 2010)—can guide us when teaching in ELF contexts.

We can conclude from this that while neither segmentals nor suprasegmentals should be omitted from the pronunciation curriculum, decisions about what to include in each area should be guided by the needs of the learners. As Brinton (2014) reminds us, "most importantly, the teaching of segmentals should be integrated into an overall pronunciation curriculum that also recognizes the importance of the suprasegmental aspects of language" (p. 232).

Principle #6: Perception and production are inextricably linked

There is no doubt a great deal of truth to the lay belief "If you can't hear it you can't produce it." This belief has led to the conventional practice in pronunciation teaching practice of prefacing the production of sound features with practice in perception. Accordingly, generations of pronunciation teachers have been trained in "listen and repeat" drilling techniques and provided with listening discrimination exercises involving both minimal pair words and sentences. Today, listen and repeat remains an important part of pronunciation practice, although current pedagogical practice reminds

practitioners of the need to move beyond the listen and repeat phase and to include meaningful, communicative practice as a follow-up (see, for example, Yoshida, 2016).

Building on this tradition, Celce-Murcia et al. (2010) propose a five-stage lesson sequence consisting of description and analysis, listening discrimination, followed by three phases of practice (controlled, guided, and communicative). As a rationale for this sequence, they cite Escudero (2007), who notes that support from a growing body of research shows focused listening practice leading to significant improvements in production (Celce-Murcia et al., 2010, p. 46). More recently, we find mounting evidence for the efficacy of this practice. Barriuso and Hayes-Harb (2018) discuss the effects of a practice known as High Variability Phonetic Training (HVPT), whereby learners are exposed to given sounds produced by multiple speakers. This variability of the input has been shown to increase learners' ability to distinguish the new sounds. Interestingly, we also find evidence (Darcy, 2018) that the reverse is true, namely focused pronunciation practice can lead to improved listening comprehension.

Principle #7: Teaching pronunciation is fundamentally different from teaching other skill areas

A large part of the teacher training curriculum consists of exposing future L2 teachers to the underlying rules of a given skill area. Thus preparation courses for teaching grammar to L2 learners require that teachers conquer the tense and aspect system of English, that they can explain both the form and meaning of embedded clauses, and that they can explain the difference between restrictive and non-restrictive relative clauses. Similarly, preparation courses for teaching vocabulary require that L2 teachers be able to explain parts of speech, collocation, and idiomatic usage—and as well be able to illustrate the concepts of connotation and denotation. And true enough, in preparing teachers of pronunciation, there is a similar required body of knowledge that future teachers need to master. Some examples of this body of knowledge include the vowel and consonant inventories, stress shifting due to part of speech (and in some cases even dialect), connected speech features such as assimilation and elision, and allophonic variations of segmentals depending on where they occur in a syllable. These “rules” of grammar, vocabulary, and pronunciation are expected to be a part of every teacher's repertoire, and although a teacher may not have all these rules at the tip of their tongue they should, as part of their lesson preparation, know where to go to retrieve this knowledge and then subsequently be able to present the rules to students in a meaningful way.

What, then, makes teaching pronunciation different from teaching other skills? As we have seen earlier, it is certainly true that teachers need to be able to transmit their knowledge about the segmental and suprasegmental systems of the spoken language. However, they also need to do a great deal more, such as effectively and efficiently conduct activities in the listening discrimination and practice phases of the lesson. To do so, they need to have at their ready disposal a wide variety of tools and techniques for pronunciation teaching, such as how to conduct a minimal pair sentence drill, how to engage learners in game-like activities such as pronunciation bingo, how to implement information gap activities focusing on a segmental contrast, and how to use limericks or children's rhymes to reinforce the stressed-unstressed rhythm of English. And even more importantly, they need to understand how to introduce auditory and visual reinforcement techniques such as rubber bands to demonstrate vowel length with stressed and unstressed vowels, kazoos to illustrate the intonation contours of English phrases, chopsticks to emphasize stressed syllables in a word or prominent elements in a phrase group, and gestures to accentuate contrastive stress.

So while there most definitely is a cognitive dimension to teaching pronunciation (i.e., with rules that teachers need to explain such as how to pronounce the *-s* and *-ed* morphological endings in

English), there is another dimension that involves auditory, visual, and kinesthetic modalities. The effective teacher of pronunciation makes copious use of all these reinforcement techniques.

Principle #8: Feedback is critical

Celce-Murcia et al. (2010) remind us that feedback is essential in all phases of the pronunciation lesson but that the shape it takes will depend on the stage in which it is delivered. Thus in the initial description and analysis phase of the lesson, teacher feedback generally focuses on the articulatory features of the sound or sound contrast being taught, whereas in the listening discrimination phase it focuses on letting learners know if they are correctly discriminating the sounds they are hearing. Finally, in the practice phases of the lesson, feedback is most direct in the controlled practice phase, where learners need to know if they are correctly producing the feature in question. In the latter stages of practice (guided and communicative), feedback may focus more on whether the intended meaning is being correctly conveyed. Feedback in these phases may also be delayed so as not to interrupt the flow of communication. An additional factor to be considered when building feedback into the lesson is the issue of who delivers the feedback. Over the progression of a lesson, it is important to build in opportunities not only for teacher feedback but also for peer feedback.

Regardless of which stage of the lesson feedback is provided, it is important to remember that feedback needs to be systematic, explicit, and targeted. With practice alone, learners will not progress. As Darcy (2018) reminds us, no matter how contextualized and meaningful practice might be, without feedback it is of little benefit to the learners.

Principle #9: Numerous factors play a role in our learners' acquisition of pronunciation

Our learners are not blank slates. Whether they are at the beginning, intermediate, or advanced stages of proficiency, they come to us with backgrounds that strongly color their learning experiences and even their chances at success. Some of these factors include their L1, age, prior education and learning experiences, cultural identity, motivation, target language exposure, and use of the target language outside of the classroom. Obviously, many of these factors are outside of our control; nonetheless, it behooves us as teachers to know as much as possible about our learners since this can provide us with valuable insights into their learning process. We can also focus on changing those factors that *are* within our control, such as the learners' motivation, their exposure to the target language, and even their use of the target language outside of the classroom. Posting links for additional practice to the course website is one small way that we can encourage learners to increase their L2 exposure. Service learning assignments that involve students in community-oriented projects is another way of increasing their use of the L2 outside of the classroom. Finally, having learners design and commit to their own learning contract (Acton, 1984) is an additional way of encouraging expanded L2 exposure and interaction, especially with fossilized learners.

Some factors are obviously more complex than others, such as getting learners to make significant changes in their L2 motivation. Many of our learners come to us with low self esteem vis-à-vis their ability to pronounce English. Encouragement and positive feedback can go a long way toward helping them to change this attitude. It is important, as well, for teachers to understand that identity and motivation are interwoven and that learners may view their accent in English as part of their identity. For this reason, gaining insight into learners' motivations (e.g., via journal topics that address the issue or learner surveys) can yield positive results. On the topic of improving motivation, Moyer (2018) suggests that teachers use a two-pronged approach of instilling in their learners a strong L2 self-concept and encouraging them to recognize the value of a target-like L2 pronunciation. Both she and Macdonald (2018) suggest encouraging learners' metacognitive efforts, having them share their pronunciation-related goals and strategies. And going one step further, Macdonald (2018)

stresses the importance of helping learners to recognize the importance of pragmatic strategies to their emerging L2 selves.

Principle #10: Knowledge of the learner's L1 is extremely helpful in teaching pronunciation but cannot predict all areas in which learners will have difficulty

In an earlier era of language teaching where contrastive analysis reigned (see Tarone, 2012), a learner's L1 tended to be viewed as a negative factor that "interfered" with L2 acquisition. Thus the fact that in German final consonants are devoiced was characterized as a bad habit that German speakers acquiring English needed to overcome. Today's view of the L1 is somewhat more enlightened, and the concept of interference has been reconceptualized as language transfer, which can be either positive or negative, depending on the feature being acquired and whether this feature in the learner's L1 is similar to that in the L2. So while comparisons of language systems such as that in Swan and Smith (2001) are definitely useful for pronunciation teachers, especially in cases where students are struggling with a specific feature (such as Japanese students struggling to acquire the English consonants /l/ and /r/), such contrastive analyses cannot predict all issues in the L2 phonological system that may cause learners to struggle. In fact, researchers today (see Munro, 2018) maintain that there is no direct correlation between the presence of a phonological feature (such as /θ/ and /ð/) in a learner's L1 and its ease of acquisition. In other words, just because certain sounds are new to the learner does not necessarily mean they will be difficult to learn. Brinton (2018a) suggests that L2 teachers of pronunciation, instead of putting their energy into analyzing L1/L2 differences, are better off spending their time analyzing learners' individual needs. This holds especially true for classroom settings where there are learners from multiple language groups.

Principle #11: Exposure to authentic language is critical

Darcy (2018) indicates a renewed research focus on the relation between pronunciation and listening, the role of listening in perception versus production, and an increased focus on extensive listening. Among L2 pronunciation researchers and practitioners, there is general consensus that students who are immersed in listening to a language and receive multiple sources of input are at an advantage when acquiring the L2 phonological system. Given this reality, it is all the more critical that the sources of input we provide learners reflect the reality of the spoken language (and not some rehearsed, overarticulated version of the language as was often the case in the past). As Brinton (2014) notes, the textbook market has responded to practitioners' requests for improved listening sources, with the result that today's listening materials are much more authentic than those of the past. Teachers can also easily supplement the sources provided in their textbooks with authentic materials from the web, thereby increasing their exposure to different voices and accents. Coupled with tasks that focus learners on aspects of native speaker pronunciation such as connected speech, intonation, and prominence, these sources serve to enrich the listening curriculum and provide excellent supplements to commercially-produced materials.

Principle #12: Learners benefit from multimodal learning

As a counterbalance to contemporary highly cognitive instruction, a parallel movement in pronunciation teaching embraces the effect of embodied pronunciation techniques such as gesture, movement, and other sensory modalities on the acquisition of L2 pronunciation. This focus on using additional modalities to teach is not entirely new to pronunciation teaching, which even in the days of Direct Method and Audiolingualism embraced auditory and visual tools such as minimal pair drills, the sagittal diagram, the consonant chart, and the vowel quadrant. With the

advent of Communicative Language Teaching, however, pronunciation teaching entered an era where it began to embrace other forms of multimodal reinforcement. One particularly influential force in this movement was Gilbert's (1991) "gadgets" article where she espoused the use of rubber bands, kazoos, and even plaster dental molds in the pronunciation classroom. More recently, pronunciation researchers and practitioners have promoted kinesthetic methods such as using the hands to indicate word and sentence stress patterns and "stress stretch" pronunciation workouts (Chan, 2018). Similarly, the field of haptic pronunciation practice (Burri et al., 2016, 2019) is rooted in the systematic use of gesture, using both movement and touch in the teaching of L2 sound features. As an example, Burri (2018) advocates three haptic techniques to teach English rhythm: the Rhythm Fight Club (to assist students in compressing syllables and foregrounding focus words), Syllable Butterfly (to reinforce long versus short syllables in English), and Tai Chi Fluency (to improve student fluency and flow, assist students in reducing unstressed vowels, and encourage natural linking).

Future directions

At the pace we are progressing, it is difficult to predict where the future will lead us. That said, there is a definite need for teacher preparation programs to equip teachers for the pronunciation classroom of the future. Although pronunciation methodology is paying increased attention to research, there is still a need for it to be more research-driven. According to Murphy and Baker (2015), pronunciation teaching in the past has been characterized by four waves, each with its unique philosophies and methodologies. Based on current research emphases, we can extrapolate several trends that will undoubtedly influence future classroom practices. These include an increased interest among pronunciation practitioners and researchers on the following:

1. Discourse and pragmatics: Recent work in these areas (Pickering, 2018) indicates an increased focus on pitch, intonation, rhythm, and tonal units in discourse along with renewed attention on how pragmatics affects selected pronunciation features.
2. Intelligibility: There is general consensus in the field that the ultimate goal of pronunciation instruction is that of intelligibility, replacing previous misconceptions that the goal was to eradicate a learner's foreign accent (Levis, 2018a). Given this fundamentally reconceptualized instructional goal, the focus will be on intelligibility-based teaching materials and curricula and teacher preparation programs that are in sync with these foci.
3. English as a lingua franca (ELF): Today's world of pronunciation pedagogy recognizes the exponential increase in non-native speaker/non-native speaker interactions in English and the concomitant need to reassess pronunciation goals in this World Englishes context (Tsang, 2019). One consequence is likely to be an increase in L2 accented speech samples in listening and speaking materials. Another, ongoing, effort is the search for a "common core" pronunciation curriculum consisting of the features of English L2 pronunciation that most impact intelligibility in the global context. This search for a significantly reduced (and thus more attainable) set of ELF/EIL pronunciation goals is likely to dominate pronunciation research for the coming decades.
4. Technology and the teaching of pronunciation: Computer-assisted pronunciation training and automatic speech recognition are no newcomers to the field of pronunciation pedagogy. However, as the underlying technology in these two areas becomes more refined, so too does the feasibility of their everyday use in the pronunciation classroom and in pronunciation apps available to both teachers and students (Hardison, 2018). The future will undoubtedly bring a proliferation of new classroom technologies enabling increased interaction, multimodality, and individualization of instruction. With this will come a need for technology-related teacher

training, both for the physical and virtual classroom (Levis, 2018b; see also Levis & Rehman, Chapter 21 in this volume).

5. Pronunciation assessment: Also accompanying the previously-described improvements in underlying technology will be advances in machine recognition and scoring of individuals' speech, leading to the increased status of pronunciation measures in language assessment and the accompanying increased role of pronunciation in large-scale proficiency exams (such as the TOEFL or IELTS examinations). Newly developed standards, norms, and assessment scales that are more sensitive to intelligibility and assessment measures that target sociolinguistic and pragmatic functions are inevitable, as is the “glocalizing” of pronunciation assessment and renewed efforts to incorporate fluency measures into pronunciation assessment (Isaacs, 2018, Kang & Kermad, 2018; Trofimovich & Isaacs, 2017; Tsang, 2019).

As the previously-predicted changes begin to filter into classroom practice, our definition of what constitutes effective pronunciation pedagogy will inevitably also begin shift. And thus we return full circle to Richards' contention that teacher identity (and with it, our definition of what makes us effective as teachers) is dynamic rather than static, strongly colored by existing beliefs about effective teaching methodologies. If we are to believe those who have closely studied where the field is going such as Levis and Wu (2018), and Levis (2018b), there is a strong glimmer of hope that we are indeed entering a more enlightened era—that “fifth wave” of pronunciation teaching alluded to by Murphy and Baker (2015) in which research and practice better align to define what constitutes effective teaching.

References

- Abercrombie, D. (1949). Teaching pronunciation. *ELT Journal*, 3(5), 113–122.
- Acton, W. (1984). Changing fossilized pronunciation. *TESOL Quarterly*, 18(1), 71–85. <https://doi.org/10.2307/3586336>
- Badwan, K. (2018). Effective classroom strategies. In J. Liontas (Ed.), *The TESOL encyclopedia of English language teaching*. Hoboken, NJ: Wiley. <https://doi.org/10.1002/9781118784235.eelt0179>
- Baker, A. & Murphy, J. (2011). Knowledge base of pronunciation teaching: Staking out the territory. *TESL Canada Journal*, 28(2), 29–50. <https://doi.org/10.18806/tesl.v28i2.1071>
- Barriuso, T. A. & Hayes-Harb, R. (2018). High variability phonetic training as a bridge from research to practice. *The CATESOL Journal*, 30(1), 177–194.
- Brinton, D. M. (2012). Pronunciation instruction. In A. Burns & J. C. Richards (Eds.), *The Cambridge guide to pedagogy and practice in second language teaching* (pp. 246–257). New York, NY: Cambridge University Press.
- Brinton, D. M. (2014). Epilogue to the myths: Best practices for teachers. In L. Grant (Ed.), *Pronunciation myths: Applying second language research to classroom teaching* (pp. 225–242). Ann Arbor, MI: University of Michigan Press.
- Brinton, D. M. (2018a). Reconciling theory and practice. *The CATESOL Journal*, 30(1), 283–300.
- Brinton, D. M. (2018b). Teacher preparation for teaching pronunciation. In J. Liontas (Ed.) *The TESOL encyclopedia of English language teaching*. Hoboken, NJ: Wiley. <https://doi.org/10.1002/9781118784235.eelt0243.pub2>
- Burri, M. (2018, January 21). *Using haptic techniques to teach English rhythm*. [Paper presentation.] 34th Annual English Teachers Association of Switzerland Conference. Zofingen, Switzerland. www.e-tas.ch/node/2949
- Burri, M., Baker, A., & Acton, W. (2019). Proposing a haptic approach to facilitating L2 learners' pragmatic competence. *Humanising Language Teaching*, 21(3), 1–15.
- Burri, M., Baker, A. A., & Acton, W. (2016). Anchoring academic vocabulary with a “hard hitting” haptic pronunciation teaching technique. In T. Jones (Ed.), *Pronunciation in the classroom: The overlooked essential* (pp. 17–26). Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Catford, J. C. (1987). Phonetics and the teaching of pronunciation. In J. Morley (Ed.), *Current perspectives on pronunciation: Practices anchored in theory* (pp. 87–100). Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (with Griner, B.) (2010). *Teaching pronunciation: A course book and reference for teachers of English to speakers of other languages* (2nd ed.). New York, NY: Cambridge University Press.

- Chan, M. (2018). Embodied pronunciation learning: Research and practice. *The CATESOL Journal*, 30(1), 47–68.
- Darcy, I. (2018). Powerful and effective pronunciation instruction: How can we achieve it? *The CATESOL Journal*, 30(1), 13–45.
- Darcy, I., Ewert, D., & Lidster, R. (2012). Bringing pronunciation instruction back into the classroom: An ESL teachers' pronunciation "toolbox." In J. Levis & K. Lavelle (Eds.), *Proceedings of the 3rd pronunciation in second language learning and teaching conference* (pp. 93–108). Ames, IA: Iowa State University.
- Deterding, D. (2013). *Misunderstandings in English as a lingua franca: An analysis of ELF interactions in South-East Asia*. Boston, MA: Walter de Gruyter.
- Echelberger, A., McCurdy, S., & Parrish, B. (2018). Utilizing a study circle model to improve teacher confidence and proficiency in delivering pronunciation instruction in the classroom. *The CATESOL Journal*, 30(1), 213–230.
- Escudero, P. (2007). Second language phonology: The role of perception. In M. C. Pennington (Ed.), *Phonology in context* (pp. 109–134). New York, NY: Palgrave Macmillan.
- Gilbert, J. (1991). Gadgets: Non-verbal tools for teaching pronunciation. In A. Brown (Ed.), *Teaching English pronunciation: A book of readings* (pp. 308–322). London, England: Routledge.
- Hardison, D. (2018). Computer-assisted pronunciation training. In O. Kang, R. I. Thomson, & J. M. Murphy (Eds.), *The Routledge handbook of contemporary English pronunciation* (pp. 478–494). New York, NY: Routledge.
- Isaacs, T. (2018). Fully automated speaking assessment: Changes to proficiency testing and the role of pronunciation. In O. Kang, R. I. Thomson, & J. M. Murphy (Eds.), *The Routledge handbook of contemporary English pronunciation* (pp. 570–584). New York, NY: Routledge.
- Kang, O. & Kermad, A. (2018). Assessment in second language pronunciation. In O. Kang, R. I. Thomson, & J. M. Murphy (Eds.), *The Routledge handbook of contemporary English pronunciation* (pp. 511–526). New York, NY: Routledge.
- Kissling, E. M. (2014). What predicts the effectiveness of foreign-language pronunciation instruction? Investigating the role of perception and other individual differences. *The Canadian Modern Language Review*, 70(4), 532–558.
- Lee, J., Jang, J., & Plonsky, L. (2015). The effectiveness of second language pronunciation instruction: A meta-analysis. *Applied Linguistics*, 36(3), 345–366.
- Levis, J. M. (2005). Changing contexts and shifting paradigms in pronunciation teaching. *TESOL Quarterly*, 39(3), 367–377. <https://doi.org/10.2307/3588485>
- Levis, J. M. (2018a). *Intelligibility, oral communication, and the teaching of pronunciation*. New York, NY: Cambridge University Press.
- Levis, J. M. (2018b). Technology and the intelligibility-based classroom. *Journal of Second Language Pronunciation*, 4(2), 260–278. <https://doi.org/10.1075/jslp.18025.lev>
- Levis, J. M. (2019). Teaching-oriented research. *Journal of Second Language Pronunciation*, 5(1), 1–12. <https://doi.org/10.1075/jslp.18043.lev>
- Levis, J. M. & McCrocklin, S. (2018). Reflective and effective teaching of pronunciation. In M. Zeraatpishe, A. Faravani, H. R. Kargazari, & M. Azarnoosh (Eds.), *Issues in applying SLA theories toward reflective and effective teaching* (pp. 77–89). Leiden, The Netherlands: Koninklijke Brill NV. <https://doi.org/10.1163/9789004380882>
- Levis, J. M. & Muller Levis, G. (2018). Teaching high-value pronunciation features: Contrastive stress for intermediate learners. *The CATESOL Journal*, 30(1), 139–160.
- Levis, J. M. & Wu, A. (2018). Pronunciation—Research into practice and practice into research. *The CATESOL Journal*, 30(1), 1–12.
- Macdonald, S. (2018). Pronunciation tutorials: Not only sounds, but also awareness of self and context. *The CATESOL Journal*, 30(1), 249–266.
- McNerney, M. & Mendelsohn, D. (1992). Suprasegmentals in the pronunciation class: Setting priorities. In P. Avery & S. Ehrlich (Eds.), *Teaching American English pronunciation* (pp. 185–196). Oxford, England: Oxford University Press.
- Moyer, A. (2018). An advantage for age? Self-concept and self-regulation as teachable foundations in second language accent. *The CATESOL Journal*, 30(1), 95–112.
- Munro, M. (2018). How well can we predict second language learners' pronunciation difficulties? *The CATESOL Journal*, 30(1), 267–282.
- Murphy, J. M. & Baker, A. A. (2015). History of ESL pronunciation teaching. In M. Reed & J. Levis (Eds.), *The handbook of English pronunciation* (pp. 36–65). Hoboken, NJ: Wiley Blackwell.
- Pickering, L. (2018). *Discourse intonation: A discourse-pragmatic approach to teaching the pronunciation of English*. Ann Arbor, MI: University of Michigan Press.
- Richards, J. C. (2012). Competence and performance in language teaching. In A. Burns & J. C. Richards (Eds.), *The Cambridge guide to pedagogy and practice in second language teaching* (pp. 46–56). New York, NY: Cambridge University Press.

- Swan, M. & Smith, B. (Eds.) (2001). *Learner English: A teacher's guide to interference and other problems* (2nd ed.). Cambridge, England: Cambridge University Press.
- Tarone, E. (2012). Interlanguage. *The encyclopedia of applied linguistics*. <https://doi.org/10.1002/9781405198431.wbeal0561>
- Trofimovich, P. & Isaacs, T. (2017). Second language pronunciation assessment: A look at the present and the future. In T. Isaacs & P. Trofimovich (Eds.), *Second language pronunciation assessment: Interdisciplinary perspectives* (pp. 259–271). Bristol, England: Multilingual Matters.
- Tsang, A. (2019). Reconceptualizing speaking, listening, and pronunciation: Glocalizing TESOL in the contexts of world Englishes and English as a lingua franca. *TESOL Quarterly*, 53(2), 579–588. <https://doi.org/10.1002/tesq.504>
- Walker, R. (2010). *Teaching the pronunciation of English as a lingua franca*. Oxford, England: Oxford University Press.
- Yoshida, M. T. (2016). *Beyond repeat after me: Teaching pronunciation to English learners*. Alexandria, VA: Teachers of English to Speakers of Other Languages.

Pronunciation and technology

John M. Levis and Ivana Rehman

Introduction

The era of COVID-19 has led to upheavals in all areas of life, among which is the necessity of teaching and learning using technology. At even a basic level, this means input and output is provided using telecommunication programs in all areas of life, but the pandemic has also demonstrated the necessity of using technology to teach language skills, including second language (L2) pronunciation. Indeed, the push toward the use of technology accelerates long-term trends in the field of L2 pronunciation as technological tools play a central role in the teaching of pronunciation to L2 learners and in the training of language teachers. Previous articles (Chun, 2019; Levis, 2007; Neri et al., 2002; O'Brien et al., 2018; Pennington & Rogerson-Revell, 2019) show a consistent interest in applying and adapting technology to pronunciation learning and teaching, including perception, production, teacher training, feedback, and the availability of resources that are appropriate for diverse contexts.

Focus of this chapter

This chapter addresses the ways that technology affects teaching and learning the pronunciation of a second language (L2). By second language, we mean any language that is not learned as a mother tongue (whether it be the second, third, fourth, or more), but primarily languages that are learned in formal contexts with a syllabus designed by someone other than the learner, such as through the use of textbooks or through self-study. By pronunciation, we mean speech features that are used to express and distinguish meaning in spoken language. These features may be segmental (i.e., related to vowel and consonant sounds) or suprasegmental (i.e., related to the use of pitch and length in stress, rhythm, tone, or intonation). Pronunciation is thus closely tied to speaking skills and to listening skills. Speech must be pronounced in patterned ways, and the way speech is pronounced affects how easily listeners understand what is spoken, as well as a speaker's place in the social structure of a community.

Pronunciation, like all aspects of spoken language, is usually ephemeral, expressing meaning but quickly interpreted in time and thus unable to be reproduced exactly. The use of technology has been critical in making speech less ephemeral, both through recording voices to play back later and through digital analysis of speech. Uses of technology have also revolutionized the teaching and learning of L2 pronunciation. Recordings of speech are used by learners on multiple platforms to listen to input targeting specific pronunciation features, from modern versions of recordings originally

designed for vinyl and tape recordings to input that is digitally adaptive to learners' needs. For example, input choices can be informed by online dictionaries, spoken corpora, and text-to-speech voices to provide pronunciation practice targeted to the needs of individual L2 learners (Qian, 2018; Qian et al., 2018). The pronunciation of specific features of a language can also be visualized through interactive sagittal diagrams (<https://soundsofspeech.uiowa.edu>), through augmented talking heads (Engwall, 2012), and through the use of ultrasound, electropalatography, or other medical technologies (Bliss et al., 2018; Hacking et al., 2017). Programs for the acoustic measurement and analysis of speech (such as Praat, by Boersma & Weenink, 2018) have also made possible precise measurements and visualized feedback on speech at a scale unimagined even 20 years ago. These acoustic tools have been adapted to language learning. For example, tone learning in Chinese is often very difficult for L2 learners, but learning to produce and distinguish tones is made easier by comparing visual pitch movement from L1 Chinese speakers to a learner's own productions (Chun et al., 2015). The ubiquitous presence of online speech can also be tapped for pronunciation practice, whether through shadowing (Foote & McDonough, 2017), by identifying appropriate models of speech production (Murphy, 2014; Yoshida, 2018), or finding how words and phrases are produced by varied L1 speakers, as on www.Youglish.com (Karatay, 2017). Pronunciation can even be effectively learned through social media such as Twitter (Fouz-González, 2017) and through an explosion of innovative pronunciation apps (e.g., Fouz-González, 2020).

Providing speech input is further advanced by technology's ability to provide automatic processing and feedback of L2 speech. However, the promise of Automatic Speech Recognition (ASR) for L2 pronunciation practice is now beginning to be realized with ASR programs built for language learning. Bai et al. (2020) show the promise of ASR for reading practice, and even off-the-shelf ASR dictation programs can be successfully used for pronunciation practice with a carefully designed pedagogy (McCrocklin, 2019; McCrocklin & Edalatshams, 2020). Text-to-speech programs, which used to sound robotic in sound quality, are also abundant and provide relatively natural spoken language via written texts input (e.g., <https://cloud.google.com/text-to-speech#section-2>).

Pronunciation within the context of L2 teaching and learning

The interaction of pronunciation and technology reflects larger issues in the teaching and research of spoken language because of what it tells us about L2 speech perception, speech production, and automaticity of speech. In regard to perception, technology allows us to understand how L1 speakers create meaning from speech (Cutler, 2012), how L2 listeners struggle to process speech (Broersma & Cutler, 2011), and why L2 listeners may struggle to understand casual speech more than formal speech (Henderson & Cauldwell, 2020), speech in noise (Munro, 1998), and speech in unfamiliar rather than familiar accents (Shin et al., 2021). In regard to L2 production, technology can be used to help determine why L2 speech is considered more or less intelligible and comprehensible, especially in regard to deviations from expected productions and variations within the L1 speech community (Moussalli & Cardoso, 2020). In regard to automaticity, L2 speech rarely matches the speech rate of L1 speech, and technology can help us to quantify the development of L2 fluency through objective measures (Blake, 2017).

Not only is technology important for researching L2 pronunciation, technology can also help L2 learners to improve their skills in becoming more comprehensible (Lima, 2020), in understanding speech spoken in careful and casual registers (Alameen & Levis, 2015), and in improving fluency through shadowing appropriate speech models (Foote & McDonough, 2017). In all these areas of pronunciation and speech, technology can be called upon to make speech visible, to provide speech models that can improve perception and production, and even to create new voices that allow learners to receive feedback that compares their own production to a model voice (Ding et al., 2019),

or even to hear their own voice with a different pronunciation, “a better me” in the words of Henderson and Skarnitzl (2022).

Technology related to language learners

L2 pronunciation learners make use of technology in a variety of ways. Technology can especially help them improve their knowledge of how pronunciation communicates meaning and connects to other aspects of language, their perception, and their production. All of these aspects of pronunciation learning are often connected to uses of technology, and all promise to continue to improve pronunciation learning as technological tools become better.

An obvious area in which technology contributes to pronunciation learning is through developing better knowledge of the L2 system. This knowledge may come through programs that show how L2 sounds are made (e.g., the Sounds of Speech app or the Seeing Speech project [www.seeing-speech.ac.uk]), phonetic charts that include sound files, online assessments of L2 prosody such as the Perception of Spoken English (POSE) Test (Shewell, 2020), videos on YouTube and other sites, and more. Indeed, the amount of information available is almost beyond belief. Not all of this information is equally reliable, but it is foolish not to recognize its potential usefulness both for teachers and for learners. Websites such as www.pronunciationforteachers.com collect information about concepts, websites, teaching tips, and other aspects of pronunciation that are likely to be accurate, but such collections only scratch the surface of what is available.

Perception

Perception is an aspect of listening comprehension that depends on being able to identify phonological distinctions in casual and controlled speech. Such distinctions may involve minimal pairs for phonemes, word stress, and suprasegmental characteristics such as the placement of pitch accents and pitch movement. In Figure 21.1, #1 reflects a potential problem in word identification (i.e., *pills* vs. *bills*) for L2 learners who cannot distinguish /p/ and /b/, such as Arabic or Somali speakers. The word *delivered* (#2) assumes the ability to identify word stress and use that identification to decode the word. Items #3, with a jump in pitch, and #4 with a drop in pitch both reflect pitch accents or prominence in spoken English, signaling a point of attention for listeners and the location of the final pitch movement of the phrase (falling pitch for #3 and rising pitch for #4). These last two items are visible in the Praat pitch tracings shown by a recording of the example. The rise in pitch on “girl” is noticeable relative to the pitch level of the words immediately preceding it. In contrast, the pitch level on “boat” is the lowest of the phrase and is salient to listeners both because of its low pitch and because it sets up the final rise in pitch to the end, signaling a question.

Language learners, even if they do not always produce these pronunciation features, need to be able to hear them in order to understand what others are saying to them. This is especially the case with conversational or casual speech, in which phonological distinctions are often harder to hear because of vowel reduction, linking, assimilations to other sounds, and deletions of expected sounds. These



Figure 21.1 Example production by a speaker of English

changes are the norm in conversational speech, causing language learners to misunderstand speech even when they know all of the words. For example, the word *temperature*, which would be phonetically transcribed in careful American English as [ˈtɛmprətʃər], can sound like [ˈtɛm(p)ʃər] in the speech of weather forecasters who say this word a lot. These types of changes are not unusual and indicate that language learners face extra difficulties in perception when listening to conversational speech.

A standard way of training perception for L2 learners is through the use of minimal pairs, either through identification or discrimination exercises. For example, if a language learner has difficulty distinguishing the vowel sounds in *beat* and *bit*, it is common for teachers to read or record exercises that ask listeners to tell the two sounds apart or identify sounds, as in Table 21.1.

These types of minimal pair exercises have existed for decades, but their effectiveness has been revitalized in recent research. Learners can get quite good at distinguishing phoneme differences for particular voices (such as those from the recordings or their teacher), but they are less successful at distinguishing phonemes with new voices. Because all voices differ in small but noticeable ways, each person’s [i] and [ɪ] sounds differ in ways that make transfer of a familiar voice to new voices challenging. Because we want perception training to transfer to any voice, new models of training have been developed that promote transfer to new voices. This approach to perception is called High Variability Phonetic Training, or HVPT. Although HVPT is based on remarkably strong evidence, it is surprisingly unknown. As Mark Liberman, editor of *Language Log*, wrote in 2008, “the mystery is why HVPT — a simple, quick, and inexpensive technique for helping adults to learn the sounds of new languages — is not widely used.” A decade later, Thomson (2018) stated that HVPT continued to be less known, even though evidence of its effectiveness has continued to grow.

HVPT employs multiple voices and linguistic environments to develop L2 perceptual abilities. Traditionally, learning new phonetic categories involved the use of a single voice that is clear and environments that ensured that sound contrasts would be easier to distinguish. For example, vowel distinctions are harder to hear when the vowels precede final dark /l/ or nasal consonants (such as *feel-fill* or *seen-sin*) because the following consonant environment masks the quality of the vowel, and the contrast of the vowels is harder to consistently identify than if the vowel precedes another oral consonant (*fees-fizz*). HVPT takes a non-traditional approach to perception training. It recognizes that different speakers have somewhat different ways of pronouncing phonemes, and that native speakers of a language have developed the ability to adjust to this variation. As a result, HVPT uses

Table 21.1 Examples of perception exercises using minimal pairs

Identification	Does this word have the [ɪ] sound? Say yes or no. Examples			
	feet		No	
	fill		Yes	
	tweet		No	
Discrimination	Are these words the same or different? Examples			
	beat	bit	DIFFERENT	
	freeze	freeze	SAME	
	did	did	SAME	
	Which word is different, Word 1, 2, or 3? Examples			
	beat	bit	beat	2
	freeze	freeze	frizz	3
did	deed	deed	1	

multiple voices during training and does not give preference to environments that are easier to hear. Laboratory research has shown that the use of highly variable stimuli (e.g., Logan et al., 1991; Bradlow et al., 1999) leads to more robust perceptual development of new phonetic categories for L2 learners. Paradoxically, making the task harder in the short run (by using multiple voices and more variable environments) creates in L2 learners a greater ability to recognize unfamiliar and difficult phonemic distinctions as spoken by different voices.

More recent research has demonstrated that the value of HVPT extends beyond the laboratory to the classroom. Thomson (2011, 2012a) demonstrated that the use of 20 Canadian English speaker voices helped Mandarin learners of English improve their ability to distinguish English vowels. The training also transferred to novel words and some novel contexts. Qian (2018) and Qian et al. (2018) demonstrated that HVPT systems were also effective for vowel and consonant improvement for Mandarin and Russian speakers. Training transferred to novel words and novel voices. HVPT training has also been shown to be effective for L2 Mandarin tone learning. Silpachai (2020) trained two groups of English speakers on Mandarin tones. One group received training with multiple talkers while the other received training with a single talker. The multiple talker group improved more than the single talker group, and their improvement was still evident six months later. Several HVPT programs are available for widespread use, including English Accent Coach (Figure 21.2) and Linguatorium Auris (Figure 21.3), both for English. For learners of French, a more basic program called *Ouïe* is available for vowel training (Figure 21.4).



Figure 21.2 English Accent Coach (englishaccentcoach.com)

Thomson (2012b)

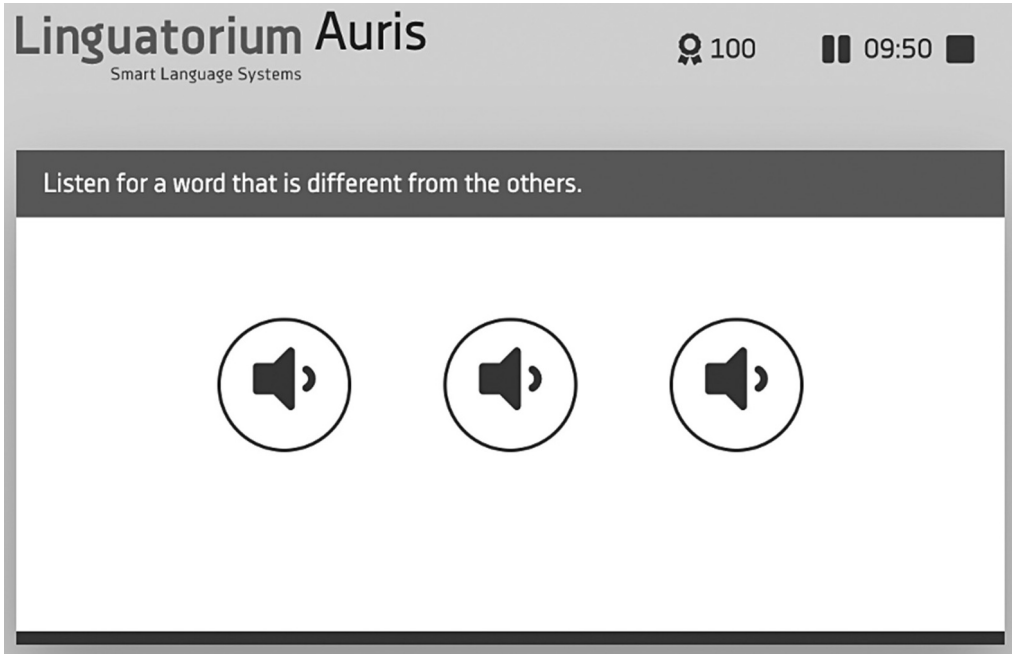


Figure 21.3 Linguatorium Auris (linguatorium.com)



Figure 21.4 L2 French vowel training (ouie.org)

Production

Technology is also widely used for production practice. Recordings provide the input for controlled, guided, and communicative pronunciation practice, with the greatest number of materials being controlled. This emphasis on controlled practice partially reflects the history of pronunciation teaching and learning, in which audiolingual materials have dominated the field. However, controlled materials also meet a very important need in the learning of L2 pronunciation. When L2 learners have difficulty in pronouncing unfamiliar sounds, they need ample controlled practice to learn to

automatically produce new pronunciation features. They need, in other words, sufficient non-communicative practice before they can begin to both pronounce the new sounds and communicate at the same time. In addition to controlled practice, technology can be used for guided practice.

By guided practice, we mean practice that requires L2 learners to pay attention to pronunciation form while also paying attention to some other aspect of language such as meaning, grammar, pragmatic uses of language, nonverbal behavior, etc. Examples of the use of technology for guided practice include the use of pre-recorded television or movie scenes (e.g., Goodwin, 2005). In a recent study, Foote and McDonough (2017) asked 22 L2 learners to use iPods to shadow the pronunciation and body language of speakers from eight TV sitcom scenes, practicing with a different scene each week over eight weeks. Subjects practiced at least four times each week for 10 minutes each time. Final ratings of their comprehensibility and fluency improved significantly, although their accentedness did not change. This study demonstrates one of the values of technology. The subjects, using portable technology, worked individually outside of the classroom environment. Their guided practice went beyond typical listen and repeat by asking learners to integrate attention to segments, prosody, and nonverbal communication while interpreting what the characters on the sitcom were trying to communicate.

Communicative practice using technology is rare, and when it does exist, it involves the use of teachers developing innovative approaches to the use of technology developed for other purposes such as Automatic Speech Recognition (ASR). ASR allows L2 learners to communicate with the computer and have the computer respond appropriately. Only a few ASR systems have been developed solely for L2 pronunciation. In one such system, Strik et al. (2012) developed an ASR system for L2 Dutch that improved learners' oral skills and pronunciation. Yoshida (2018) suggests that pronunciation teachers should emphasize communicative goals in their technology-based assignments. She recommends that teachers ask students to develop a multimedia project that will be communicated with others for a real reason, creating a greater motivation to communicate intelligibly and pronounce more clearly. In a similar project, Lord (2008) used student-developed podcasts to learn about aspects of Spanish language and culture. The podcasts, which were part of a Spanish phonetics class, also resulted in improved pronunciation and more positive attitudes. For pronunciation practice that is tied to listening, the internet provides a wealth of authentic spoken language that was not available 20 years ago. From TED Talks to Youglish.com, L2 learners can access models of speech and pronunciation in many registers through authentic recordings. Rather than being restricted to mainstream speech models, L2 learners have many options to choose from. For example, Cutler (2014) describes immigrant youth in the US choosing to model their own speech after hip-hop culture because of their chosen L2 identity. Other uses of technology that can be exploited for pronunciation practice are the use of video-chat programs (now being used throughout the world for almost every purpose on every platform). With the help of teachers, or on their own, L2 learners can communicate with others at a distance, leading to convergence on a more intelligible pronunciation (Jenkins, 2000).

Teacher preparation

Most technology-based L2 pronunciation information has two audiences: L2 learners and L2 teachers. Both may make use of freely available web-based materials such as Rachel's English or Youglish, or use apps that promise to improve the learner's pronunciation. However, an under-exploited area for technology is teacher preparation. Teachers who are already interested in teaching pronunciation often go first to internet sources to find information and activities to teach pronunciation (Sonsaat, 2017). However, there is an enormous gap in the field in using technology to systematically address teacher preparation. There are very few teacher training courses online even though courses would be a boon to the field. We know that many language teachers never receive training in how to teach pronunciation (Foote et al., 2011). As a result, language teachers report lacking confidence and

uncertainty about whether teaching pronunciation is effective (Huensch, 2019). Training for teaching pronunciation using technology is even rarer (Fouz-González, 2015). Pronunciation teacher training using technology would include both practical and theoretical aspects and could be available in modules that address particular topics within pronunciation. Areas that would be important would include knowledge of pronunciation, pedagogical knowledge that allows teachers to make principled decisions, knowledge of materials and how to use and evaluate them, and the ways in which technology can be exploited (see Kochem, 2022 for a sample course).

Perhaps the easiest way to make use of technology for teacher training is in the knowledge of pronunciation. There are many resources available that describe the sound systems of more commonly taught languages such as English, Spanish, Japanese, and French, as well as reliable descriptions of the sound systems of many other languages through the work of professional associations such as the International Phonetic Association. Many descriptions have sound recordings, making it possible for L2 pronunciation teachers to feel confident about the segmental sound system of the target language. Some language descriptions, such as for English, are available for multiple models of pronunciation, such as General American and Standard Southern British English, but descriptions are often valid only for the most careful, standardized form of the language. This means that normal conversational speech may not match the dialect of a speaker nor the register of speech very well. Another place in which technology could be useful, but is often not, is in descriptions of suprasegmentals. There are many descriptions available, some very good (e.g., www.youtube.com/watch?v=Kpdgi6_qeU4) and others that are pedagogically accessible, but often do not have connections to sound files, leaving teachers to imagine how written descriptions sound.

A second area in which technology could be helpful for teacher training is in lectures and demonstrations of key concepts in L2 pronunciation, such as accent, comprehensibility, intelligibility, functional load, and feedback. L2 pronunciation teaching does not require the teaching of all elements of a language's pronunciation, that is, it does not require trying to make the L2 learner into a copy of a native speaker. Instead, L2 pronunciation is important when a learner's pronunciation gets in the way of their being understood or when their pronunciation makes listeners work extra hard to understand. Not all deviations from the pronunciation of L1 speakers are therefore likely to be important, and successful teaching only involves those features that are likely to impair comprehensibility and intelligibility. A third aspect for teacher training is a library of video-recorded examples of teaching pronunciation along with debriefings of what was done and why. Again, there are many places where video is used to describe, but few in which teaching is actually happening, either one-on-one or to a whole class. In one example from an Adult Basic Education class, the teacher presents a lesson on voice quality settings (how speakers of a language usually shape their mouth) to a mixed ESL (English as a second language) class (www.youtube.com/watch?v=7vz7zXYecpY&t=2s). These kinds of lessons are invaluable in understanding how to approach pronunciation teaching without having to observe in person. Other technology uses that have become common since the pandemic are increasing numbers of webinars presented through professional associations such as TESOL, CATESOL, and IATEFL. The Speech, Pronunciation, and Listening Interest Section of TESOL, for example, has recently hosted monthly webinars that are available for members and non-members. These include discussions of key concepts, current research, and practical tips.

A final essential element for teacher training in pronunciation is knowledge of how technology can be exploited in teaching pronunciation. This is an area that is ripe for development. Learning how to use acoustic analysis for pedagogy, adapting technological resources originally developed for other purposes (such as video, audio, and speech recognition), making use of technologies such as smartphones (McGregor, 2019), and developing new exercise types that promote individualized and cooperative learning for pronunciation are all areas that have almost unlimited opportunities for teachers. However, teachers would benefit enormously from being shown how to start, being given tips that work, and being encouraged to fit uses of technology to their own contexts.

Feedback

Feedback is an essential and a natural part of L2 learning because it provides necessary information about the differences between learner performance and the target structure. Feedback's benefits have long been established in second language acquisition and computer-assisted language learning research for all aspects of L2 learning (Chun, 2016). Feedback can show the learner the state of their current performance, suggest goals for improvement, and provide strategies to reach those goals. This type of awareness is not reliably provided by exposure only because it is often masked by learners' perceptions of both their performance and the target language (Neri et al., 2002). In L2 pronunciation learning, feedback can help learners identify pronunciation challenges and help them improve their intelligibility (Hincks, 2003). Successful feedback should be accurate, comprehensible, and realistic. In other words, feedback should correctly identify the pronunciation problems in a way that is understandable to the learner, and it should provide an avenue for improvement while taking into consideration both the L1 and the target language. Although feedback should be individualized because L2 learners have unique patterns of errors, it is difficult for a single teacher to provide such feedback in a classroom of contrasting needs and varied L1 backgrounds. Technology can reduce this burden because it provides a tireless and self-paced environment for pronunciation learning, consistent and varied feedback, and it can be individualized (Hardison, 2004). Therefore, the most effective computer-assisted pronunciation training (CAPT) systems provide feedback.

Visual feedback

The most common type of feedback in research studies is visual feedback. It can take many forms (e.g., spectrograms, waveforms, pitch tracings, articulatory visualizations, ultrasound imaging, etc.) and target different aspects of pronunciation (e.g., vowels, consonants, rhythm, intonation). Although visualization of suprasegmental features received more attention early on in CAPT research, greater numbers of segmental visualization studies have emerged in recent years. Visual feedback has overall been effective for L2 pronunciation learning in carefully designed experiments (Chun et al., 2015; Kartushina et al., 2015; Offerman & Olson, 2016; Suemitsu et al., 2015). The appropriate visual feedback method depends on the focus of L2 pronunciation instruction. Bliss et al. (2018) describe types of optimal visual feedback. They state that visualization should be (1) natural and logical for the learners, (2) understandable (user-friendly and comprehensible), (3) immediate, (4) informative of the L2 target (e.g., optimally facilitate comparison to the native speaker model), (5) flexible (e.g., individualizable), (6) enriching (extending rather than replacing human instruction), and (7) affordable. These criteria can serve as a path toward optimal visual feedback to facilitate effective L2 pronunciation learning. Types of visual feedback that have the potential to fit all these criteria are discussed in the following sections.

Visualization for segmental features

Visual displays for segmental features mostly include acoustic and/or articulatory information about speech sounds. Because research studies are often quite limited in the length of the experiments, researchers mostly focus on particular segments rather than overwhelming the learners with the entire speech sound system of the target language. However, when it comes to pronunciation instruction in the classroom, instructors may have more time during which they can utilize multiple types of visualizations and alternate the method of instruction to focus on particular types of sounds.

User-friendly types of visual feedback include displays of articulatory explanations, e.g., vocal tract movements and lip positioning. These depictions are easy to interpret and can allow an instructor

to spend time instead on training the learners to use them. Similarly, learners may have an increased interest in using these visualizations because they are easy to understand. A well-known approach to articulatory animations is Sounds of Speech, a commercial mobile application (formerly a website as well which has since been discontinued) for learning English sounds with instructions provided in Spanish, Korean, and Chinese. Similar articulatory displays were successfully used by Suemitsu et al. (2015), in which learners improved their L2 vowel production after using the articulatory visual stimulus in their learning. Similarly, Levitt & Katz (2007) used electromagnetic articulography as articulatory visual feedback for learning of L2 Japanese postalveolar flap, and they reported highly significant improvements in learners' L2 production. Although reportedly efficient and user-friendly, articulatory visual feedback is not widely available. The discontinuation of the Sounds of Speech website, the app's current focus on English only, and the specialized medical and clinical uses of electropalatography mean that language learners do not currently have a large number of options for this type of feedback.

Several studies have used waveforms as visual feedback for segmental features (Motohashi-Saigo & Hardison, 2009; Olson, 2014). Waveforms are depictions of sound pressure variation in time, and they can provide information about the intensity of the speech signal (Carey, 2004). They can be created using the freely-available acoustic analysis software, Praat (Boersma & Weenink, 2018). Although this type of visualization was criticized as difficult to interpret for L2 learners (Aliaga-García & Mora, 2009), it has been found useful for perception improvement in a study of L2 learners of Japanese geminate consonants (Motohashi-Saigo & Hardison, 2009) and for L2 learners' production of Spanish stop consonants (Olson, 2014; Olson & Offerman, 2020). Alameen (2014) also implemented waveforms into training on linking with a group of learners, and the study found that, in comparison to a group that received only audio training, they improved their linking of high frequency words in both perception and production. Waveforms could also be used for word stress. For example, the difference in word stress between “PROject” and “proJECT” can be easily visualized using waveforms.

As potentially representative of multiple acoustic features, spectrograms (Figure 21.5) are another type of visual feedback that has been used in CAPT research. Spectrograms are considered more difficult to use for L2 learners, so they have been implemented successfully mainly in combination with other visual aids, e.g., waveforms (Okuno, 2013; Olson, 2014; Olson & Offerman, 2020; Saito, 2007). These studies demonstrate production improvements for both vowels and consonants. However, the effect of these types of feedback on a learner's pronunciation improvement is highly dependent on the training they receive in interpreting waveforms and/or spectrograms.

Ultrasound has gained visibility in research and teaching of L2 sounds due to its success in speech training for L1 speakers with hearing difficulties. Ultrasound offers high quality images of tongue

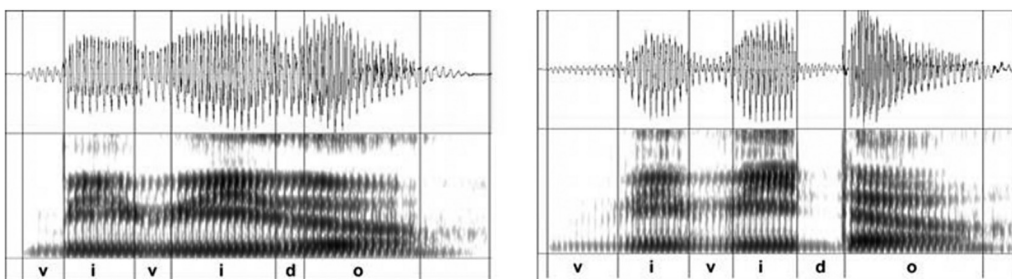


Figure 21.5 L1 Spanish speaker example spectrogram (left) and L2 Spanish speaker spectrogram of the same token (right)

Source: Olson (2014)

positions in production of speech sounds, which can serve as immediate visual feedback to L2 learners. Additionally, ultrasound equipment has become more affordable and portable, increasing its accessibility for classroom use (Bliss et al., 2018). Research has recognized it as potentially valuable with extensive implications for the advancement of knowledge and theory in L2 acquisition of speech sounds (Gick et al., 2008) as it can provide an efficient and accurate language learning experience (Mozaffari et al., 2018). Bliss et al. (2018) state that both instructors and students have expressed interest in this type of technology as a tool to create learning materials to be used both in and out of the classroom.

Visualization for suprasegmental features

Visual feedback for suprasegmental features is less familiar despite the role suprasegmentals play in communicating meaning at the syllable, word, sentence, and discourse level. With greater attention to intelligibility and successful communication rather than nativelikeness (Levis, 2005, 2020), research has found that suprasegmental errors can damage intelligibility and comprehensibility (Hahn, 2004; Derwing et al., 1998). Suprasegmental visual feedback has been researched since the early 1980s, with pitch tracings being the most commonly investigated feedback (Chun, 2019), but research on other types of visualization for suprasegmentals is scarce. Also, automatic feedback for suprasegmentals is uncommon. Nevertheless, visualization for suprasegmentals is a promising topic in both research and teaching.

Pitch tracings for L2 intonation improvement have been found to be successful in multiple studies. Hincks and Edlund (2009) found that the learners who used pitch tracings in their learning significantly improved their spoken language, which was analyzed through both acoustic analyses and human judgments (i.e., listener ratings for liveliness, naturalness, pronunciation, and intelligibility). Similarly, Le and Brook (2011) reported on learners' analysis of their production using Praat. They found significant improvements in the learners' intonation of Yes/No and WH questions. Learner satisfaction with Praat's pitch tracings was also reported in Lima (2020), who employed pitch tracings through use of an online tutorial program called the Supra Tutor. Not all intonation visualizations are equally good for language learners. Niebuhr et al. (2017) tested six different visualizations for L2 learners of German and found that more iconic visualizations (which were less linguistically accurate) were more successful for learning intonation than more abstract visualizations even though they were more theoretically accurate.

Pitch tracings have also been successfully used as visual feedback in instruction of lexical tone. In a study which investigated the acquisition of Mandarin Chinese tones, visual representations of pitch variation in tones helped the learners in their tone production (Wiener et al., 2020). However, the improvement varied for different tones. This kind of visualization is also valued by learners. Wang (2012) reports that all participants unanimously praised the usefulness of the visual training and the overall positive experience.

Automatic Speech Recognition (ASR)

Although ASR technology has long been included in language learning software such as Rosetta Stone, it is most familiar in real-world situations through personal assistants and smart home devices and mobile technology, such as Siri, Alexa, and Google Assistant. With this increase in accessibility, ASR has become a valuable resource for language teachers and learners. Research has also shown that this technology can be beneficial if incorporated into the classroom (McCrocklin, 2019), or if assigned to learners as independent pronunciation practice (Wallace, 2016), in which the intelligibility of speech is indirectly measured by the ability of an ASR system to type what has been

said. Additionally, L2 learners see ASR dictation practice as a useful tool for their L2 pronunciation improvement (McCrocklin, 2019).

Google's dictation tool is more accurate in its transcription ability compared to its competitors (McCrocklin et al., 2019), and a recent study states that its accuracy for L2 learners is close to that of human listeners (McCrocklin & Edalatishams, 2020). Considering that past criticism of ASR technology for L2 speech has been its lack of accuracy (Derwing et al., 2000), greater accuracy may lead users to gain greater confidence and motivation when it comes to using it for L2 pronunciation learning. Another study reports that training with ASR improves learners' clarity as perceived by the software used in training, but it also improves their comprehensibility and intelligibility in real-life conversations (Evers & Chen, 2020). The increase in accuracy combined with accessibility and transferability to real-life situations makes ASR a tool that can be integrated into L2 pronunciation learning and teaching worldwide.

Synthesized voices as feedback

Another state-of-the-art advancement in speech technology that may be beneficial as feedback for L2 learners' pronunciation is speech synthesis. This process includes build a model voice by transforming the learner's voice through accent conversion techniques, in which the features contributing to the foreign accent are substituted by native ones (Felps et al., 2009). There have been several studies that show this type of feedback leads to improvement in different aspects of L2 pronunciation.

A synthesized model voice, which combines native features of L2 English with those of a learner's voice quality, may result in improvements in fluency and comprehensibility (Ding et al., 2019). The CAPT system used in this study, the Golden Speaker Builder (Figure 21.6), is now freely available (<https://goldenspeaker.engl.iastate.edu/speech/>), and detailed instructions help L2 learners use it with or without an instructor. In another study, Praat was used to acoustically modify learners' utterances to approximate the prosodic features of native-like English. Then, the modified utterances served as model L1 English production in a listen-and-repeat exercise (Henderson &

Golden Speaker Builder

Your voice, any accent

TEXAS A&M UNIVERSITY. IOWA STATE UNIVERSITY

Home

Welcome, Ilucic Logout

Welcome to the Golden Speaker Builder!

To begin, please watch the tutorial video on the right and follow the steps.

NOTE: Google Chrome is required to use the Golden Speaker Builder. Please maximize the window to better view the contents.

Record Model »

Edit Model »

Build Golden Speaker »

Practice with Golden Speaker »

Figure 21.6 A program to build a synthesized learner's voice with accurate pronunciation

Skarnitzl, 2022). The authors reported improvements in learners' temporal and melodic patterning as it relates to English prominence. Furthermore, Tejedor-Garcia et al. (2017) reported that learners exhibited significant improvements in both perception and production of L2 words after training with a CAPT system that included a synthesized voice as feedback. Although these methods have been successful for L2 pronunciation improvement, it is important to point out that the use of these tools requires a moderate amount of preparation, which may entail pre-recording material, waiting for back-end processing, and/or manual modifications.

Future directions

The teaching and learning of L2 pronunciation will continue to change as technology develops. Despite the abundance of descriptive information and recordings available, we need to know more. For example, segments are well-described in isolated words and in careful, formal speech, and such speech can be reliably analyzed and transcribed through forced alignment of speech. But there is also abundant evidence that expected sounds often change in unusual ways when words are produced in connected speech (Cauldwell, 2018), and that better technological solutions for analysis are needed for connected speech. It may be that spoken corpora that are annotated both for expected phones and actual pronunciation may be of particular help in understanding the patterns for connected speech. In addition, suprasegmentals have also been described in many different ways, not all of which are easily represented through technology or easily learned, but this is an area in which we can expect changes both through technological innovations and pedagogical applications.

Besides these areas which are not yet available, we expect that current tools such as ASR and text-to-speech will become increasingly useful for L2 learners. Both of these tools were originally built for L1 speech. L2 speech has always been harder to recognize or match through technology, but the reach of technology is changing, and the insoluble problems of 15 years ago seem eminently solvable today. With the right approach, technological resources that have been built for other purposes can be used for pronunciation training. In addition, we see L2 pronunciation as a frontier for many new studies and applications which will ultimately continue to affect how we teach and learn pronunciation.

References

- Alameen, G. (2014). *The effectiveness of linking instruction on NNS speech perception and production*. [Doctoral dissertation, Iowa State University]. <https://lib.dr.iastate.edu/etd/14004>
- Alameen, G. & Levis, J. M. (2015). Connected speech. In M. Reed & J. Levis (Eds.), *The handbook of English pronunciation* (pp. 157–174). Boston: Wiley Blackwell.
- Aliaga-García, C. & Mora, J. (2009). Assessing the effects of phonetic training on L2 sound perception and production. In M. Watkins, A. Raubier, & B. Baptista (Eds.), *Recent research in second language phonetics/phonology: Perception and production* (pp. 2–31). Cambridge Scholars Publishing.
- Bai, Y., Hubers, F., Cucchiari, C., & Strik, H. (2020). ASR-based evaluation and feedback for individualized reading practice. *Proc. Interspeech 2020*, 3870–3874.
- Blake, R. (2017). Technologies for teaching and learning L2 speaking. In C. Chapelle & S. Sauro (Eds.), *The handbook of technology and second language teaching and learning* (pp. 107–117). Boston: Wiley Blackwell.
- Bliss, H., Abel, J., & Gick, B. (2018). Computer-assisted visual articulation feedback in L2 pronunciation instruction: A review. *Journal of Second Language Pronunciation*, 4(1), 129–153.
- Boersma, P. & Weenink, D. (2018). Praat: Doing phonetics by computer [Computer program]. Version 6.1.15.
- Bradlow, A., Akahane-Yamada, R., Pisoni, D., & Tohkura, Y. (1999). Training Japanese listeners to identify English /r/ and /l/: Long-term retention of learning in perception and production. *Perception & Psychophysics*, 61(5), 977–985.
- Broersma, M. & Cutler, A. (2011). Competition dynamics of second-language listening. *Quarterly Journal of Experimental Psychology*, 64(1), 74–95.
- Carey, M. (2004). CALL visual feedback for pronunciation of vowels: Kay Sona-Match. *Calico Journal*, 21(3), 571–601.

- Cauldwell, R. (2018). *A syllabus for listening: Decoding*. Birmingham, England: Speech in Action.
- Chun, D. (2016). The role of technology in SLA research. *Language Learning & Technology*, 20(2), 98–115.
- Chun, D. (2019). Computer-assisted pronunciation teaching. In C. Chapelle (Ed.), *The encyclopedia of applied linguistics* (pp. 1–11). Boston: John Wiley & Sons. doi: 10.1002/9781405198431.wbeal0172.pub2.
- Chun, D., Jiang, Y., Meyr, J., & Yang, R. (2015). Acquisition of L2 Mandarin Chinese tones with learner-created tone visualizations. *Journal of Second Language Pronunciation*, 1(1), 86–114.
- Cutler, A. (2012). *Native listening: Language experience and the recognition of spoken words*. MIT Press.
- Cutler, C. (2014). Accentedness, “passing” and crossing. In J. Levis & A. Moyer (Eds.), *Social dynamics in second language accent* (pp. 145–167). DeGruyter Mouton.
- Derwing, T., Munro, M., & Carbonaro, M. (2000). Does popular speech recognition software work with ESL speech? *TESOL Quarterly*, 34(3), 592–603.
- Derwing, T., Munro, M., & Wiebe, G. (1998). Evidence in favor of a broad framework for pronunciation instruction. *Language Learning*, 48(3), 393–410.
- Ding, S., Liberatore, C., Sonsaat, S., Lučić, I., Silpachai, A., Zhao, G., Levis, J. Chukharev-Hudilainen, E., & Gutierrez-Osuna, R. (2019). Golden speaker builder—An interactive tool for pronunciation training. *Speech Communication*, 115, 51–66.
- Engwall, O. (2012). Analysis of and feedback on phonetic features in pronunciation training with a virtual teacher. *Computer Assisted Language Learning*, 25(1), 37–64.
- Evers, K. & Chen, S. (2020). Effects of an automatic speech recognition system with peer feedback on pronunciation instruction for adults. *Computer Assisted Language Learning*, 1–21.
- Felps, D., Bortfeld, H., & Gutierrez-Osuna, R. (2009). Foreign accent conversion in computer assisted pronunciation training. *Speech Communication*, 51(10), 920–932.
- Foote, J., Holtby, A., & Derwing, T. (2011). Survey of the teaching of pronunciation in adult ESL programs in Canada, 2010. *TESOL Canada Journal*, 29(1), 1–22.
- Foote, J. & McDonough, K. (2017). Using shadowing with mobile technology to improve L2 pronunciation. *Journal of Second Language Pronunciation*, 3(1), 34–56.
- Fouz-González, J. (2015). Trends and directions in computer-assisted pronunciation training. In J.A. Mompean & J. Fouz-González (Eds.), *Investigating English pronunciation: Trends and directions* (pp. 314–342). Basingstoke; New York, NY: Palgrave Macmillan.
- Fouz-González, J. (2017). Pronunciation instruction through Twitter: The case of commonly mispronounced words. *Computer Assisted Language Learning*, 30(7), 631–663.
- Fouz-González, J. (2020). Using apps for pronunciation training: An empirical evaluation of the English File Pronunciation app. *Language Learning & Technology*, 24(1), 62–85.
- Gick, B., Bernhardt, B., Bacsfalvi, P., Wilson, I., & Zampini, M. (2008). Ultrasound imaging applications in second language acquisition. In J. H. Edwards & M. Zampini (Eds.), *Phonology and second language acquisition* (pp. 315–328). Philadelphia: John Benjamins.
- Goodwin, J. (2005). The power of context in teaching pronunciation. In J. Frodesen & C. Holten (Eds.), *The power of context in language teaching and learning* (pp. 225–236). Boston: Thomson Heinle.
- Hacking, J., Smith, B., & Johnson, E. (2017). Utilizing electropalatography to train palatalized versus unpalatalized consonant productions by native speakers of American English learning Russian. *Journal of Second Language Pronunciation*, 3(1), 9–33.
- Hahn, L. (2004). Primary stress and intelligibility: Research to motivate the teaching of suprasegmentals. *TESOL Quarterly*, 38(2), 201–223.
- Hardison, D. (2004). Generalization of computer assisted prosody training: Quantitative and qualitative findings. *Language Learning & Technology*, 8(1), 34–52.
- Henderson, A. & Cauldwell, R. (2020). Jungle listening: A course in decoding English for psychology students. *ASp. la revue du GERAS*, (77), 63–77.
- Henderson, A. & Skarnitzl, R. (2022). “A better me”: Using acoustically modified learner voices as models. *Language Learning & Technology*, 26(1), 1–21.
- Hincks, R. (2003). Speech technologies for pronunciation feedback and evaluation. *ReCALL*, 15(1), 3–20.
- Hincks, R. & Edlund, J. (2009). Promoting increased pitch variation in oral presentations with transient visual feedback. *Language Learning & Technology*, 13(3), 32–50.
- Huensch, A. (2019). Pronunciation in foreign language classrooms: Instructors’ training, classroom practices, and beliefs. *Language Teaching Research*, 23(6), 745–764.
- Jenkins, J. (2000). *The phonology of English as an international language*. Oxford: Oxford University Press.
- Karatay, Y. (2017). YouGlish.com (Review). In M. O’Brien & J. Levis (Eds.), *Proceedings of the 8th pronunciation in second language learning and teaching conference*, ISSN 2380-9566, Calgary, AB, August 2016 (pp. 254–259). Ames, IA: Iowa State University.

- Kartushina, N., Hervais-Adelman, A., Frauenfelder, U., & Golestani, N. (2015). The effect of phonetic production training with visual feedback on the perception and production of foreign speech sounds. *The Journal of the Acoustical Society of America*, 138(2), 817–832.
- Kochem, T. (2022). *Second language teacher cognition development in an online L2 pronunciation pedagogy course: A quasi-experimental study* (Doctoral dissertation, Iowa State University).
- Le, H. & Brook, J. (2011). Using Praat to teach intonation to ESL students. *Hawaii Pacific University TESOL Working Paper Series*, 9(1, 2), 2–15.
- Levis, J. (2005). Changing contexts and shifting paradigms in pronunciation teaching. *TESOL Quarterly*, 39(3), 369–377.
- Levis, J. (2007). Computer technology in teaching and researching pronunciation. *Annual Review of Applied Linguistics*, 27, 184–202.
- Levis, J. (2020). Revisiting the intelligibility and nativeness principles. *Journal of Second Language Pronunciation*, 6(3), 310–328.
- Levitt, J. & Katz, W. (2007). Augmented visual feedback in second language learning: Training Japanese post-alveolar flaps to American English speakers. *Journal of the Acoustical Society of America*, 122(5), 1–13. <https://doi.org/10.1121/1.2942697>
- Lieberman, M. (2008, July 8). HVP. *Language Log*. <https://languagelog ldc.upenn.edu/nll/?p=328>
- Lima, E. (2020). The Supra Tutor: Improving speaker comprehensibility through a fully online pronunciation course. *Journal of Second Language Pronunciation*, 6(1), 39–67.
- Logan, J., Lively, S., & Pisoni, D. (1991). Training Japanese listeners to identify English /r/ and /l/: A first report. *The Journal of the Acoustical Society of America*, 89(2), 874–886.
- Lord, G. (2008). Podcasting communities and second language pronunciation. *Foreign Language Annals*, 41(2), 364–379.
- McCrocklin, S. (2019). Learners' feedback regarding ASR-based dictation practice for pronunciation learning. *Calico Journal*, 36(2), 119–137.
- McCrocklin, S. & Edalatihams, I. (2020). Revisiting popular speech recognition software for ESL speech. *TESOL Quarterly*, 54(4), 1086–1097.
- McCrocklin, S., Humaidan, A., & Edalatihams, E. (2019). ASR dictation program accuracy: Have current programs improved. In *Proceedings of the 10th pronunciation in Second Language Learning and Teaching Conference* (pp. 191–200). Ames, IA: Iowa State University.
- McGregor, A. (2019). Teaching tip: Using selfies to improve problematic English consonants. In J. Levis, C. Nagle, & E. Todey (Eds.), *Proceedings of the 10th Pronunciation in Second Language Learning and Teaching Conference*, ISSN 2380- 9566, Ames, IA, September 2018 (pp. 393–400). Ames, IA: Iowa State University.
- Motohashi-Saigo, M. & Hardison, D. (2009). Acquisition of L2 Japanese geminates: Training with waveform displays. *Language Learning & Technology*, 13(2), 29–47.
- Moussalli, S., & Cardoso, W. (2020). Intelligent personal assistants: can they understand and be understood by accented L2 learners?. *Computer Assisted Language Learning*, 33(8), 865–890.
- Mozaffari, M., Guan, S., Wen, S., Wang, N., & Lee, W. (2018, June). Guided learning of pronunciation by visualizing tongue articulation in ultrasound image sequences. In *2018 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA)* (pp.1–5). IEEE.
- Munro, M. (1998). The effects of noise on the intelligibility of foreign-accented speech. *Studies in Second Language Acquisition*, 139–154.
- Murphy, J. (2014). Intelligible, comprehensible, non-native models in ESL/EFL pronunciation teaching. *System*, 42, 258–269.
- Neri, A., Cucchiarini, C., Strik, H., & Boves, L. (2002). The pedagogy-technology interface in computer assisted pronunciation training. *Computer Assisted Language Learning*, 15(5), 441–467.
- Niebuhr, O., Alm, M., Schümchen, N., & Fischer, K. (2017). Comparing visualization techniques for learning second language prosody: First results. *International Journal of Learner Corpus Research*, 3(2), 250–277.
- O'Brien, M., Derwing, T., Cucchiarini, C., Hardison, D., Mixdorff, H., Thomason, H., Levis, J., Munro, M., Foote, J., & Muller Levis, G. (2018). Directions for the future of technology in pronunciation research and teaching. *Journal of Second Language Pronunciation*, 4(2), 182–206.
- Offerman, H. & Olson, D. (2016). Visual feedback and second language segmental production: The generalizability of pronunciation gains. *System*, 59, 45–60.
- Okuno, T. (2013). *Acquisition of L2 vowel duration in Japanese by native English speakers* [Unpublished doctoral dissertation. East Lansing, MI: Michigan State University.]
- Olson, D. (2014). Benefits of visual feedback on segmental production in the L2 classroom. *Language Learning and Technology*, 18(3), 173–192. <http://llt.msu.edu/issues/october2014 /olson.pdf>

- Olson, D. & Offerman, H. (2020). Maximizing the effect of visual feedback for pronunciation instruction: A comparative analysis of three approaches. *Journal of Second Language Pronunciation*, 7(1), 89–115.
- Pennington, M. & Rogerson-Revell, P. (2019). *English pronunciation teaching and research: Contemporary perspectives*. London: Palgrave Macmillan.
- Qian, M. (2018). *An adaptive computational system for automated, learner-customized segmental perception training in words and sentences: Design, implementation, assessment*. [Doctoral dissertation, Iowa State University.]
- Qian, M., Chukharev-Hudilainen, E., & Levis, J. M. (2018). A system for adaptive high-variability segmental perceptual training: Implementation, effectiveness, transfer. *Language Learning & Technology*, 22(1), 69–96.
- Saito, K. (2007). The influence of explicit phonetic instruction on pronunciation teaching in EFL settings: The case of English vowels and Japanese learners of English. *The Linguistics Journal*, 3(3), 16–40.
- Shewell, J. (2020). Perception of Spoken English Test. <https://posetest.com/>
- Shin, S., Lee, S., & Lidster, R. (2021). Examining the effects of different English speech varieties on an L2 academic listening comprehension test at the item level. *Language Testing*, 0265532220985432.
- Silpachai, A. (2020). The role of talker variability in the perceptual learning of Mandarin tones by American English listeners. *Journal of Second Language Pronunciation*, 6(2), 209–235.
- Sonsaat, S. (2017). *The influence of an online pronunciation teacher's manual on teachers' cognitions*. [Unpublished dissertation, Iowa State University.]
- Strik, H., Colpaert, J., van Doremalen, J., & Cucchiarini, C. (2012). The DISCO ASR-based CALL system: Practicing L2 oral skills and beyond (pp. 2702–2707).
- Suemitsu, A., Dang, J., Ito, T., & Tiede, M. (2015). A real-time articulatory visual feedback approach with target presentation for second language pronunciation learning. *The Journal of the Acoustical Society of America*, 138(4), EL382–EL387.
- Tejedor-García, C., Escudero-Mancebo, D., González-Ferreras, C., Cámara-Arenas, E., & Cardenoso-Payo, V. (2017). Evaluating the efficiency of synthetic voice for providing corrective feedback in a pronunciation training tool based on minimal pairs. In *Proceedings of SLaTE*, 26–30.
- Thomson, R. (2011). Computer assisted pronunciation training: Targeting second language vowel perception improves pronunciation. *Calico Journal*, 28(3), 744–765.
- Thomson, R. (2012a). Improving L2 listeners' perception of English vowels: A computer-mediated approach. *Language Learning*, 62(4), 1231–1258.
- Thomson, R. (2012b). *English accent coach*. Computer program. Version, 2.
- Thomson, R. (2018). High variability [pronunciation] training (HVPT): A proven technique about which every language teacher and learner ought to know. *Journal of Second Language Pronunciation*, 4(2), 208–231.
- Wallace, L. (2016). Using Google web speech as a springboard for identifying personal pronunciation problems. In J. Levis, H. Le, I. Lucic, E. Simpson, & S. Vo (Eds). *Proceedings of the 7th Pronunciation in Second Language Learning and Teaching Conference*, ISSN 2380-9566, Dallas, TX, October 2015 (pp. 180–186). Ames, IA: Iowa State University.
- Wang, X. (2012). Auditory and visual training on Mandarin tones: A pilot study on phrases and sentences. *International Journal of Computer-Assisted Language Learning and Teaching*, 2(2), 16–29.
- Wiener, S., Chan, M., & Ito, K. (2020). Do explicit instruction and high variability phonetic training improve nonnative speakers' Mandarin tone productions? *The Modern Language Journal*, 104(1), 152–168.
- Yoshida, M. (2018). Choosing technology tools to meet pronunciation teaching and learning goals. *CATESOL Journal*, 30(1), 195–212.



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Teaching and learning English spelling

Adam Brown

Introduction

This volume is entitled *Handbook of Practical Second Language Teaching and Learning*. However, the subject of this chapter is the spelling specifically of English – not of other languages. While much of the content of this chapter may be applied to other languages, a fundamental point, that is made early in the chapter, is that English spelling is less regular, and thus more difficult to teach and learn, than the spelling of most other languages.

As a result of this lack of regularity between letters in the spelling and sounds in the pronunciation, English teachers spend far more time in the classroom dealing with problems of spelling than do teachers of other languages.

An American professor, Edward Rondthaler, related that his grandson who lived in Mexico had just started to learn Spanish. Since the professor was interested in spelling, he asked the boy what Spanish spelling lessons were like. The boy didn't seem to understand the question. "Well, how did you learn to spell Spanish?" Rondthaler asked. "In the first lesson," his grandson replied, "the teacher wrote up the letters of the alphabet and told us what sound they each represented. Then we got on with learning the language."

(Brown, 1996, p. 23)

In addition, some users of English – both native speaker and second-language – do not master its spelling, or do not master it fully. Literacy rates for English-speaking countries are thus lower than, for instance, Spanish-speaking. According to UNESCO, Spain has a literacy rate of 98.25%, and the rates for Spanish-speaking South American countries are also very high (99.13% for Argentina). In contrast, Wylie (2020) reports that 14% of Americans have level 1 (below basic) literacy, of which 4% are non-literate. This equates to 26.5 m and 8.4 m people respectively (U.S. National Center for Education Statistics, 2019).

These figures do not mean that such people cannot function in society. They can function, but in speech rather than in writing. (This may, however, represent a substantial limitation and stigma.)

Many people are of the opinion that the written language is the "correct, proper" form of the language, and that speech is just an oral way of expressing what could be written. However, as far as linguistics is concerned, the situation is the other way round: spoken language has primacy, for several reasons (Brown, 2019, Chapter 1). Some human languages have a spoken form but no written form. Children acquire the spoken form of their native language at a young age by exposure

to native speakers, especially their parents and other family members, whereas written language is acquired at a later age, largely through explicit instruction. As we have just said, all humans learn to speak their native language, but not all humans learn to write it.

The nature of English spelling

In order to understand the problems that English spelling poses to learners, a number of facts about the English language and English spelling need to be presented. Many of these facts are not true of other languages.

History

English has a long history (Baugh & Cable, 2012; Crystal, 2005; Miles, 2005; Upward & Davidson, 2011). It is considered to have started with the migration to Britain of Germanic tribes (Angles, Saxons, Jutes, Franks and Frisians) from modern northern Germany, and parts of Denmark and the Netherlands, in the middle of the 5th century. Because of the first two mentioned, this period, and the language they brought, is known as Anglo-Saxon. Over the centuries, various other invasions, both physical and cultural, have influenced the language, predominantly Norse (from the Vikings), French (the Norman conquest of 1066), and Latin and Greek (during the Renaissance), but also many other languages, especially in the last few centuries through colonialization. English thus has a history of 1½ millennia.

English has had a spelled form for the whole of that time. Originally, the Anglo-Saxons used runes, but that was superseded by the Roman alphabet brought by Christian missionaries in the late 6th century. In contrast, spelling systems for some recent languages have been invented in the relatively recent past.

Over that 1½ millennia period, many words have been borrowed into English from other languages, just as English words have been borrowed into other languages. However, English has tended not to regularize foreign loanwords in terms of spelling, in order to make their spellings look like regular English spellings. For example, many French words ending in *-que* have been borrowed into English from the 16th century onwards: *arabesque*, *baroque*, *boutique*, *brusque*, *critique*, *mystique*, *physique*, *pique*, *torque*, etc. However, the French ending *-que* has been retained in the English spelling rather than, say, regularizing it with a *k*. In contrast, other languages usually do regularize loanwords in terms of spelling. For instance, many English words have been borrowed into Malay, which has regularized their spellings to conform to Malay patterns. Bearing in mind that in Malay *c* = /tʃ/, can you recognize the following English loanwords: *asid*, *eksais*, *hoki*, *orkid*, *pakej*, *sivik*, *vaksin*? (Answers are given at the end of this chapter.)

Two episodes in the history of English need to be mentioned. The first is the invention in Germany of the printing press by Gutenberg around 1440. William Caxton brought the press to England in 1476. It had the effect of largely standardizing the spelling of English, which had been quite variable until then. The second event is known as the Great Vowel Shift. This affected the long vowels of English pronunciation in a gradual process that started around 1350 but was not completed until around 1600. However, while the vowel sounds changed, the spelling did not, as it had been standardized by the printing press. It was all a matter of timing. If the printing press had been invented later, or the Great Vowel Shift taken place earlier, modern spelling would be a much better indicator of modern pronunciation. As it is, the modern spelling of many words reflects more accurately the pronunciation of Chaucer's time (second half of the 14th century).

As a result of this, many letters that represented original sounds no longer do. They were dropped in the pronunciation, but remain in the spelling. That is, they are silent letters, e.g. the *gh* in *light*, *fight*, *night*, *sight*, etc.

The English language traveled from Britain to other parts of the world through three main channels. Firstly, native English-speaking people migrated from Britain to settle other countries, notably the U.S.A., Canada, South Africa, Australia and New Zealand.

Secondly, native English-speaking people migrated from Britain to colonize other countries, e.g. the Indian subcontinent (India, Bangladesh, Pakistan, etc.), many African countries (Ghana, Kenya, Malawi, Nigeria, Tanzania, Uganda, etc.), Malaysia and Singapore in Southeast Asia, Pacific Islands (Fiji, Samoa, Tonga, etc.). All countries of these two categories have gained independence but, with the exception of the U.S.A., remain members of the British Commonwealth. As a result, English is spoken widely, perhaps alongside other local languages.

Thirdly, it is estimated that about 55% of the internet is in English (Wood, 2015). Much international business is conducted in English (Neeley, 2012). Western, English-medium, popular culture is prevalent around the world. As a result, English is taught and learned in virtually all the other countries of the world.

The way English is pronounced differs widely from country to country. However, the way it is spelled differs very little. The only main difference is between British (BrE) and American (AmE) spellings. Most American spellings date back to Webster's *American Dictionary of the English Language* (1828). Some of these are productive differences affecting sets of words (*anaemia/anemia, colour/color, dialogue/dialog, oestrogen/estrogen, theatre/theater, traveller/traveler*), while others relate to only one word (*aeroplane/airplane, cheque/check, kerb/curb, mould/mold, plough/plow, pyjamas/pajamas*). All these variations do not amount to a large difference. Nevertheless, other languages have far less variation in spelling. Learners may thus not be accustomed to seeing alternative ways of spelling the same word.

Alphabetic spelling

The English spelling system is an alphabetic one. That is, it uses a set of letters to represent the sounds in the pronunciation. That is, for example, the letter *v* represents the sound /v/ and, vice versa, the sound /v/ is represented by the letter *v*. This letter was chosen because the correspondence is virtually 100% each way in English. The only common counterexample is the word *of* /ɒv, ʌv, ɑ:v, əv/. (Transcriptions are from Wells, 2008.)

There are other types of spelling system. In a syllabary, such as the Japanese hiragana and katakana systems, the symbols represent whole, indivisible syllables rather than individual vowel and consonant sounds. In logographic systems, such as is used for Chinese, symbols (characters) represent morphemes, with little indication of the pronunciation. Learners may thus have native languages that are not alphabetic, and need to understand the alphabetic principle underlying English, that letters represent consonant and vowel sounds.

English uses the Roman alphabet (a, b, c, ... x, y, z) because of the Christian missionaries mentioned earlier, and the influence of Latin. However, there are many other alphabets in use in languages of the world: Arabic, Cyrillic (Russian), Devanagari (many Indian languages), Greek, Hebrew, Hangul (Korean), Thai, etc. Learners from these languages may therefore be familiar with the alphabetic principle of letters representing sounds, but not necessarily with the Roman alphabet system.

The Roman alphabet is used not just for English, but for many other languages. Wikipedia (n.d.-a) lists 146 different languages from around the world that use it. Learners from these languages will therefore be familiar with the alphabetic principle, and with the Roman alphabet. However, the letter-sound correspondences in their languages may be different from English. For instance, in English, the letter *c* may represent /k/ (*call*), /s/ (*cell*), and various other sounds in loanwords (/tʃ/, *cello*), and in combination with other letters and in certain contexts (/ʃ/ *ocean, social, panache*; /tʃ/, *child*) (Carney, 1994, p. 301ff.). However, it is /θ/ in the Spanish of northern and central Spain

(*Barcelona*); /tʃ/ in Malay (*cuci* “wash”), /ts/ in Hungarian (*cukros* “sugary”), /dʒ/ in Turkish (*lahmacun* “pizza”), /ð/ in Fijian (*moce* “goodbye”). Learners from these languages thus have to learn new correspondences of the letter *c* for English.

Like all Roman alphabet languages, English is written from left to right. However, other directions are possible. A right-to-left arrangement is used in Arabic and related languages (Persian, Urdu) and Hebrew. Chinese can be written vertically rather than horizontally. In Thai, the vowel that follows a consonant in the pronunciation can be represented by a symbol that comes after, before, above, below or surrounding the consonant letter; it depends on the particular vowel. The left-to-right orientation of English spelling may thus need to be instilled in some learners.

The English spelling system is an alphabetic one. The problem is that it is probably the worst example of an alphabetic system, that is, the least regular. How irregular is it? Any answer to that question depends on how you calculate irregularity, and various researchers have used various measures. By considering the number of phonemes and the number of ways they are represented in spelling, Dewey (1971) concluded that English is only 7% regular. Similarly, Hanna et al. (1966; also see Hanna et al., 1971) concluded that only half of the words investigated could be spelled accurately on the basis of sound-letter correspondences. This compares with a figure of 83% for Spanish (The English Spelling Society, n.d.).

Not all words are equally important

No teacher can teach the spelling of all English words, individually. Strategies for dealing with the spelling of newly encountered words are therefore necessary.

It is impossible to give a figure for the number of words in English. Firstly, we need to agree on a definition of *word*: are *take, takes, took, taken, taking* one word (lexeme) or five words (word forms)? Secondly, words come into and go out of use in the language. Slang and other coinages are being invented all the time. One way of providing a figure would be to look at English dictionaries. However, there are different types of dictionaries: large, small, technical, historical, etc. Wiktionary contains 505,000 entries, *Webster's Third New International Dictionary* (with addenda) 470,000, *The American Heritage Dictionary of the English Language* 350,000, *The Oxford English Dictionary* 171,000 (in current use) and the *Collins COBUILD Advanced Learner's English Dictionary* “over 110,000” (*Collins COBUILD Advanced Learner's English Dictionary*, 2018, Lexico, n.d., Merriam-Webster, n.d., Wikipedia, n.d.-b).

Clearly, nobody (apart perhaps from lexicographers) knows all these words. Some are very common; some are very rare. Nation (2013) divides all words into four groups.

High frequency words

Firstly, high frequency words occur very frequently in any English text. There are about 2,000 high frequency lexemes. Many of them are function words (not nouns, verbs, adjectives or adverbs), and high frequency words therefore account for between 80% and 95% of any text. They should therefore be taught to learners early and, having mastered them, learners should be able to read the majority of most texts. About 50% of these words came into English from French, Latin or Greek.

Unfortunately for learners of English (and for many native speakers), the commonest words in English are also often the least regular in terms of their spelling.

Academic Word List

The second group of words are academic words (Coxhead, 2000, n.d.). This comprises about 570 lexemes (outside the high frequency word list) that are common in academic texts, regardless of the

particular academic subject being studied. They may, of course, also occur in non-academic texts. They include words like *attribute*, *conclude*, *random*, *medium* and *theory*. About 91% of these words are from French, Latin or Greek.

Technical words

Technical words are words that are used in a particular subject area, perhaps with technical meaning distinct from their everyday meanings (*jargon* in a non-pejorative sense). They are often contained in technical subject dictionaries, and the number of such words may vary up to 1,000 words. Examples from English language teaching include specific words like *adverbial*, *collocation*, *co-text*, *interlanguage*, *morpheme* and *phoneme*; and common words but with specialist ELT meanings like *aspect*, *continuous*, *demonstrative*, *finite*, *perfect*, *register* and *skimming*. Technical words are often from French, Latin or Greek, depending on the subject area.

Low frequency words

The fourth group of words is the remainder. They are known as low frequency words. They include words like *eponymous*, *gibbous*, *bifurcate*, *plummet* and *ploy*. One person's technical vocabulary may be low frequency words for someone else, who is not in that subject area. If the first three groups of words come to about 4,000 words, then the number of low frequency words is well over 100,000. About 60% of them are from French, Latin or Greek.

It is of course impossible for a teacher to expect to teach 100,000 English words and their spellings. Nation (2013) concludes that a vocabulary of 15,000 to 20,000 words is required to cope with most reading. This is a similarly impossible number for teachers to cover in class. What is needed, therefore, is strategies for coping with new vocabulary – in terms of meaning, grammar, etc. – when encountered in extensive reading.

Five strategies for English spelling

In discussing strategies for coping with English spelling, we might take a lesson from the experts. Every year since 1925 (apart from war years and 2020, because of the coronavirus), the Scripps National Spelling Bee (n.d.) has been held in the U.S.A., for children aged 14 and under. A 2002 film, *Spellbound*, followed eight competitors, including the eventual winner, in the 1999 competition (Blitz, 2002).

To many, it seems a geeky obsession. Competitors admit to being driven; one reports that in summer she studies spelling 8–9 hours a day, while another covers 8,000–9,000 words a day. Most have difficulty maintaining a study/life balance; one acknowledges that her friends ask, “Why don't you get a life?” One mother reports that another mother labels it “child abuse”. Most contestants are described as having above average intelligence; one is described by his brother as having an “IQ one short of being a genius” (see Shaw, 2019).

They all have clear strategies for learning spellings, although one reflects “I guess I came up with them myself.” Some are discussed in the following sections.

The strategies clearly work, as the words have become increasingly rarer over the years. In the first five years of the competition (1925–1929), the winning words were relatively everyday: *gladiolus*, *cerise*, *luxuriance*, *albumen*, *asceticism*. However, in the last five years (2015–2019) they have become rare, often recent loanwords: *scherechnitte*, *nunatak* (two winners); *Feldenkrais*, *gesellschaft* (two winners); *marocain*, *koinonia*, *auslaut*, *erysipelas*, *bougainvillea*, *aiguillette*, *pendeloque*, *palama*, *cernuous*, *odylic* (eight winners). As can be seen, the prize has been shared in some recent years, because the finalists exhausted the entire list of words.

Phonological strategy

The phonological strategy stresses the alphabetic principle of English spelling, namely that letters represent vowel and consonant sounds. This is known as phonics, involving phonological awareness, although various different types of phonics have been proposed (U.S. National Reading Panel, 2006, pp. 2–89). Various factors are involved in teaching phonics:

Accurate pronunciation: Learners must have a reasonably accurate pronunciation of English. Otherwise, the correct sounds cannot be associated with the correct letters. Even the native-speaker contestants in *Spellbound* check this; one, on being given the word *palimpsest*, repeats the word and asks the judges, “Am I pronouncing it correctly?”

Number of syllables: Learners must be able to say how many syllables a word has, and to dissect a word into its constituent syllables

Separating the onset and the rhyme: The onset is the initial consonant(s), if any, and the rhyme is the rest of the syllable (the vowel and any final consonant(s)). Exercises like the following can be used:

“Which word has a different first sound: *cell*, *call*, *soup*?”

“Which word does not rhyme: *seem*, *swim*, *cream*?”

“Which word does not rhyme: *beach*, *speech*, *seat*?”

Separating the peak and coda: The rhyme is made up of the peak (the vowel) and the coda (final consonant(s), if any). Exercises like the following can be used:

“Say *seat*. Now say it without the /t/ sound at the end.”

“Say *straight*. Now say it again, but instead of /eɪ/ say /i:/.”

One boy in *Spellbound*, on being given the relatively simple word *banns*, wavers between the pronunciations /bænz, bændz/.

In many languages with regular spelling systems, nothing more than this is necessary.

There are many freely available websites and downloadable worksheets and books with phonics material for English and guidance on how to choose and use it, e.g. British Council (n.d.-a), Drabble (2013), Jolly Learning (n.d.), LiteracyPlanet (2016), Mumsnet (n.d.), PBS (n.d.), U.K. Department for Education and Skills (2007), U.K. Government (n.d.).

Morphological strategy

The spelling (and meaning) of some words can be worked out by considering the parts that the word is composed of (morphemes). Thus, if a student knows the word *humid*, they can work out the meaning of the word *dehumidifiers*, because it is composed of:

de- “removal” e.g. *deforest*

humid, the root

-ifi (-ify) “make something [adjective, e.g. *humid*]”, e.g. *purify*

-er “person or thing that does [verb]”, e.g. *teacher*

-s “plural”, e.g. *computers*

Morphemes can be of many types:

- Some can be words by themselves (e.g. *humid*), while others cannot. Thus, *inept* is clearly composed of *in-* “negative” and *ept*, but *ept* is not a word of modern English. Historically, it is related to *apt*.

- Some are historical morphemes, explained in greater detail later.
- Some are grammatical morphemes (inflections) that have grammatical functions rather than meanings. There are eight inflections in English, and they are all suffixes (come after the root):
 - *-(e)s* plural (e.g. *computers*)
 - *-'s/s'* possessive (e.g. *the student's book*)
 - *-(e)s* 3rd person singular present tense verb (e.g. *he looks*)
 - *-ing* progressive verb (e.g. *he is looking*)
 - *-ed* past tense verb (e.g. *he looked*)
 - *-ed* participle for perfect and passive verbs (e.g. *he has looked, he was looked after*)
 - *-er* comparative adjective (e.g. *happier*)
 - *-est* superlative adjective (e.g. *happiest*).
- Some change the meaning of the root (derivations). They may be prefixes (before the root) or suffixes (after the root). Thus, in *dehumidifiers*, *de-* is a derivational prefix, while *-ify* and *-er* are derivational suffixes (and *-s* is the plural inflection).

The spelling of these morphemes changes little, regardless of the fact that the addition of them may change the pronunciation substantially. For instance, the spelling of the root *photograph* (/fəʊtəgrɑ:f (BrE), fəʊtəgræf (AmE)/) remains the same in *photography* /fəʊtəgrəfi (BrE), fəʊtəgræfi (AmE)/ and *photographic* /fəʊtəgræfɪk (BrE), fəʊtəgræfɪk (AmE)/.

The fact that the spelling remains the same while the pronunciation differs shows that English spelling is not purely phonological. This fact has been acknowledged for a long time. In 1958, the American linguist Charles Hockett noted that “The complexities of English spelling cannot be accounted for completely on the assumption that the system is phonemic with irregularities ... It is necessary to assume that the system is partly phonemic and partly morphemic” (p. 542). This is not true of many other languages, where spelling reflects pronunciation very closely, regardless of morphology.

The fact that a large number of technical words and words in the Academic Word List are from the classical languages Latin and Greek emphasizes the importance of learning some Latin and Greek word parts (morphemes) (Lane et al., 2019; Merriam-Webster, 2002; Rice University, n.d.; Wikipedia, n.d.-c). These classical morphemes are very productive – that is, combine to form a lot of words – and their spelling does not usually change.

You may not have encountered the English word *hydrogeology* before. However, you can probably work out from its parts that it means the study (*ology*, from Greek *-logia*, as in *theology* “study of God”) of the distribution and movement of groundwater (*hydro*, Greek for “water”, as in *hydroelectricity*) in the soil and rocks (*geo*, Greek for “earth”, as in *geography*). From their classical morphemes, work out the meaning of the following words: *acrophobia*, *circumlunar*, *homograph*, *omnivore*.

Relating words whose spelling is uncertain to morphologically related words whose spelling is clearer is a worthwhile technique. For example, a *momento* must correctly be spelled *memento* because of the related words *memory* and *remember*. Likewise, *grammar* (not *grammer*) is related to *grammatical* (not *grammetical*). Your *just deserts* (not *desserts*) are what you *deserve*. See Brown (2019, Chapter 22) for more discussion and examples.

The *Spellbound* contestants use morphology. In one round, a girl, given the word *apocope*, asks if the *a-* at the beginning is a negative, as in *atypical*.

Etymological strategy

As we saw earlier, the English language is considered to have started in the 5th century with the invasion of the Anglo-Saxons. It is therefore known as a Germanic language. However, in the

intervening 1½ millennia, it has been influenced by many other languages, each bringing their words and spellings to English, usually without regularization. The word *etymology* refers to the historical origins of words.

For instance, if given the word /laɪtməʊti:f (BrE), laɪtməʊti:f (AmE)/ “a recurrent theme in music”, and being told that it is of German origin, someone who knows that in German /aɪ/ = *ei*, can make an educated guess that the first syllable is spelled *leit*. The whole word is *leitmotif* in English, from *Leitmotiv* in German. The same is true of other German loanwords: *edelweiss*, *eiderdown*, *gesund-heit*, *Heidi*, *Heinz*, *Rottweiler*, *zeitgeist*, etc.

Carney (1994) gives a hypothetical example of an etymological strategy:

Suppose you are writing about life at sea and find that a favorite dish of working seamen was called /bɜ:’gu:/. If you think that this word is just nautical slang, you will spell it *burgoo*. But if you think, perhaps because of the final stress, that it may have something to do with French cooking, you will look for possible French elements and spell it *burgout*, presumably on analogy with *ragout*.

(Carney, 1994, p. 468)

The etymological strategy helps with the digraph (two letters representing one sound) *ch*. It may represent three different pronunciations. Firstly, it can be /tʃ/, usually in words of Anglo-Saxon origin.

beach, cheese, Chelsea, chicken, church, finch, much, rich, Richard, speech, such, which

Secondly, it can be /k/, usually in words of Greek origin. In Greek, it is spelled with the Greek letter *chi* (χ).

ache, chaos, character, Chloe, Christopher, echo, monarch, orchid, stomach, technical

Finally, it can be /ʃ/, usually in words of French origin, where they are spelled *ch*. French has no /tʃ/ sound.

chalet, champagne, Charlotte, chassis, chef, machine, Michelle, niche, panache, parachute

Knowing such etymological correspondences helps with both perceptive reading, and productive pronouncing. So, *panache* is not the feeling you get when your wife hits you with a frying pan.

Many of the contestants in *Spellbound* ask for the etymology of the word. One boy has a teacher at school who reports, “I’m tutoring him in French. He isn’t taking French as a subject, but I’m tutoring him in the French words that may come up in the National Spelling Bee.” He has the same arrangement for Spanish and German, and also studies Latin as a subject.

Analogical strategy

Analogy means comparing things. This is often used in English teaching. Does the verb *sting* pattern like *sing* (*sang, sung*) or *swing* (*swung, swung*)?

In terms of spelling, we are often comparing unknown words and their spellings with known words. An example of this is the infamous *-ough* words. They are spelled this way because they come from Old or Middle English words where the *gh* was pronounced (as in modern Scottish (Gaelic)

loch). There are several sounds and combinations of sounds represented by this spelling. None of them can really be called patterns, since they occur in very few example words.

- /əʊ (BrE), oʊ (AmE)/ as in *though*
- /u:/ as in *through*
- /ʌf/ as in *rough*
- /ɒf (BrE), ɔ:f (AmE)/ as in *cough*
- /ɔ:/ as in *thought*
- /aʊ/ as in *bough*
- /ə/ as in *thorough*, *Peterborough* (/oʊ/ in AmE)

Those words (*though*, *through*, etc.) are all common words. How are the following *-ough* words pronounced: *chough* “crow-like bird”, *clough* “valley” (and place name), *furlough* “leave of absence”, *hiccough*, *lough* “lake” (and family name), *Loughborough* (place name), *slough* “marsh (and place name), shed skin”, *yarborough* “a hand of low cards in bridge (and place name)”? (Answers are given at the end of this chapter.)

Visual strategy

The Oxford English Corpus is a computerized collection of written texts comprising nearly 2.1 billion words. It covers major world varieties (so, is not purely British), and is balanced for types of texts (literary novels, specialist journals, everyday newspapers, magazines, blogs, emails, social media, etc.). It is the basis for what appears in the *Oxford English Dictionary*. The Corpus gives the following as the 100 commonest words in English (Oxford Dictionaries, 2011):

the, be, to, of, and, a, in, that, have, I, it, for, not, on, with, he, as, you, do, at, this, but, his, by, from, they, we, say, her, she, or, an, will, my, one, all, would, there, their, what, so, up, out, if, about, who, get, which, go, me, when, make, can, like, time, no, just, him, know, take, people, into, year, your, good, some, could, them, see, other, than, then, now, look, only, come, its, over, think, also, back, after, use, two, how, our, work, first, well, way, even, new, want, because, any, these, give, day, most, us

Because they are such common, everyday words (they account for 50% of all the words in the Corpus), it may not strike the reader how irregular the spelling of some of them is. *Have* /hæv/ is not like *shave* /ʃeɪv/. *Shave* represents the regular pattern (known as “magic e”; Brown, 2019, Chapter 13). Similarly, compare *with/pith*; *as/gas*; *you/thou*; *do/go*; *his/axis*; *one/tone*; *would, could/mould* (BrE); *there/here*; *who/when*; *some, come/home*; *give/five*; *most/cost*.

Because these words are both infrequent and often irregularly spelled, it has been suggested that they should be taught early (both for vocabulary and for spelling) and often with little attempt to identify the letter-sound patterns in them. This relates to the *whole word* or *whole language* approach to teaching English, which has been around for at least a century. In the first half of the 20th century, Edward William Dolch and Edward B. Fry analyzed children’s reading books and produced lists of common words that should be learned by rote, known as “sight words” (full lists can be found at Sight Words, n.d.-a, n.d.-b). It is wise for teachers to put posters of such words on classroom walls, to increase learners’ familiarity with them. In *Spellbound*, some children study by using a poster board, Scrabble tiles, etc., to increase visual memory.

Tips for teaching English spelling

To conclude this chapter, let us pull together the various elements that have been discussed in the preceding sections, in the form of a number of “how to” tips for the classroom.

Familiarity with the Roman alphabet and left-to-right spelling

This is clearly a very basic prerequisite for English. However, the Roman alphabet, as used for English and many other languages, is so widespread nowadays that little training is necessary.

Handwriting

Is it necessary, in these days when most writing is done on computer, for learners to develop good handwriting? Certainly. There is evidence that handwriting improves memory.

Research by Mueller and Oppenheimer (2014), in an article entitled “The pen is mightier than the keyboard”, suggests that handwriting rather than typing improves a learner’s chances of learning. Bounds (2010) reports research showing that handwriting “helps with learning letters and shapes, can improve idea composition and expression, and may aid fine motor-skill development.” Berninger (quoted in VOA Learning English, 2009) reports her own five-year longitudinal study of 240 children that found “they wrote longer essays, they wrote the words faster. . . . they wrote more complete sentences in fourth and sixth grade when they were writing in handwriting by pen than when writing on keyboard.”

Most of the contestants in *Spellbound* are seen handwriting lists of words in order to remember their spelling.

In some classrooms, handwriting seems to be a forgotten skill. However, it is necessary, especially at younger ages, and for learners from non-Roman alphabet languages. If good handwriting habits are inculcated at the start, they will stand the writer in good stead for the rest of their life.

There is no shortage of material for teaching handwriting; a search on Amazon produces over 10,000 hits. As a start, Bugbee (2020) gives the following sensible tips:

1. Use a nice pen.
2. Maintain a relaxed grip.
3. Start with drills.
4. Experiment with paper rotations.
5. Practice with a worksheet.
6. Sneak in practice when you can.
7. Write on lined paper or use a template.
8. Embrace your personal style.

This does not, of course, mean that we should avoid using computers in teaching spelling. However, there are nowadays many devices – smart pens, styluses, smartphone apps, etc. – that allow the user to use handwriting for input, and then convert that handwriting into text.

Technology

All devices (computers, tablets, smartphones, etc.) nowadays come with spell-checkers. What effect has this had on learners’ spelling? An early study (Galletta et al., 2005) found that spelling and grammar improved when spell- and grammar-checkers were turned off by students. If these checkers find mistakes, why does the learner need to look for them?

There is little evidence that spell-checking has had a positive effect on spelling. However, spell-checkers can help learners, if they are looked on as a learning tool. That is, learners should be encouraged to actively focus on their wrong spelling and the correct one, perhaps by keeping a note of troublesome words.

As a final note about technology, it is surprising, in these days when most writing is done on computer, that keyboard skills are not similarly taught at an early age.

Phonological awareness

We have already seen that phonological awareness and phonics, relating sounds and spellings, is all that is needed for many languages of the world, and it is the major strategy for English.

In the U.S.A., educational programs are coordinated state by state, including a greater emphasis in the last decade on phonics and phonological awareness by Arkansas, Colorado, Minnesota, New York, Ohio and Wisconsin.

In the U.K., Ofsted (the Office for Standards in Education, Children's Services and Skills), a government body, increased the emphasis on phonics in schools ten years ago. A phonics check is now administered to six-year-olds, with convincing results: passes rose from 58% in 2012 to 74% in 2014 (Burns, 2014; Gibb, 2017).

A four-step procedure for developing phonological awareness was proposed:

1. Accurate pronunciation.
2. Number of syllables.
3. Separating the onset and the rhyme.
4. Separating the peak and coda.

Again, there is no shortage of material for teaching phonological awareness. A search for phonics on Amazon yields over 20,000 hits of various types of material.

Sequence for teaching spelling

In what order should the various spellings and spelling patterns of English be introduced, at the beginner level? Clearly, as in most aspects of English language teaching, it makes sense to go from the simple to the complex. Lloyd (1998) suggests the following:

1. *s, a, t, i, p, n*
2. *ck, e, h, r, m, d*
3. *g, o, u, l, f, b*
4. *ai, j, oa, ie, ee, or*
5. *z, w, ng, v*, "little oo" (representing /ʊ/), "long oo" (representing /u:/)
6. *y, x, ch, sh*, "voiced th" (representing /ð/), "unvoiced th" (representing /θ/)
7. *qu, ou, oi, ue, er, ar*

The first set of letters generate the following CVC words: *nap, nip, nit, pan, pat, pin, pip, pit, sap, sat, sin, sip, sit, tan, tap, tin, tip*. If this has been preceded by phonological awareness training, the following slightly more complex words are produced: *snap, snip, span, spat, spin, spit, pant, Stan* (but not *pint*, which has a different vowel sound). An *s* can be added to all of them, to make the plural noun

or 3rd person present tense verb (apart from *sat*). In short, only six letters, but a total of 41 different words, none of them terribly uncommon.

Based on other works, Brown (2019, Chapter 27) gives the following sequence for introducing aspects of English spelling to learners:

1. Accurate pronunciation.
2. Phonemic awareness.
3. Names of letters (/eɪ, bi:, si:/ etc.).
4. Individual letter-to-sound correspondences.
5. CVC words.
6. Simple words with consonant clusters, e.g. *flat, drip, spin, stop, dent, fits, hunt, left*.
7. Simple words with consonant digraphs, e.g. *chop, shed, thin, when, fish, moth, ring*.
8. Magic e, e.g. *tap/tape; pet/Pete; bit/bite; cop/cope; tub/tube*.
9. Vowel letter + r, e.g. *cart, firm, hurt, storm, term*.
10. Vowel digraphs, e.g. *new, seat, shout, boost*.
11. Compound words, e.g. *timetable*.
12. Multisyllable words, e.g. *depart*.
13. Affixes, e.g. *disagree, playful*.

Useful words

The same letters also produce the word *spint*, pronounced /spɪnt/ (so not like *pint*). However, many readers may not know this word, as it is slang/colloquial for “be a no-show, idiot”. Words that are used when teaching spelling need to be words that the learners know, or that will be useful words. One of the *Spellbound* contestants laments,

Most of the words that I learn, I don't know what they mean. I just remember how to spell them. Like “Moroccan desert wind” [*sirocco, chergui, harmattan?*]! When am I going to have a chance to use that in a sentence?

Words that can be used in class can be words encountered in reading, words introduced for vocabulary enrichment purposes or simply useful, common words. To check on how common particular words are, see Anthony (n.d.), Cobb (n.d.), Nation (n.d.).

Word games

There are many games that relate to written answers and spelling: crosswords, word searches, Scrabble, Boggle, etc. All of these can be easily adapted for the teaching of spelling.

Extensive reading

There is little point in instituting phonics and other reading strategies, if the beneficial effects are not put to good use in reading books and other material. Burns (2012) refers to a “can read, won't read” culture in the U.K.; almost two-thirds of British children say they do not enjoy reading.

Based on a 2012 research project, the U.K. National Literacy Trust (2013) reported that “children and young people are reading less and more are embarrassed to be seen reading, while many also believe that their parents don't care if they spend time reading.” Indeed, it was found that many U.K.

Computers and reading

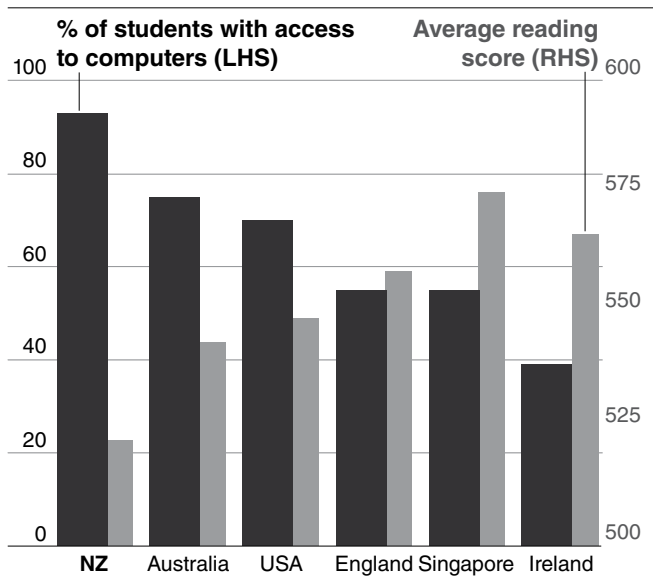


Figure 22.1 The relationship between access to computers, and reading score

Source: Collins, 2020

teenagers sitting GCSE (General Certificate of Secondary Education) examinations did not possess a high enough literacy level to read and understand the question papers (Richardson, 2012).

One way to counteract this is extensive reading; in other words, reading texts – the more, the better – for enjoyment and to develop general reading skills. This can be encouraged as a classroom and curriculum activity “by setting up a class library, encouraging review writing, and incorporating reading of books into the syllabus, and dedicating some class time to quiet reading” (British Council, n.d.-b).

The promotion of extensive reading seems to be hampered by modern technology. The Progress in International Reading Literacy Study (PIRLS) (Boston College, n.d.) is an international assessment in 70 countries that measures student learning in reading. It is conducted every five years, the latest in 2016. In an analysis of the 2016 data, Forkert and Chamberlain (2020) found “a direct, negative relationship between how often teachers had their students use computers or tablets for reading activities and their liking of reading.” Similarly, Figure 22.1 shows that students who had the greatest access to computers among countries surveyed also had the lowest reading scores. It may therefore be wise to conduct extensive reading sessions with conventional, hardcopy books.

As we have seen, the largest group of words are low frequency words; that is, words that do not belong to the high frequency, academic or technical groups. Extensive reading helps readers to encounter them, so that they can find out their meaning and remember their spelling.

Integrating spelling with vocabulary teaching

Words do not occur in isolation. They occur with other words in phrases, sentences and passages. Passages are often used in class for vocabulary development. In order to say that you know a word, you need to know various things about it: its meaning, pronunciation, grammar, collocations, formality, etc. – and its spelling. So, vocabulary teaching is an ideal occasion also to cover spelling teaching.

Testing spelling

An (unfortunately common) practice is to give learners a set of, say, 20 words whose spelling will be tested. There are several problems with this.

Even if a learner achieves 100% on the test, this is no guarantee that they will spell the word correctly subsequently. They may have learned the spelling solely for the test.

Is it fair – ethical, even – to test learners on something that they have not received explicit instruction on? It makes much more sense for the words to be exemplars of particular spelling patterns. This, then, allows learners to cope better with new words that follow the same pattern. If no explicit spelling instruction is given, it gives the impression that words should be learned, or can only be learned, by rote or osmosis; in other words, that the alphabetic principle that letters represent sounds is bypassed, and only a visual strategy is needed.

The words should not be tested once. They need to be recycled by being used in readings, spelling exercises, etc. Spence (2014) gives several ideas.

Tests, like spell-checking, can also be learning opportunities. Wrong answers can be analyzed by the teacher to understand why the learner made the mistake. Do they not pronounce the word accurately? Is this a spelling pattern that they have not mastered?

Conclusion

Spelling is important. It has also been argued that handwriting and spell-checking are important. However, many speakers do not master English spelling fully. Often this is due to the inherent, irregular nature of English spelling. Strategies and classroom tips have been given in order to help learners overcome these problems. The reference list contains many entries for readers who wish to delve deeper into the topic.

Answers

In case they were not obvious, the English loanwords in Malay are *acid*, *excise*, *hockey*, *orchid*, *package*, *civic*, *vaccine*.

The *-ough* words are pronounced as follows: *chough* /tʃʌf/; *clough* /klɒf/ (and /klɒx/ as an Irish place name); *furlough* /fɜːləʊ (BrE), fɜːrloʊ (AmE)/; *hiccough* /hɪkʌp/; *lough* /lɒx (BrE), la:k (AmE)/ (and /lɒf, ləʊ, loʊ/ as a family name); *Loughborough* /lɒfbərə (BrE), lɒfbərəʊ (AmE)/; *slough* /slaʊ, sluː/ “marsh”, /slɒf/ “shed skin”, /slaʊ/ (place name); *yarborough* /jɑːbərə (BrE), jɑːrbərə (AmE)/ “a hand of low cards in bridge”, /jɑːbərə (BrE), jɑːrbərəʊ (AmE)/ (place name).

References

- Anthony, L. (n.d.). *AntWordProfiler*. www.laurenceanthony.net/software/antwordprofiler
- Baugh, A. C. & Cable, T. (2012). *A history of the English language* (6th ed.). Routledge.
- Blitz, J. (Director). (2002). *Spellbound* [Film]. ThinkFilm/Metrodome.
- Boston College. (n.d.). *Data to improve education worldwide*. <https://timssandpirls.bc.edu>
- Bounds, G. (2010, October 5). How handwriting trains the brain: Forming letters is key to learning, memory, ideas. *The Wall Street Journal*. www.wsj.com/articles/SB10001424052748704631504575531932754922518
- British Council. (n.d.-a). *LearnEnglish kids: Phonics stories*. <http://learnenglishkids.britishcouncil.org/en/apps/learnenglish-kids-phonics-stories>
- British Council. (n.d.-b). *Extensive reading*. www.teachingenglish.org.uk/article/extensive-reading-0
- Brown, A. (1996). The trouble with spelling. *Speak Out!* (Newsletter of the IATEFL Pronunciation Special Interest Group), 17, 23–31.
- Brown, A. (2019). *Understanding and teaching English spelling: A strategic guide*. Routledge.
- Bugbee, L. (2020). 8 tips to improve your handwriting (plus a free worksheet). *The Postman's Knock*. <https://thepostmansknock.com/8-tips-improve-your-handwriting>

- Burns, J. (2012). Authors help tackle 'can read won't read culture'. *BBC News*. www.bbc.com/news/education-18145173
- Burns, J. (2014). More children pass phonics check, says government. *BBC News*. www.bbc.com/news/education-29376127
- Carney, E. (1994). *A survey of English spelling*. Routledge.
- Cobb, T. (n.d.). *Compleat lexical tutor*. www.lextutor.ca
- Collins COBUILD Advanced Learner's English Dictionary. (2018, 9th ed.). HarperCollins.
- Collins, S. (2020). Online learning reduces children's reading enjoyment – study. *New Zealand Herald*. www.nzherald.co.nz/nz/online-learning-reduces-childrens-reading-enjoyment-study/DX76N66XKKPCVAV6SZ3FTACK2M/
- Coxhead, A. (2000). A new Academic Word List. *TESOL Quarterly*, 34, 213–238.
- Coxhead, A. (n.d.). *The Academic Word List*. www.wgtn.ac.nz/lals/resources/academicwordlist
- Crystal, D. (2005). *The stories of English*. Penguin Books.
- Dewey, G. (1971). *English spelling: Roadblock to reading*. New York Teachers College Press.
- Drabble, E. (2013). How to teach ... phonics. *The Guardian*. www.theguardian.com/education/teacher-blog/2013/apr/01/phonics-teaching-resources-schools
- Forkert, J. & Chamberlain, M. (2020). *PIRLS 2016: Using computers for reading activities and students' attitudes to reading*. www.educationcounts.govt.nz/publications/schooling/pirls-2016-using-computers-for-reading-activities-and-students-attitudes-to-reading
- Galletta, D. F., Durcikova, A., Everard, A., & Jones, B. M. (2005). Does spell-checking software need a warning label? *Communications of the ACM* (Association for Computing Machinery), 48(7), 82–86. <http://isites.harvard.edu/fs/docs/icb.topic761456.files/p82-galletta%20durcikova%20everard%20jones%20cacm.pdf>
- Gibb, N. (2017). It's official. The UK's phonics revolution has dramatically improved school standards. *The Telegraph*. www.telegraph.co.uk/news/2017/12/04/official-uks-phonics-revolution-has-dramatically-improved-school
- Hanna, P. R., Hanna, J. S., Hodges, R. E., & Rudorf, E. H. (1966). *Phoneme-grapheme correspondences as cues to spelling improvement*. U.S. Department of Health, Education, and Welfare.
- Hanna, P. R., Hodges, R. E., & Hanna, J. S. (1971). *Spelling: Structures and strategies*. Houghton Mifflin.
- Hockett, C. F. (1958) *A course in modern linguistics*. Macmillan.
- Jolly Learning. (n.d.). www.jollylearning.co.uk
- Lane, H. B., Gutlohn, L., & van Dijk, W. (2019). Morpheme frequency in academic words: Identifying high-utility morphemes for instruction. *Literacy Research and Instruction*, 58(3), 184–209. <http://doi.org/10.1080/19388071.2019.1617375>
- Lexico. (n.d.). *How many words are there in the English language?* www.lexico.com/explore/how-many-words-are-there-in-the-english-language
- LiteracyPlanet. (2016). *Phonics: Establishing a strong foundation for early reading*. www.literacyplanet.com/au/schools/skills/phonics
- Lloyd, S. (1998). *The phonics handbook* (3rd ed.). Jolly Learning.
- Merriam-Webster. (2002). *A dictionary of prefixes, suffixes, and combining forms from Webster's Third New International Dictionary, Unabridged*. https://secure.spellingbee.com/forms/M_W_pre_suf_comb.pdf
- Merriam-Webster. (n.d.). *How many words are there in English?* www.merriam-webster.com/help/faq-how-many-english-words
- Miles, E. (2005). *English words and their spelling: A history of phonological conflicts*. Whurr.
- Mueller, P. A. & Oppenheimer, D. M. (2014). The pen is mightier than the keyboard: Advantages of longhand over laptop note taking. *Psychological Science*, 25, 1159–1168. <http://doi.org/10.1177/0956797614524581>
- Mumsnet. (n.d.). *Mumsnet by parents for parents*. www.mumsnet.com/learning
- Nation, I. S. P. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press.
- Nation, I. S. P. (n.d.). *Vocabulary analysis programs*. www.wgtn.ac.nz/lals/resources/paul-nations-resources/vocabulary-analysis-programs
- Neeley, T. (2012). Global business speaks English. *Harvard Business Review*. <https://hbr.org/2012/05/global-business-speaks-english>
- Oxford Dictionaries. (2011). *The OEC: Facts about the language*. <http://web.archive.org/web/20111226085859/http://oxforddictionaries.com/words/the-oec-facts-about-the-language>
- PBS. (n.d.). *Phonics*. www.pbs.org/launchingreaders/soundsandsymbols/helpfularticles_3.html
- Rice University. (n.d.). *Greek and Latin morphemes in English words*. www.ruf.rice.edu/~kemmer/Words04/structure/roots_examples.html
- Richardson, H. (2012). Many teenagers 'can't read GCSE exam papers'. *BBC News*. www.bbc.com/news/education-20346204

- Scripps National Spelling Bee. (n.d.). <http://spellingbee.com>
- Shaw, G. (2019, May 31). Where are they now? 21 winners of the Scripps National Spelling Bee. *Business Insider*. www.businessinsider.com.au/lives-of-national-spelling-bee-champs-2013-5?r=US&IR=T
- Sight Words. (n.d.-a). *Fry sight words list*. www.sightwords.com/sight-words/fry/#lists
- Sight Words. (n.d.-b). *Dolch sight words list*. www.sightwords.com/sight-words/dolch/#lists
- Spence, B. (2014). Why I don't give a Friday spelling test (and what I do instead). *This Reading Mama*. <https://thisreadingmama.com/no-friday-spelling-test>
- The English Spelling Society. (n.d.). <http://spellingsociety.org>
- U.K. Department for Education and Skills. (2007). *Letters and sounds: principles and practice of high quality phonics*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/190599/Letters_and_Sounds_-_DFES-00281-2007.pdf
- U.K. Government. (n.d.). *Teaching phonics: Information for schools*. www.gov.uk/government/collections/phonics
- U.K. National Literacy Trust. (2013). *Children's and young people's reading in 2012*. <https://literacytrust.org.uk/research-services/research-reports/childrens-and-young-peoples-reading-2012>
- U.S. National Center for Education Statistics. (2019). *Adult literacy in the United States*. <https://nces.ed.gov/datapoints/2019179.asp>
- U.S. National Reading Panel. (2006). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. www.dys-add.com/resources/SpecialEd/TeachingChildrenToRead.pdf
- Upward, C. & Davidson, G. (2011). *The history of English spelling*. Wiley-Blackwell.
- VOA Learning English. (2009). *Which makes the better writer: the hand or the keyboard? Age is a part*. <https://learningenglish.voanews.com/a/a-23-2009-10-05-voa3-83141387/117534.html>
- Webster, N. (1828) *An American dictionary of the English language*. Webster.
- Wells, J. C. (2008). *Longman pronunciation dictionary* (3rd ed.). Longman.
- Wikipedia. (n.d.-a). *List of languages by writing system*. https://en.wikipedia.org/wiki/List_of_languages_by_writing_system
- Wikipedia. (n.d.-b). *List of dictionaries by number of words*. https://en.wikipedia.org/wiki/List_of_dictionaries_by_number_of_words
- Wikipedia. (n.d.-c). *List of Greek morphemes used in English*. https://en.wikipedia.org/wiki/List_of_Greek_morphemes_used_in_English
- Wood, J. (2015). Top languages of the internet, today and tomorrow. *Harvard Business Review*. <https://hbr.org/2012/05/global-business-speaks-english>
- Wylie, A. (2020). *What's the latest U.S. literacy rate?* www.wyliecomm.com/2019/03/us-literacy-rate

L2 Writing

Toward a Theory-Practice Praxis

Lawrence Jun Zhang

Introductions

Writing as a language skill that is pivotal to success in all spheres of life has been well acknowledged. We know how important writing is in terms of its role as a medium of communication either on paper, in emails, or official letters of communication in our daily life. It is a skill that is simply too important to be neglected; it is crucial to all who work in academic settings, across all levels of schooling. When a high level of writing skills is expected, for example, in pursuing an academic qualification at university, being able to write and write well in the genre in which students are expected to express themselves accurately and appropriately, determines their performance at university. It is almost true of students of all disciplines. Given the centrality of the role that writing skills play, writing evidently needs to be taught. How it is taught is to a great extent contingent upon the context in which it is required. The way in which it is taught is a function of how teachers understand writing. Such understandings range from how L1 and L2 texts are similar or different (see, e.g., Connor & Kaplan, 1987; Hinkel, 2005; Kaplan, 1966, 1988; Wei et al., 2020). In subtle ways, the pedagogy that teachers adopt in conducting their teaching involves a complex web of the inclusivity and interactionality between theory and practice, namely, a praxis between the two, if at all. How theories of writing are understood, enacted, embodied, or realized in the writing process by the writer or in the writing classroom by the writing teacher becomes immediately relevant to whoever is in this enterprise, and in this case, L2 writing (see e.g., elaborations in Ferris & Hedgcock, 2014; Forbes, 2021; Hyland, 2016; Hyland & Hyland, 2019). This chapter provides an overview of several key areas of L2 writing that were not otherwise regarded as central to the field, highlights the trends, and points to possible future directions as an attempt to bring closer a praxis between theory and practice.

L2 Writing Research as Theory-Informed Endeavors

Like other skill areas that have been examined in this volume, writing research inherited its psychological research tradition, where writing used to be typically viewed as a cognitive process, an activity that occurs in the human brain. This spirit of scientific research might be closely related to how understanding and knowledge should be approached. This appears to be supported by the argument that:

the purpose of a theoretical discipline is the pursuit of truth through contemplation; its *telos* (i.e., purpose) is the attainment of knowledge for its own sake. The purpose of the productive

sciences is to make something; their *telos* is the production of some artefact. The practical disciplines are those sciences which deal with ethical and political life; their *telos* is practical wisdom and knowledge.

(Carr & Kemmis 1986, p. 32)

The teaching of writing is in fact an attempt to establish a praxis between theory and practice. Praxis means that a person “makes a wise and prudent practical judgement about how to act in this situation” (Carr & Kemmis 1986, p. 190). Teachers’ act of engaging, applying, exercising, realizing, or practicing ideas in their writing classrooms is as significant as students’ decision on carrying out the writing task in a role that is different from that of the teachers. This embodiment might be exemplary in the conceptualization of the writing process, as seen in a number of publications as collaboration between Linda Flower and John Hayes in the late 1970s and early 1980s (Flower & Hayes, 1977, 1980; Hayes & Flower, 1980), which I discuss in some detail next.

Recent developments in L2 writing have appeared to show a sociocultural turn (Canagarajah, 2019, 2020), or at least attempts have been made to consider sociocultural appropriation (of cognitive ways of understanding and teaching L2 writing), or viewing the whole enterprise as sociocognitive in nature (Atkinson, 2014). Issues that have been investigated include writer identity (see Matsuda, 2015), authorial voice (Hirvela & Belcher, 2001; Xu & Zhang, 2019), stance-taking (Chang & Schleppegrell, 2011, 2016; Charles, 2006; Lancaster, 2014, 2016; Zhang & Zhang, 2021), writer self-efficacy (Chen & Zhang, 2019), and enhancing L2 students’ motivation and self-regulation for improving writing performance (Teng & Zhang, 2016), among others. Some of the research studies were conducted with due consideration of the theory–practice praxis, whereas others purely investigated the phenomena. Investigations into the complexity of such praxis oftentimes were executed in relation to the sociocultural contexts, which were the realities in L2 teaching (Zhang, 2016). Given that educational psychologists regard self-efficacy as “an essential motive to learn” (e.g., Zimmerman, 2000), classroom-based L2 writing intervention studies have emerged more frequently than what used to be the case (e.g., Deng et al., 2014; Ferris & Hedgcock, 2014; Huang & Zhang, 2020; Teng & Huang, 2019; Teng & Zhang, 2020). I revisit this line of work in some detail later in this chapter.

Evolving Theoretical Views on Writing

In recent times, ample chapters or books presenting thorough reviews of the theoretical developments in the field of L2 writing have been published (see e.g., Ferris & Hedgcock, 2014; Hyland, 2016; Hyland & Hyland, 2019). There does not seem to be a need for me to elaborate on any of the theories. For the benefit of readers who are interested in this chapter, I decided to briefly review at least the evolving theoretical views on writing so that my focus on the theory–practice praxis is made more relevant.

The field of writing research has taken at least two major turns. In today’s educational contexts in many parts of the world, many of us have taken for granted the fact the process approach to understanding and teaching writing is more like a daily affair in our professional lives if our job is to teach writing or how to teach writing in educational institutions. In the USA, Canada, New Zealand, at least, or in other western contexts, process-oriented teaching and learning activities are now the order of the day, when teachers organize their class teaching through students’ participation in the various procedures derived from the process-approach to writing, ranging from brainstorming, planning, drafting, offering and receiving peer feedback, revising, and publishing or sharing the completed writing. Different from what used to be the popular and apparently dominant, and probably the only, pedagogy that product-oriented teaching of writing was poised to be, the process-focused instruction was generally regarded as a breakthrough, or an innovation, as it were, which explains why it started to gain prevalence in the 1970s. The book, *The Composing Processes of Twelfth Graders*

(Emig, 1971), is generally regarded as heralding empirical research into the writing process, at least it was the case in North America, as De La Paz and McCutchen (2016) observed. However, the challenge of viewing writing as a process was far bigger than what we believe today. In writing classrooms in Asia, for example, teachers still face the dilemma of what to do when they have to make a decision on the allocation of the classroom time they have and the required contents that need to be covered within the prescribed curricula, should they want to use process approaches in teaching writing (Huang & Zhang, 2020; Zhang, 2016).

Product-oriented Writing

Compared with the process approach, the rather mechanical and traditional product-oriented writing instruction, or the product approach, as is so called (Kroll, 2001), has arguably phased out in most of the language education curricula, particularly in programs that include L2 writing as an essential component (Hyland, 2016). This is because in this model of writing instruction teachers do not really teach students how to write. Instead, teachers and students pay paramount attention to deductive analyses of model text, with teachers requiring students to follow the rigid rhetorical conventions. The ideal behind such a pedagogy is that students will be able to produce quality writing because they are guided by the specifically prescribed rules that are assumed to be the guarantor. Williams (2003) summarizes these rules as follows: “All paragraphs must have a topic sentence... All essays have an introductory paragraph, three body paragraphs, and a concluding paragraph... All concluding paragraphs reiterate the information in the introduction” (pp. 100–101). Ultimately, students are trained to follow the rules and write, with a focus on the formulaic features of text. Such a pedagogy has been proven by research as counter-productive (e.g., Campbell & Latimer, 2012). Ferris and Hedgcock (2014) recommend “a socioliterate approach that features authentic genres as a more productive alternative” (p. 64), which is an effective advancement of process approaches in their own specific ways.

Process Writing

Great interest among cognitive psychologists in reading in the 1970s (e.g., LaBerge & Samuels, 1974) and in complex problem-solving in almost the same period of time (e.g., Hayes, 1981; Hayes-Roth & Hayes-Roth, 1979; Larkin et al., 1980; Newell & Simon, 1972) made it possible for the two groups of psychologists to join forces for synergy to investigate the writing process, as pointed out by De La Paz and McCutchen (2016). One of the main reasons for the difficulty in examining the writing process, as was the case with the reading process, was its mental operations that at that time were not easy to detect due to the lack of modern technologies. As a result, scholars of composition studies and cognitive psychology started the collaboration, typically represented by Linda Flower and John R. Hayes (Flower & Hayes, 1977, 1980; Hayes & Flower, 1980). Their work has laid a solid theoretical foundation for research into the writing process as well as the application of the research findings to pedagogy (Zamel, 1982), with its influence on writing research continuing until the present day, at least in the field of L2 writing (Forbes, 2021; Hyland, 2016). Such work along this line has been further modified and blended with genre-focused work that has been successfully implemented in the teaching of L2 writing (Badger & White, 2000; Deng et al., 2014; Huang & Zhang, 2020; Tardy, 2009, 2016).

In the Flower and Hayes’ theoretical framework (Flower & Hayes, 1980; Hayes & Flower, 1980), writing is considered as having three key processes that are involved in the writer’s deliberate effort to produce a written text. These processes are planning, translating (i.e., transfer what is planned into a written text), and reviewing (i.e., processes that involve revision), all of which operate under the guidance of executive control of the metacognitive process in the human brain. The writer’s

successful operation of these processes is contingent upon the external task environment in which he/she writes as well as his/her long-term memory. Hayes (1996, 2006) has revised this writing process model over a period of 25 years or so, but he has essentially kept it as a cognitive theory of writing. The influence of this model in the fields of writing studies and English language education, especially in L2 writing research and teaching, has been profound (see Ferris & Hedgcock, 2014, especially Chapter 3). The liberal pursuit for process-oriented pedagogies has led to various ways of executing the instruction. In light of this development, the process approach is essentially diversified and implemented in different ways. Therefore, pluralizing the word *approach* might better represent this movement. As a further development, genre-process pedagogies foreground the current L2 writing instruction, as discussed next.

Genre as Theory and Pedagogy

Genre is not a new concept, as is well stated in a number of scholarly publications (see Bawarshi & Reiff, 2010; Bazerman, 2010; De La Paz & McCutchen, 2016; Hyland, 2016). As a theory, genre is customarily classified as belonging to three schools: The Systemic Functional Linguistics (SFL) school, the ESP School, and the New Rhetoric school (Hyon, 1996). In the field of L2 writing, Hyon's succinct classification based on his understanding of the three traditions of genre is widely accepted. The Systemic Functional Linguistics (SFL) school focuses on the interrelationships between linguistic forms and social functions of language (Halliday, 1994; Hyland, 2007; Martin & Christie, 1984). In this genre tradition, the purposeful, interactive, and sequential character of different genres, and the ways language is systematically linked to context through patterns of lexicogrammatical and rhetorical features, are the main goals of the writer (Martin et al., 1987). ESP scholars typically identify features of the discourse communities and regard genre as a tool to teach L2 users discipline-specific writing in professional as well as academic contexts (Bhatia, 1993; Feak & Swales, 2011; Hyon, 1996; Swales, 1990). New Rhetoric scholars posit that genre is intended to perform a certain social action (Connor, 2004) and that the significance of the rhetorical contexts makes it imperative that genres be employed to serve these social functions instead of carrying out detailed analyses of texts and their elements (e.g., Freedman & Medway, 1994). As is a necessary progression, these genre perspectives provide their own strong rationales for their way of understanding and researching writing. It might be correct to say that L2 writing researchers and teachers have been engaged more with adopting or adapting various process-oriented genre-based pedagogies either in their research or their teaching, or both (Badger & White, 2000; Huang & Zhang, 2020). Analysis of learners' L2 texts in comparison with their L1 text or textual practice is regarded as a necessary precursor to deepening our understanding of the affordances L2 student writers have and the challenges they face so that teachers' pedagogies better serve these students' L2 writing needs (Hinkel, 2005, 2011).

Genre as Pedagogy

Genre as pedagogy is based on the understanding that the pedagogical approaches to teaching writing are reader-oriented (Raimes, 1991; see also Hyland, 2016; Tardy, 2016) and they are a response to the widely accepted planning-writing-reviewing process writing framework (Hayes, 2012; Flower & Hayes, 1980). Hyland's (2003) explicit statement as shown in the title of his now well-cited article, "Genre-based pedagogies: A social response to process", has become an open call for using genre pedagogies with such a clear goal. Although criticisms were levelled against genre pedagogies on the basis that such pedagogies are stifling or restricting writers' creativity as one major reason cited in venting the criticism, scholars in support of genre-based approaches argue clearly that writing varies with different social contexts and communicative purposes (Hyland, 2003; Paltridge, 2013).

Christie (1987) maintains that creativity and genre are not incompatible, and that genre awareness is a prerequisite for creative variation. In effect, it can be said that genre and related genre pedagogies offer writers, including L2 writers, explicit information on the texts in terms of how they are structured in different genres, supported with clear explanations for why these texts need to be written the ways that they are (Hyland, 2003).

Centrality of Social Context

The new ways of approaching a genre take into consideration the social context and afford both readers and writers new perspectives that can be harnessed for exploring and exploiting many different genres to better serve the social functions (Johns, 1997; Rose & Martin, 2012). A large array of real-world genres (such as business letters) and academic genres (such as research reports) can be approached and learned this way. Rose and Martin (2012) provide a very detailed account of the variety of genres available in our human experience, where the list ranges from everyday life to academic and professional contexts. In these discussions by the various scholars mentioned earlier, a text is typically viewed as a rhetorical interaction situated within a social context, where cultural norms take a central role. Given that genres are means by which writers present effective responses to those social situations, generic conventions are not regarded as prescriptions but rather consequences resulting from suitability and appropriateness, rather than from prescribed arbitrary and formal conventions that are most often practiced in the product-oriented pedagogies (Hyland, 2003; Tardy, 2016).

Because the notion of genre has been given different meanings, depending on which school of thought one follows, Devitt's (1993) view of genre might be useful in clarifying the essential tenets of what it really means when one talks about "genre". In Devitt's words,

genres develop ... because they respond appropriately to situations that writers encounter repeatedly. In principle, that is, writers first respond in fitting ways and hence similarly to recurring situations; then the similarities among those appropriate responses become established as generic conventions.

(p. 576)

Looking around and examining the various available texts as representative genres, one cannot help but think of Bazerman's introduction to Bawarshi and Reiff's (2010) *Genre*. Bazerman writes,

the longer you work with genre, the more it reveals and the more it connects with—perhaps because genre is at a central nexus of human sense-making, where typification meets utterance in pursuit of human action. To communicate effectively we need to know what kind of situation we are in, what kinds of things are being said, and what kinds of things we want to accomplish. ... Many aspects of communication, social arrangements, and human meaning-making are packaged in genre recognition.

(p. xi)

Learning and teaching L2 writing is equally bound to the notions of connectivity, relatedness, and situatedness, based on a solid understanding of what genre is in the very process of creatively using the various genres for text production. Publications along this line reinforce the significance of genre and genre pedagogies in L2 writing scholarship (see, e.g., Tardy, 2009, 2016). A recent development, as seen in L2 scholarly publications, is the integration of process and genre to form a more holistic approach to teaching writing, namely, genre-process pedagogies. Badger and White (2000) made a successful attempt to have fleshed out the specific pedagogical processes that were proven to be

working well in their EFL (English as a foreign language) writing class. Huang and Zhang's (2020) intervention study was built on Badger and White's (2000) work, further elaborating on the idea of process-genre pedagogies. Their findings, as well as those from other studies that examined the effects of writing performance in relation to increasing L2 writers' genre awareness and self-regulated learning strategies, point to the utility of teacher guidance (Teng & Zhang, 2020).

Culture and Rhetoric

Culture and rhetoric are closely woven and research into cultural differences obviously has a long history. Anecdotal evidence in teachers' conversations on how students' L1 interferes with their L2 writing at the local level of language use and the global level of text organization was what contrastive linguistics was very much concerned about (see e.g., Lado, 1957; Stern, 1983; Zhang, 2013). Comparing the differences in the compositions in two different languages, including academic texts in English, written by students of different L1 backgrounds, was attributed to the work heralded by Kaplan (1966) under the name of "contrastive rhetoric" (Connor, 1996; Connor & Kaplan, 1987; Hinkel, 2002). Kaplan (1966) analyzed the paragraph structure in 600 essays by L2 English writers/students and found their paragraph development showing different patterns. He linked each of these patterns such as coordination, digressive, and circular, among others, to specific linguistic and cultural backgrounds of the writers who produced these texts. He also compared these patterns to their preferred rhetorical conventions in their own cultures.

Working along the same line of research interest, scholars examined how students' L1 influence was exhibited in their L2 argumentative patterns in writing (Connor & Kaplan, 1987), what indirectness devices and how frequently they were used (Hinkel, 1997), and what rhetorical appeals and reasoning strategies were used in L2 argumentative writing (Kamimura & Oi, 1998). In the past 20 years or so, a number of studies have shown that such rhetorical organization transferred from L1 to L2 (e.g., González et al., 2001; Wei et al., 2020). These studies found that L2 English writers with Chinese as their L1 wrote following the Chinese writing traditions in terms of the argument structure used in their texts. They did not appear to have successfully used, if at all, the canonical linear structure in academic prose commonly regarded as the rightful way of writing in English. However, other studies did not find L1 and L2 writers significantly different in the display of rhetorical patterns in their written texts. L2 language proficiency might have played a bigger role in affecting the quality of argumentation that was closely related to their effective use of rhetorical strategies (Kubota, 1998; Qin & Karabacak, 2010; Stapleton & Wu, 2015). In recent years, studies have shown that it is not that L2 students are not aware of the rhetorical features or how an argument should be organized. Other factors such as L2 writing proficiency and the lack of ideas contributed to L2 students' poor argumentation. For example, Qin and Karabacak (2010) found that 133 L1 Chinese university English-major students writing in L2 English were clear about the structures of argumentation when the compositions were evaluated against the Toulmin (1958/2003) model of argument structure that has six elements (i.e., *claim*, *data*, *counterargument claim*, *counterargument data*, *rebuttal claim*, and *rebuttal data*). Their aim was to find out how the uses of these Toulmin elements was related to the overall quality of these students' argumentative compositions. They found that an average paper had at least one claim supported by four pieces of data. However, there were far fewer uses of counterargument claim, counterargument data, rebuttal claim, and rebuttal data in the papers, although their uses were significant predictors of the overall quality of argumentative papers.

Stapleton and Wu (2015) collected argumentative essays from 125 high school students in Hong Kong for the purpose of analyzing and uncovering their reasoning ability in English writing. This is much related to how rhetorical structures can jointly play a role. The researchers instructed these students to write their essays in accordance with a modified Toulmin (2003) model, which included *claims*, *counterargument claims*, and *rebuttals*. They selected 6 exemplary essays based on their judgement

of surface structure by the standards of the modified Toulmin model and analyzed them to see which would be showing high quality of reasoning. They invited 46 doctoral students to act as judges and rated the 20 most common reasons advanced in the 125 essays. Interestingly, their analyses showed inadequacies in the writers' reasoning, despite them being able to follow the surface structure. The quality of their reasoning in argumentative writing is not as effectively augmented as it should have been. It seems that L2 writing proficiency and the absence of good ideas as valid substance for supporting the claims were the main reasons for their weak reasoning. This comes to a point that the complexity of argumentation is not a simple one-fits-all formula. Contrastive rhetoric has shown us the value of the differences between cultures but being confined to a narrow contrastive rhetoric view does not help advance our understanding of challenges L2 student writers face.

Kaplan's contrastive rhetoric has been criticized as being simplistic, both in the patterns and the breadth of their categories. Even Kaplan himself acknowledged that "it is probably true that, in the first blush of discovery, I overstated both the difference and my case" (Connor & Kaplan, 1987, p. 9). As a further development of his thinking, Kaplan (2001) noted that "genres are nothing more nor less than conventional solutions to recurring communication problems" (p. xi). This means that for students and teachers the challenge is how to find a salutation to the conflict brought into the situation by two cultural norms. Probably, the most important thing that the L2 writing teacher needs to bear in mind is that there are different patterns, which may influence L2 writers' writing as a natural course of action.

With reference to Asian learners of L2 writing, Leki and Carson (1997) pointed out that the rhetorical and stylistic patterns that were claimed to be typical of Chinese, Japanese, and Thai writing were not unique to these groups of L2 writers. The patterns were also found among English writers. This explains why "intercultural rhetoric" is a more apt term (Atkinson, 2015; Atkinson & Matsuda, 2013); and Flowerdew (2020) explains that the way intercultural rhetoric research has been carried out in the form of corpus analysis is to show patterns (e.g., Pérez-Llantada, 2014). For instance, Fløttum et al.'s (2006) study of person manifestation in research articles in English, French, and Norwegian in the disciplines of economics, linguistics, and medicine is probably an early example. The differences they found between French and English and Norwegian were attributed to a possible effect of differences in the national cultures: "The contrast between the Anglo-American and Scandinavian cultures relying on explicit transformation of information, and the French culture, where more implicit information coded in the context would appear to be the norm" (p. 266).

Given that much of the discussion in the literature focused on L2 English writers with an Asian L1 background, it is significant to review how Anglo-American writers and L2 English writers with L1 Chinese backgrounds differ in the way they used metadiscourse strategies that are closely associated with the rhetorical features in argumentative writing (Hyland, 2018). One recent example is Mu et al. (2015), who self-built a small corpus consisting of 20 journal articles in English and another 20 in Chinese to illustrate metadiscourse features in both groups of research articles. The authors relied on an established model of metadiscourse (Hyland, 2005) when annotating the research articles. They found more metadiscourse features in the English sub-corpus than in the Chinese sub-corpus. In both the English sub-corpus and the Chinese sub-corpus more interactive metadiscourse resources (organizing discourse) were used than interactional metadiscourse resources (indicating writers' attitude and stance to themselves, the text, and the audience), but the English sub-corpus employed statistically significantly more interactional metadiscourse features than the Chinese sub-corpus. Recently, similar findings have also been reported (e.g., Chen & Zhang, 2017). All these findings suggest differences between the two groups of applied linguists in the way they used metadiscourse strategies in research articles.

Generally speaking, L2 writing scholars now echo what Silva et al. (1997) noted and agree that L2 writers' conceptions of audience and organizational patterns, among other things, are somewhat conditioned or influenced by their cultural backgrounds in which they grew up and were educated.

Silvia et al.'s comments that the extent to which L2 writers value the conservation and the extension of knowledge is indeed well-justified and rightfully stated. Asian cultures in general (I am fully aware of possible over-generalization) tend to value the former, and, as a result, reproduction of information through strategies such as memorizing and imitating is regarded as showing knowledge from, and respect for, those who created it. In light of this rationale, we can now re-examine Bereiter and Scardamalia's (1987) binary view on novice and expert writers, whose validity needs to be questioned when the notion is applied to L2 writers in the context of working with students from Asian cultures. According to Bereiter and Scardamalia, "knowledge telling" in writing is "immature" writing that is typical of novice writers, and "knowledge transforming" shows that the writer is "mature" in the way that an expert writer exhibits all related characteristics in their final written texts. Silva et al. (1997) were probably right when they commented that "what would appear to be a developmental continuum, then, from immature to mature writing in a knowledge extending culture, is recast as an issue of social context when viewed from the larger cross-cultural perspective" (p. 420). Connor (2018, p. 1) presented a succinct summary of the recent discussion on contrastive rhetoric and intercultural rhetoric in relation to teaching L2 writing this way. In her view, intercultural rhetoric should be viewed as "a new multi-layered model", which is no longer the same as its 1996 predecessor. Three major aspects need to be taken into consideration: texts have meanings in context; culture is not a monolithic concept, rather it "needs to be complexified to include disciplinary cultures in addition to national/ethnic cultures"; and communication is interactive and dynamic when texts are employed, and as a result "convergences among cultural differences" will be the norm.

Written Corrective Feedback

As a main concern for L2 writing teachers, teachers' interest in feedback, especially research along this line, has never seen any degree of abating/subsiding. Despite the popularity of feedback, among L2 writing researchers, some colleagues proposed that feedback research come to an end, if at all, or at least less attention be paid to it. This proposal was also witnessed in a recent colloquium during the 15th Symposium on Second Language Writing (SSLW 2018) in Vancouver, Canada. A full house of this colloquium already informed us how significant this research topic was at the symposium. Nonetheless, feedback and its related pedagogical activities and research on them are heart and soul to L2 writing teachers' professional lives. Calling this research to be shelved is probably unrealistic. In fact, research in this area is still increasing (Bitchener & Ferris, 2012; Bitchener & Knoch, 2009; Hyland & Hyland, 2019; Karim & Nassaji, 2020; Lee, 2020; Yu, 2021; Zhang & Cheng, 2021).

Understandably, studies on teacher written feedback, particularly on written corrective feedback in L2 writing, have proliferated in the past decade. The well-known Ferris vs Truscott debate that originated from Truscott (1996) is now common knowledge among L2 writing scholars. However, during that period of time when research evidence was limited, the debate itself was a healthy way of illuminating the phenomenon for providing the right insight into L2 writing pedagogies. Many years of research has led to a consensus that written corrective feedback has a beneficial effect on text revision and new pieces of writing (e.g., Benson & DeKeyser, 2019; Bitchener & Knoch, 2009; Li & Roshan, 2019; Karim & Nassaji, 2020). The real focus is really on how to provide feedback and what is the optimal amount of feedback that should be provided. This line of research is still going on (see, e.g., Lee, 2020; Storch, 2018a).

Conclusion and Future Directions

It can be seen from the discussion here that the field of L2 writing has been embracing a variety of approaches to researching issues relating to the learning and teaching of L2 writing. The

product-process debate lasted for some time before process approaches finally became the main-stream pedagogies for teaching L2 writing and supporting L2 writers. Nonetheless, this does not mean that the process approach (or approaches) in various forms has become a universal pedagogy (or pedagogies) for teaching L2 writing in every corner of the world. Social and cultural contexts define what kind of pedagogies best serve their purposes. The new development along this line is the process-genre approach, attempted by Badger and White (2000) and later on modified and implemented on a relatively larger scale in university EFL classrooms by Deng et al. (2014) and Huang and Zhang (2020). These studies show the relative effectiveness of such pedagogies as compared with the conventional, product-oriented approaches.

Given that learning L2 writing is a challenge for students, teachers have managed to come up with various pedagogies, among which process approaches, genre pedagogies, and process-genre approaches are just some of the more prevailing ways for teaching L2 writing or helping L2 students improve their writing skills. Collaborative writing and multi-modal composing are two dominant and useful ways for developing students' L2 argumentative writing skills, as research has shown (Storch, 2018b). Similar to these two but at the same time different from them is digital storying, which is foundational to the more demanding reasoning skills required of students writing persuasive texts. Developing L2 writers' self-regulatory skills, metacognition, motivation, and self-efficacy are areas in which attention has also been paid by scholars in recent years due to their direct relevance to students' development of L2 writing skills (Chen & Zhang, 2019; Graham & Sandmel, 2011; Teng & Zhang, 2016, 2020; Zhang & Qin, 2018). These developments point to a need to revisit some of the phenomena that were once regarded as significant to the understanding of students' learning of L1 writing in the literature, especially in the work of psychologists and educational psychologists, but they were not thoroughly researched in the field of L2 writing. Based on these observations, I would think that further work is needed to examine these as possible areas of pedagogical interest in order to arrive at the aim stated at the outset of this chapter: To bring to fruition a possible theory-practice praxis.

Despite some of the criticisms against written corrective feedback studies, I think that as a major area of work that L2 teachers do in the classroom and in writing centres, among many other settings, feedback to students on their writing is significant to their L2 writing development (Adams et al., 2010). As one piece of the big puzzle, feedback studies fit well in the large body of work on revision, which has been researched relatively substantially in L1 composition studies (Hayes, 2004; MacArthur et al., 2015; Myhill & Jones, 2007), but insufficient work has been done with regard to L2 writing. We still need to know more about what L2 writers are doing in up-taking teachers' feedback and action on it; what metacognitive, cognitive, and socioaffective strategies they adopt to achieve their revision goals for improving the quality of their writing (Rijlaarsdam et al., 2006); what self-regulatory processes are useful to their relatively more efficient completion of revision and hence the whole writing task (Negretti, 2012); and how L2 writing teachers can help their students efficiently based on a good understanding of L2 writers' self-efficacy and other related individual factors (Chen & Zhang, 2019). Since feedback is an important process in enhancing revision quality, how it is practiced in classrooms based on the beliefs teachers and students hold about it warrants further investigation. Such investigation is much related to L2 writers' self-efficacy beliefs about text revisions, namely, how L2 writers view their ability to write and revise. Therefore, further investigation is necessary into providing training to L2 writers for enhancing their self-efficacy for revision with adequate skills and knowledge that are regarded as essential for executing text revision. Modern technologies such as eye-tracking and key-strokes might be useful tools that can be employed in fathoming the complexity of revision as a highly challenging skill in order to bring to the fore useful strategies that L2 writers use and share them to benefit large numbers of L2 writers who are learning to write in an additional language.

References

- Adams, A. M., Simmons, F., & Willis, C. (2010). Undergraduate students' ability to revise text effectively: Relationships with topic knowledge and working memory. *Journal of Research in Reading*, 33(1), 54–76.
- Atkinson, D. (2014). Language learning in mindbodyworld: A sociocognitive approach to second language acquisition. *Language Teaching*, 47, 467–483.
- Atkinson, D. (2015). Writing across cultures: “Culture” in second language writing studies. In F. Sharifian (Ed.), *Routledge handbook of language and culture* (pp. 417–430). London: Routledge.
- Atkinson, D. & Matsuda, P. K. (2013). Intercultural rhetoric – a conversation: The sequel. In D. Belcher & G. Nelson (Eds.), *Critical and corpus-based approaches to intercultural rhetoric* (pp. 227–247). Ann Arbor: University of Michigan Press.
- Badger, R. & White, G. (2000). A process genre approach to teaching writing. *ELT Journal*, 54(2), 153–160.
- Bhatia, V. K. (1993). *Analysing genre: Language use in professional settings*. London: Routledge.
- Bawarshi, A. S. & Reiff, M. L. (2010). *Genre: An introduction to history, theory, research, and pedagogy*. West Lafayette, IN: Parlor Press.
- Bazerman, C. (2010). Series editor's preface. In A. S. Bawarshi & M. J. Reiff (Eds.), *Genre: An introduction to history, theory, research, and pedagogy* (pp. xi–xii). West Lafayette, IN: Parlor Press.
- Benson, S. & DeKeyser, R. (2019). Effects of written corrective feedback and language aptitude on verb tense accuracy. *Language Teaching Research*, 23, 702–726.
- Bereiter, C. & Scardamalia, M. (1987). *The psychology of written composition*. Hillsdale, NJ: Erlbaum.
- Bitchener, J. & Ferris, D. (2012). *Written feedback in second language acquisition and writing*. London: Routledge.
- Bitchener, J. & Knoch, U. (2009). The relative effectiveness of different types of direct written corrective feedback. *System*, 37, 322–329.
- Campbell, K. H. & Latimer, K. (2012). *Beyond the five-paragraph essay*. Portland, ME: Stenhouse.
- Canagarajah, A.S. (2019). Weaving the text: Changing literacy practices and orientations. *College English*, 82(1), 7–28.
- Canagarajah, A. S. (2020). *Transnational literacy autobiographies as translanguaging writing*. London: Routledge.
- Carr, W. & Kemmis, S. (1986). *Becoming critical: Education, knowledge and action research*. Lewes: Falmer.
- Chang, P. & Schleppegrell, M. (2011). Taking an effective authorial stance in academic writing: Making the linguistic resources explicit for L2 writers in the social sciences. *Journal of English for Academic Purposes*, 10(3), 140–151.
- Chang, P. & Schleppegrell, M. (2016). Explicit learning of authorial stance-taking by L2 doctoral students. *Journal of Writing Research*, 8(1), 49–80.
- Charles, M. (2006). The construction of stance in reporting clauses: A cross-disciplinary study of theses. *Applied Linguistics*, 27(3), 492–518.
- Chen, C. & Zhang, L. J. (2017). An intercultural analysis of the use of hedging by Chinese and Anglophone academic English writers. *Applied Linguistics Review*, 8(1), 1–34.
- Chen, J. & Zhang, L. J. (2019). Assessing student-writers' self-efficacy beliefs about text revision in EFL writing. *Assessing Writing*, 40, 27–41.
- Christie, F. (1987). Genres as choice. In I. Reid (Ed.), *The place of genre in learning: Current debates* (pp. 22–34). Geelong, Australia: Deakin University Press.
- Connor, U. (1996). *Contrastive rhetoric: Cross-cultural aspects of second-language writing*. Cambridge: Cambridge University Press.
- Connor, U. (2004). Intercultural rhetoric research: Beyond texts. *Journal of English for Academic Purposes*, 3, 291–304.
- Connor, U. (2018). Intercultural rhetoric. In J. Lontos, D. Belcher, & A. Hirvela (Eds.), *The TESOL encyclopedia of English language teaching: Teaching writing* (pp. 1–8). Oxford: Wiley.
- Connor, U. & Kaplan, R. (Eds.). (1987). *Writing across languages: Analysis of L2 text*. Reading, MA: Addison-Wesley.
- De La Paz, S. & McCutchen, D. (2016). Learning to write. In R. E. Mayer & P. A. Alexander (Eds.), *Handbook of research on learning and instruction* (pp. 33–55). Abingdon: Routledge.
- Deng, L., Chen, Q., & Zhang, Y. (2014). *Developing Chinese EFL learners' generic competence: A genre-based and process-genre approach*. New York: Springer.
- Devitt, A. J. (1993). Generalizing about genre: New conceptions of an old concept. *College Composition and Communication*, 44(4), 573–586.
- Emig, J. (1971). *The composing processes of twelfth graders*. Urbana, IL: National Council of Teachers of English.
- Feak, C. & Swales, J. (2011). *Creating contexts: Writing introductions across genres* (rev and expanded ed.). Ann Arbor, MI: University of Michigan Press.

- Fløttum, K., Dahl, T., & Kinn, T. (2006). *Academic voices across languages and disciplines*. Amsterdam: Benjamins.
- Freedman, A. & Medway, P. (1994). *Genre in the new rhetoric*. New York: Routledge.
- Ferris, D. & Hedgcock, J. S. (2014). *Teaching L2 composition: Purpose, process and practice*. New York: Routledge.
- Flower, L. S. & Hayes, J. R. (1977). Problem-solving strategies and the writing process. *College English*, 39(4), 449–461.
- Flower, L. S. & Hayes, J. R. (1980). The dynamics of composing: Making plans and juggling constraints. In L. W. Gregg & E. R. Steinberg (Eds.), *Cognitive processes in writing* (pp. 31–50). Hillsdale, NJ: Erlbaum.
- Flowerdew, J. (2020). English for research and publication purposes: A personal view. *Journal of English for Research Publication Purposes*, 1(2), 170–183.
- Forbes, K. (2021). *Cross-linguistic transfer of writing strategies*. Bristol: Multilingual Matters.
- González, V., Chen, C., & Sanchez, C. (2001). Cultural thinking and discourse organizational patterns influencing writing skills in a Chinese English-as-a-foreign language (EFL) learner. *Bilingual Research Journal*, 25, 417–442.
- Graham, S. & Sandmel, K. (2011). The process writing approach: A meta-analysis. *Journal of Educational Research*, 104(6), 396–407.
- Halliday, M. A. K. (1994). *An introduction to functional grammar*. London: Arnold.
- Hayes, J. (2004). What triggers revision. In L. Allal, L. Chanquoy, & P. Largy (Eds.), *Revision: Cognitive and instructional processes* (pp. 9–20). Dordrecht: Springer.
- Hayes, J. R. (2012). Modeling and remodeling writing. *Written Communication*, 29(3), 369–388.
- Hayes, J. R. & Flower, L. S. (1980). Identifying the organization of writing processes. In L. W. Gregg & E. R. Steinberg (Eds.), *Cognitive processes in writing* (pp. 3–30). Hillsdale, NJ: Erlbaum.
- Hayes, J. R. (1981). *The complete problem solver*. Philadelphia, PA: Franklin Press Institute.
- Hayes, J. R. (1996). A new framework for understanding cognition and affect in writing. In C. M. Levy & S. Ransdell (Eds.), *The science of writing* (pp. 1–27). Mahwah, NJ: Erlbaum.
- Hayes, J. R. (2006). New directions in writing theory. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of writing research* (pp. 28–40). New York: Guilford Press.
- Hayes-Roth, B. & Hayes-Roth, F. (1979). A cognitive model of planning. *Cognitive Science*, 3, 275–310.
- Hinkel, E. (1997). Indirectness in L1 and L2 academic writing. *Journal of Pragmatics*, 27(3), 360–386.
- Hinkel, E. (2002). Expressions of L1 literacy in L2 writing. In D. Li (Ed.), *Discourses in search of members: In honor of Ron Scollon* (pp. 465–482). Lanham, MD: University Press of America.
- Hinkel, E. (2005). Analyses of second language text and what can be learned from them. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 615–628). Mahwah, NJ: Erlbaum.
- Hinkel, E. (2011). *Effective curriculum for teaching L2 writing: Principles and techniques*. New York: Routledge.
- Hirvela, A. & Belcher, D. (2001). Coming back to voice: The multiple voices and identities of mature multilingual writers. *Journal of Second Language Writing*, 10(1–2), 83–106.
- Huang, Y. & Zhang, L. J. (2020). Does a process-genre approach help improve students' argumentative writing in English as a foreign language? Findings from an intervention study. *Reading and Writing Quarterly*, 36(4), 339–364.
- Hyland, K. (2003). *Second language writing*. Cambridge: Cambridge University Press.
- Hyland, K. (2005). *Metadiscourse*. London: Continuum.
- Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing*, 16, 148–164.
- Hyland, K. (2016). *Teaching and researching writing* (3rd ed.). London: Routledge.
- Hyland, K. (2018). *Metadiscourse: Exploring interaction in writing*. London: Bloomsbury.
- Hyland, K. & Hyland, F. (2019). *Feedback in second language writing* (2nd ed.). Cambridge: Cambridge University Press.
- Hyon, S. (1996). Genre in three traditions: Implications for ESL. *TESOL Quarterly*, 30(4), 693–722.
- Johns, A. M. (1997). *Text, role, and context: Developing academic literacies*. Cambridge: Cambridge University Press.
- Kaplan, R. B. (1966). Cultural thought patterns in intercultural education. *Language Learning*, 16, 1–20.
- Kamimura, T. & Oi, K. (1998). Argumentative strategies in American and Japanese English. *World Englishes*, 17(3), 307–323.
- Kaplan, R. B. (1988). Contrastive rhetoric and second language learning: Notes toward a theory of contrastive rhetoric. In A. C. Purves (Ed.), *Writing across languages and cultures: Issues in contrastive rhetoric* (pp. 275–304) (Written Communication Annals, Vol. 2). Newbury Park, CA: Sage.
- Kaplan, R. B. (2001). Forward: What in the world is contrastive rhetoric? In C. G. Panetta (Ed.), *Contrastive rhetoric revisited and redefined* (pp. vii–xx). Mahwah, NJ: Erlbaum.
- Karim, K. & Nassaji, H. (2020). The revision and transfer effects of direct and indirect comprehensive corrective feedback on ESL students' writing. *Language Teaching Research*, 24(4), 519–539.

- Kroll, B. (2001). Consideration for teaching an ESL/EFL writing course. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (3rd ed., pp. 219–232). Boston, MA: Heinle & Heinle.
- Kubota, R. (1998). An investigation of L1–L2 transfer in writing among Japanese university students: Implications for contrastive rhetoric. *Journal of Second Language Writing*, 7(1), 69–100.
- LaBerge, D. & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6, 293–323.
- Lado, R. (1957). *Linguistics across cultures: Applied linguistics for language teachers*. Ann Arbor, MI: University of Michigan Press.
- Lancaster, Z. (2014). Exploring valued patterns of stance in upper-level student writing in the disciplines. *Written Communication*, 31(1), 27–57.
- Lancaster, Z. (2016). Expressing stance in undergraduate writing: Discipline-specific and general qualities. *Journal of English for Academic Purposes*, 23, 16–30.
- Larkin, J. H., McDermott, J., Simon, D. P., & Simon, H. A. (1980). Models of competence in solving physics problems. *Cognitive Science*, 4, 317–345.
- Lee, I. (2020). Utility of focused/comprehensive written corrective feedback research for authentic L2 writing classrooms. *Journal of Second Language Writing*, 49, 1–7.
- Leki, I. & Carson, J. (1997). “Completely different worlds”: EAP and the writing experiences of ESL students in university courses. *TESOL Quarterly*, 31(1), 39–69.
- Li, S. & Roshan, S. (2019). The associations between working memory and the effects of four different types of written corrective feedback. *Journal of Second Language Writing*, 45, 1–15.
- MacArthur, C. A., Philippakos, Z. A., & Ianetta, M. (2015). Self-regulated strategy instruction in college developmental writing. *Journal of Educational Psychology*, 107(3), 855.
- Martin, J. R. & Christie, F. (1984). *Language, register and genre in children's writing*. Geelong, Australia: Deakin University Press.
- Martin, J., Christie, F., & Rothery, J. (1987). Social processes in education: A reply to Sawyer and Watson (and others). In I. Reid (Ed.), *The place of genre in learning* (pp. 58–82). Geelong, Australia: Centre for Studies in Literacy Education, Deakin University.
- Matsuda, P. K. (2015). Identity in written discourse. *Annual Review of Applied Linguistics*, 35, 140–159.
- Mu, C., Zhang, L. J., Ehrlich, J., & Hong, H. (2015). The use of metadiscourse for knowledge construction in Chinese and English research articles. *Journal of English for Academic Purposes*, 20, 135–148.
- Myhill, D. & Jones, S. (2007). More than just error correction: Students' perspectives on their revision processes during writing. *Written Communication*, 24(4), 323–343.
- Negretti, R. (2012). Metacognition in student academic writing: A longitudinal study of metacognitive awareness and its relation to task perception, self-regulation, and evaluation of performance. *Written Communication*, 29(2), 142–179.
- Newell, A. & Simon, H. (1972). *Human problem solving*. Englewood Cliffs, NJ: Prentice Hall.
- Paltridge, B. (2013). Genre and English for specific purposes. In Brian Paltridge & Sue Starfield (Eds.), *The handbook of English for specific purposes* (pp. 347–366). Malden, MA: Wiley-Blackwell.
- Pérez-Llantada, C. (2014). Formulaic language in L1 and L2 expert academic writing: Convergent and divergent usage. *Journal of English for Academic Purposes*, 14, 84–94.
- Qin, J. & Karabacak, E. (2010). The analysis of Toulmin elements in Chinese EFL university argumentative writing. *System*, 38, 444–456.
- Raines, A. (1991). Out of the woods: Emerging traditions in the teaching of writing. *TESOL Quarterly*, 25(3), 407–430.
- Rijlaarsdam, G., Couzijn, M., & Van Den Bergh, H. (2006). The study of revision as a writing process and as a learning-to-write process. In L. Allal, L. Chanquoy, & P. Largy (Eds.), *Revision: Cognitive and instructional processes* (pp. 189–207). Dordrecht: Springer.
- Rose, D. & Martin, J. R. (2012). *Learning to write, reading to learn: Genre, knowledge and pedagogy in the Sydney School*. Sheffield: Equinox.
- Silva, T., Leki, I., & Carson, J. (1997). Broadening the perspective of mainstream composition studies: Some thoughts from the disciplinary margins. *Written Communication*, 14(3), 398–428.
- Stapleton, P. & Wu, Y. A. (2015). Assessing the quality of arguments in students' persuasive writing: A case study analysing the relationship between surface structure and substance. *Journal of English for Academic Purposes*, 17, 12–23.
- Stern, H. H. (1983). *Fundamental concepts of language teaching*. Oxford: Oxford University Press.
- Storch, N. (2018a). Written corrective feedback from sociocultural theoretical perspectives: A research agenda. *Language Teaching*, 51, 262–277.
- Storch, N. (2018b). Collaborative writing: Research timeline. *Language Teaching*, 52(1), 40–59.

- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Tardy, C. (2009). *Building genre knowledge*. West Lafayette, IN: Parlor Press.
- Tardy, C. M. (2016). *Beyond convention: Genre innovation in academic writing*. Ann Arbor: University of Michigan Press.
- Teng, F. & Huang, J. (2019). Predictive effects of writing strategies for self-regulated learning on secondary school learners' EFL writing proficiency. *TESOL Quarterly*, 53(1), 232–247.
- Teng, L. S. & Zhang, L. J. (2016). A questionnaire-based validation of multidimensional models of self-regulated learning strategies. *Modern Language Journal*, 100(3), 674–701.
- Teng, L. S. & Zhang, L. J. (2020). Empowering learners in the second/foreign language classroom: Can self-regulated learning strategies-based writing instruction make a difference?. *Journal of Second Language Writing*, 48, 100701, 1–14.
- Toulmin, S. E. (1958/2003). *The uses of argument*. Cambridge: Cambridge University Press.
- Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language learning*, 46(2), 327–369.
- Wei, X., Zhang, L. J., & Zhang, W. (2020). Associations of L1-to-L2 rhetorical transfer with L2 writers' perception of L2 writing difficulty and L2 writing proficiency. *Journal of English for Academic Purposes*, 47, 100907, 1–14.
- Williams, J. D. (2003). *Preparing to teaching writing: Research, theory, and practice* (3rd ed.). Mahwah, NJ: Erlbaum.
- Xu, L. & Zhang, L. J. (2019). L2 doctoral students' experiences in thesis writing in an English-medium university in New Zealand. *Journal of English for Academic Purposes*, 41, 100779, 1–13.
- Yu, S. (2021). Feedback-giving practice for L2 writing teachers: Friend or foe? *Journal of Second Language Writing*, 52, 100798.
- Zamel, V. (1982). Writing: The process of discovering meaning. *TESOL Quarterly*, 16(2), 195–209.
- Zhang, L. J. (2013). Second language writing as and for second language learning. *Journal of Second Language Writing*, 22(4), 446–447.
- Zhang, L. J. (2016). Reflections on the pedagogical imports of western practices for professionalizing ESL/EFL writing and writing-teacher education. *Australian Review of Applied Linguistics*, 39(3), 203–232.
- Zhang, L. J. & Qin, L. T. (2018). Validating a questionnaire on EFL writers' metacognitive awareness of writing strategies in multimedia environments. In A. Haukås, C. Bjørke, & M. Dypedahl (Eds.), *Metacognition in language learning and teaching* (pp. 157–179). London: Routledge.
- Zhang, L. J. & Cheng, X. (2021). Examining the effects of comprehensive written corrective feedback on L2 EAP students' linguistic performance: A mixed-methods study. *Journal of English for Academic Purposes*, 54, 101043, 1–15. <https://doi.org/10.1016/j.jeap.2021.101043>
- Zhang, L. & Zhang, L. J. (2021). Development and validation of the Questionnaire on EFL Students' Perceptions of Authorial Stance in Academic Writing. *Applied Linguistics Review*, Online First, 1–33. <https://doi.org/10.1515/applirev-2021-0003>
- Zimmerman B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, 25(1), 82–91.

Feedback on L2 Student Writing

Current Trends and Future Directions

Dana R. Ferris

When English as a Second/Foreign Language (ESL/EFL) teachers are in preservice training programs, often they avoid, if they can, coursework on the teaching of second language (L2) writing, preferring to focus rather on listening, speaking, reading, vocabulary, or grammar. For some, the reason is simple: They perceive teaching writing to be too much work, particularly because of the need to read and respond to students' texts, whether they are in progress (preliminary drafts) or completed and waiting for a grade. They do not want to become, as one L1 scholar famously termed it, a "composition slave" (Hairston, 1986, p. 117).

The purpose of this chapter is not to persuade anyone that responding to student writing is easy. Done well, it certainly is demanding of a teacher's time and energy. However, feedback is also undeniably important—perhaps the single most important thing an L2 language or literacy instructor can give to their students. It has been described as "one of the ESL writing teacher's most important tasks" (Hyland & Hyland, 2019, p. xiii).

In this chapter, I will review different approaches to feedback on L2 writing—from teachers' written commentary on students' ideas to corrective feedback on language errors to peer response or guided self-evaluation. I will briefly discuss what the research to date has shown about these various subtopics and why there has been controversy around some of the issues they raise, particularly in the case of written corrective feedback (WCF). The chapter concludes with a summary of what teachers can take and apply from the research thus far and a look ahead at questions around response that could productively be addressed in the next 10–20 years. The overarching goal of this chapter is to inform and equip teachers in this critical but often fraught area of giving (or facilitating) feedback to L2 student writers.

As already noted, many applied linguists or TESOL professionals choose not to specialize in the teaching of L2 writing, leaving expertise in that area to scholars in the field of writing studies, also known as rhetoric and composition (Matsuda, 2003; Silva & Leki, 2004). Nonetheless, writing is one of the "four skills" around which ESL/EFL classes are structured, and, even more importantly, learners' ability to write effectively in the L2 for academic or professional purposes is critical to many students' future success. Further, written production is an important outcome and/or measure of a learner's second language acquisition, so even for applied linguists whose primary interests and focus are elsewhere, the teaching of L2 writing is worthy of consideration and attention. Feedback on student writing is, in turn, arguably the most important pedagogical subtopic within the (sub) discipline of L2 writing.

A Brief History of L2 Response Research

Written Teacher Feedback

Like many subtopics in the history of L2 writing scholarship, discussions of response to L2 student writing were first shaped by experts in mainstream or first language (L1) composition studies. Most notably, early papers on teacher response to student writing characterized it mostly negatively, arguing that writing instructors were too focused on surface issues (such as grammar and mechanics) and overly invested in co-creating the Ideal Text (to the point of co-opting or “appropriating” student work) rather than helping students develop their own independent writing strategies (Brannon & Knoblauch, 1982; Elbow, 1973; Knoblauch & Brannon, 1981; Sommers, 1982). Such practices, it was argued, demotivated or even demoralized students and sent the wrong messages (e.g., that writing is about surface perfection and not about exploring or communicating one’s ideas to a desired audience). Written teacher commentary provided to student writers was described as “an exercise in futility” (Knoblauch & Brannon, 1981, p. 1; 2006), and teachers were cautiously advised that, if feedback couldn’t help students, it should at least attempt not to harm them (Elbow, 1999).

Early scholars writing on the response to L2 writers expressed similar concerns (e.g., Radecki & Swales, 1988; Zamel, 1985) that teachers were overly concerned with grammar and correctness and not adequately focused on helping students develop independent thinking and writing strategies. However, beginning in the 1990s, new research evidence suggested that as L2 writing pedagogy had evolved, specifically toward allowing multiple drafts, revision, and feedback at intermediate stages of the writing process, writing instructors were also providing more enlightened feedback that commented on all aspects of evolving texts (Ferris, 1995, 1997, 2014; Ferris, Brown, et al., 2011; Montgomery & Baker, 2007). Consensus began to build that teacher response to L2 student writing, when thoughtfully conceptualized and implemented, could actually help and support student writers, not just avoid harming them (Conrad & Goldstein, 1999; Ferris, 1995, 1997; Goldstein, 2005; Goldstein & Conrad, 1990; Hedgcock & Lefkowitz, 1994, 1996).

Teacher–Student Writing Conferences

Many of the 1980s–1990s studies on teacher feedback concluded that one-to-one writing conferences were nearly always a better choice than written feedback. However, some studies challenged this assumption, especially when it came to working with L2 writers. It was noted that students and teachers sometimes seemed to be at cross-purposes during such conferences, with teachers striving to be nondirective and students attempting to maneuver their instructors into telling them what to do to get a good grade (Newkirk, 1995; Sperling & Freedman, 1987). With L2 writers in particular, researchers have questioned whether nondirective interaction strategies in writing conferences are culturally and pragmatically accessible to this student population (Eckstein, 2013; Patthey-Chavez & Ferris, 1997).

Peer Feedback

In L1 writing studies, peer response emerged early as a preferred alternative to teacher feedback (Elbow, 1973), although it was noted that teachers and peers may have different goals in responding to student writing (Newkirk, 1984). However, when L2 instructors attempted to utilize peer feedback sessions as an instructional approach, researchers expressed concern about student competence, their cultural familiarity with this practice, and resistance to it (Carson & Nelson, 1994; Connor &

Asenavage, 1994; Leki, 1990; Zhang, 1995). Though other studies have identified ways to make peer response activities in L2 writing courses more successful (Liu & Hansen, 2002; Mangelsdorf & Ruecker, 2018; Mendonça & Johnson, 1994; Stanley, 1992), there is still evidence that L2 writers themselves are not always convinced that such activities are worthwhile, mainly because they do not trust their peers to be either willing or able to give them sound guidance (see Evans & Ferris, 2019; Hamp-Lyons, 2006; Nelson & Murphy, 1992; Leki, 1990). More recently, it has been argued that collaborative writing tasks, which require peers to negotiate over the content and language of a jointly authored text, are a more effective way to achieve the cognitive and social benefits of peer interaction in a writing class than are traditional peer feedback activities (Storch, 2019).

Error Correction or Written Corrective Feedback (WCF)

As already noted, early L1 and L2 scholars criticized classroom writing teachers for being excessively focused on error correction in their written feedback (Krashen, 1984; Radecki & Swales, 1988; Sommers, 1982; Zamel, 1985) rather than giving student writers more global feedback on their ideas and text structure (organization) or helping them develop independent writing strategies. However, other experts countered that L2 writers need feedback on their language as well as other aspects of their texts (Eskey, 1983; Horowitz, 1986) and that writing teachers should not withhold their expertise from students when a lack of language control in writing could hold them back from achieving their academic and professional goals (Ferris, 1995; Reid, 1994).

The unease around WCF came to a scholarly head with the publication of a review essay in *Language Learning* (Truscott, 1996) that argued that grammar correction was ineffective and harmful because it demoralizes students and takes energy and attention away from more important concerns of writing instruction. Truscott's strong thesis—that grammar correction should be abandoned—led to a sustained effort on the part of both L2 writing and second language acquisition (SLA) researchers to examine empirically whether his claims were true (for reviews, see Bitchener, 2019; Bitchener & Ferris, 2012; Ferris, 2004, 2010; Ferris & Kurzer, 2019). Following some 25 years of research since Truscott's essay was published, it seems fair to generalize that most L2 writing/SLA researchers believe that WCF has its place in L2 writing pedagogy—but that there are optimal conditions required for it to be most effective.

Technology and L2 Writing Feedback

As research and pedagogy have evolved in L2 writing over the past 30–40 years, the role of technology in writing instruction has simultaneously expanded. Gone, for most teachers, are the days when they would sit with a stack of student papers, handwriting comments into the margins and perhaps circling language errors with a red pen. Early in the computer era, teachers might respond to student papers using a word processor, emailing documents with comments or edits (e.g., using Microsoft Word's Track Changes feature) back to the student writer. Later, they might have used Google Docs, an online co-authoring tool, to have either synchronous or asynchronous interactions with their students around their evolving or finished texts. Most recently, teachers can use learning management systems (LMS) such as Canvas for students to upload or enter their texts and teachers to respond to and grade them on the screen within the LMS (with grades able to be entered in an online gradebook).

Technology also makes teacher–student conferences and peer feedback more convenient. Canvas, for example, allows peer reviews to be built right into assignments, or students can use Google Docs to collaborate on each other's texts or jointly authored ones. Teacher–student conferences can be conducted via Canvas or on stand-alone video-conferencing tools such as Zoom, Microsoft Teams, Skype, or Google Hangouts. Some of these tools allow screen-sharing, making it easy for peers or a teacher and student to look at and discuss a student text together.

The effects of technology on teachers' feedback practices and student writers' engagement with feedback they receive are an area worthy of further empirical study, as I will elaborate further upon in the conclusion to this chapter. However, a current issue or controversy around response and technology is the growing use of automated feedback. Some institutions use software such as Grammarly or Turnitin both to give students automated feedback on their writing and to check for possible instances of plagiarism. While some experts argue that automated writing evaluation (AWE) can provide an extra layer of feedback to help students and reduce feedback burdens on teachers (Li, 2018; Stevenson & Phakiti, 2019; Ware, 2011), others believe that a human audience, not an algorithm, is essential for student writing development and worry that teachers may dispense with giving little or any feedback at all if they over-rely on AWE systems. Many writing scholars also express concern about an overemphasis on plagiarism in educational settings and the potentially punitive effects of programs such as Turnitin.

Current Practices in Response to L2 Writing

L2 writing instruction occurs worldwide, and it would be impossible to generalize what instructors are actually doing everywhere. However, our brief review of the history of research on response allows us to make several suggestions of what best practices should be. These are summarized in Table 24.1 and discussed in more detail in the following paragraphs.

Sources and Timing of Feedback

Beginning in the 1990s, researchers of L2 writing began examining feedback practices (and student reactions to them) in multiple-draft settings—in other words, when students could receive and apply formative, intermediate-draft feedback before a writing assignment was finalized and graded. It was reported in these studies that student writers took feedback seriously, especially when it came from the teacher, and that they attempted with varying degrees of success to apply suggestions they received to revised versions of their papers (Evans & Ferris, 2019; Ferris, 1995, 1997; Hedgcock &

Table 24.1 Research-based best practices in response to L2 writing

Response Practice

1. Feedback should come from multiple sources and at multiple stages of text development.
 2. Feedback should prioritize the most important/urgent issues presented in a particular text. Corrective feedback on student language issues should be focused on several patterns of error rather than being comprehensive (marking all errors).
 3. Feedback should be clear, concrete, and specific. Written corrective feedback should be clear and not overly reliant on symbols or jargon.
 4. Feedback should address what the writer did well, not just problems in the text.
 5. Students should be carefully prepared for peer feedback activities, and tasks should be narrowly focused and clearly structured.
 6. Teacher–student conferences should be based on what the student writer believes is most helpful or needed. Students should have a reviewable record (in writing or a video recording) of what they discussed in conferences with their teachers.
 7. Students should have opportunities to reflect upon, analyze, and apply feedback they have received.
 8. If teachers utilize rubrics and/or automated feedback tools, it should be complementary to their own feedback rather than replacing it.
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Lefkowitz, 1994, 1996; Montgomery & Baker, 2007; Zhang, 1995). As already noted, though concerns have been raised by L2 writing researchers about peer feedback, there is substantial evidence that students value it as well, as long as it doesn't completely replace expert commentary from the instructor.

Beyond instructors and peers, another important source of feedback on an evolving text is writers themselves. Most experienced writers are well aware that the mere act of returning to a manuscript after time has passed and rereading it enables writers to see ways to improve the text, even if no one else has yet read or responded to it. However, some student writers may not have experienced such benefits in their previous school writing experiences. It can therefore be very beneficial for teachers to assign metacognitive reflection activities for student writers in which they think about and analyze their past experiences as writers, their current experiences (e.g., between drafts of an assignment or as they finish a task), and their future goals as writers (i.e., at the end of a writing course). Such activities can build confidence and self-regulation abilities (Andrade & Evans, 2013; Cohn & Stewart, 2016; Edgington, 2020) and have been demonstrated to facilitate transfer of writing strategies to future contexts (Beaufort, 2007; Downs & Wardle, 2007; Yancey et al., 2014).

Timing of feedback. Early scholars looking at response in L1 and L2 settings argued that teachers should separate feedback on content from feedback on form, for example by giving content-focused comments on early drafts of assignments and language-focused corrections on penultimate or final drafts (Brannon & Knoblauch, 1982; Sommers, 1982; Zamel, 1985). It was argued that premature attention to form would impede students' composing processes as they developed their ideas. However, a handful of empirical investigations of this question have found evidence suggesting that students are able to attend to feedback on content and form simultaneously (Ashwell, 2000; Chandler, 2003; Fathman & Whalley, 1990). Consequently, it has been suggested that early-draft feedback could combine substantive suggestions for content revision with information about patterns of language error to which student writers might attend as they continue to revise and edit their work (Ferris & Hedgcock, 2014).

Feedback Priorities

One of the more contentious issues with regard to feedback in general and WCF in particular is whether an instructor should attempt to address all problems with a student text through feedback or whether they should limit their comments to the most serious and urgent issues presented by a student text. Arguments for selective feedback are straightforward and compelling: Prioritized response is less overwhelming for students and teachers alike and provides greater opportunity for L2 writers to understand and apply the suggestions and information they have received. Further, if an instructor gives an excessive amount of commentary, it can feel like the teacher is attempting to take over, or "appropriate" the student text—which in turn can frustrate and demotivate some student writers (Brannon & Knoblauch, 1982). On the other hand, some instructors worry that if they leave problems in student texts unremarked upon, the student writers may feel that they have been unfairly penalized for those problems in grading.

Feedback Characteristics

While teachers should indeed avoid overwhelming students with too much feedback or appropriating student texts, some teachers go too far in the opposite direction, favoring "nondirective" feedback strategies that can frustrate students and fail to meet their needs. To be helpful, feedback to L2 writers should be clear and specific, avoiding jargon, and making concrete suggestions about what the student could consider as they work on an evolving draft and/or on their next writing assignment. Cryptic abbreviations such as "INC SEN" (Zamel, 1985), "awk," or brief comments

such as “Explain further!” or “No!” are almost never helpful and can be very off-putting to student writers. Words are better than symbols, and complete sentences are better than shorthand. Teachers should also be careful when using questions rather than statements or imperatives, as students may misunderstand the intent of questions or not know how to address questions in a revision (Ferris, 1997, 2001). Finally, when providing written feedback, teachers should ensure that the commentary is easy to read and comprehend. For example, teachers should avoid using tools such as Track Changes in Microsoft Word to student writing because of the visual clutter it can cause on a page, and teachers might summarize suggestions in a numbered or bulleted list rather than writing a lengthy, wordy paragraph at the end of the paper.

Praise and Criticism

Another concern that has been raised is that negative feedback, regardless of the source, might demoralize and discourage L2 writers. However, in research on student views about feedback, students express desire for and appreciation of constructive criticism that clearly conveys how they can improve their writing (Ferris, 1995, 2018; Hedgcock & Lefkowitz, 1994, 1996; Montgomery & Baker, 2007; Radecki & Swales, 1988). If anything, they are sometimes disappointed if teachers don't tell them everything that might be wrong with their papers and correct all of their errors (Ferris, 1995; Leki, 1991). At the same time, most writers are insecure about their abilities and will appreciate encouragement about what they have done well (Ferris, 1995; Hyland & Hyland, 2001). While teachers need not strive for an even balance of positive and critical comments, they should look for ways to encourage students where they can. Further, teacher feedback, even when it is critical, should always be kind and respectful. There is a clear relationship between students' experiences with teacher feedback and their overall feelings about writing and themselves as writers (Ferris, 2018; Hamp-Lyons, 2006; Hyland & Hyland, 2001).

Designing Peer Feedback Tasks

As noted earlier, both researchers and students have expressed reservations about the value and appropriateness of peer feedback activities in L2 writing classes (e.g., Connor & Asenavage, 1994; Leki, 1990; Zhang, 1995). However, other studies have found that students enjoy peer feedback and/or collaborative writing activities (Storch, 2019; Storch & Wigglesworth, 2010) and find them useful in ways different from teacher feedback (Evans & Ferris, 2019; Paulus, 1999). Further, several studies have demonstrated that if L2 writers are carefully prepared for peer feedback (or “trained”), they are both more positively disposed toward it and more successful at it (Stanley, 1992; Zhu, 1995). Though specifications about peer feedback tasks may vary according to students' writing and language proficiency, in general, students respond better to activities that are narrowly and clearly structured, with specific evaluative questions for them to answer and/or instructions to look at particular features of their peer's text (see, e.g., Evans & Ferris, 2019). Vague or open-ended peer feedback activities can be frustrating or anxiety-provoking for some L2 writers, who are not sure what to look for and/or do not receive the kind of suggestions from peers that they find helpful (see, e.g., the case study participant in Hamp-Lyons, 2006).

Guidelines for Teacher–Student Writing Conferences

Many writing instructors prefer one-to-one writing conferences with students over providing written feedback, believing that the interaction, discussion, and negotiation made possible by face-to-face meetings is more helpful for students than one-directional written commentary from the teacher (Ferris, 2014; Zamel, 1985). While writing conferences can be both beneficial and satisfying

for participants, for L2 writers they can sometimes fall short of being as effective as they could be (Eckstein, 2013; Patthey-Chavez & Ferris, 1997; Thonus, 2002). Many writing instructors have been encouraged to use nondirective conferencing techniques, such as eliciting opinions or questions from student writers rather than giving their own guidance, but some L2 students may be confused or frustrated with such approaches. Conferences with L2 writers may be more successful if teachers ask and provide what students want from the encounter rather than rigidly adhering to a nondirective ideology (Eckstein, 2013; Newkirk, 1995; Patthey-Chavez & Ferris, 1997; Sperling & Freedman, 1987). Further, instructors should bear in mind that some L2 writers may have listening comprehension and/or oral fluency challenges that may make written comments less stressful and more useful for them than face-to-face conferences are. As a minimum, teachers should ensure that L2 writers leave conferences with some kind of permanent record of the conversation, such as an audio-recording, written notes, or written comments on a draft of the student text. In a post-pandemic world, teachers and students might consider their newfound comfort with Zoom as a resource that can be exploited for teacher-student writing conferences. Not only does using Zoom rather than in-person meetings provide more schedule flexibility for teachers and students alike, but Zoom meetings can be recorded and can generate transcripts, both of which could help the student writer review what was discussed in the conference.

Following Up Feedback

Whether students receive written teacher feedback, attend a writing conference, or participate in peer feedback, such activities should always include a follow-up stage in which students are asked to reflect upon, analyze, and apply the suggestions they have received. Writing instructors can often be very frustrated that students apparently don't even read, let alone learn from, the commentary that teachers have labored to provide (Ferris, Liu, et al., 2011). These follow-up activities can take a variety of forms. For example, students could be asked to write a brief reflection after a peer response workshop, discussing what they learned not only from the feedback they received on their own paper but from reading and responding to classmates' papers. After receiving feedback and completing a revision of a draft, they can be asked to talk about how they applied suggestions from teachers and/or peers while revising—or explain why they chose not to.

For feedback focused on language issues, they could enter the information into error logs (Kurzer, 2018; Lalande, 1982) so that they can track their progress over time on frequent patterns of error, or they can analyze or attempt to correct existing texts (see, e.g., the procedure used in Ferris et al., 2013). Students can also be asked to write a letter to an instructor or peer, responding to feedback (see Ferris, 2015, for specific suggestions on such follow-up activities). The common element in all of these suggestions is an understanding that feedback on student writing does not have to fall into a void, never to be seen again—nor should it. If teachers design follow-up activities such as the ones described here, this conveys to students that the process of receiving, considering, and using feedback is an important part of learning to be a successful writer.

Instructor Engagement in Feedback to Student Writers

As I noted at the beginning of this chapter, providing quality feedback to L2 writers can require a lot of hard work, and teachers may come to resent the amount of time and energy it can take (Ferris, Brown, et al., 2011; Ferris, Liu, et al., 2011; Ferris, 2014). Further, many teachers of L2 writers do not receive in-depth training on how to respond effectively *and* efficiently to student writing. Thus, it can be tempting for teachers to take shortcuts to lessen the load. One such shortcut is the use of

prepared rubrics to give students feedback. Such rubrics specify the grading criteria for the assignment (or the whole course) and a system to convey to students how well they met the criteria, for example through a check/check-plus/check-minus system or a point scale (e.g., 0–10 points out of 100 for a “clear thesis statement”). Another shortcut is using automated writing evaluation (AWE) tools to give students feedback on their texts.

Both tools absolutely have their place in writing instruction. Rubrics can be an excellent way for teachers to clearly articulate their expectations for a particular task to themselves and to their students (Crusan, 2010; Ferris & Hedgcock, 2014). They also provide a somewhat objective way for students to understand why they got the grade they did, which can reduce frustration or anxiety. AWE tools (e.g., Grammarly) can provide an extra iteration of feedback to students above and beyond what teachers are humanly able to provide given energy and time constraints. Both options definitely illustrate the cliché that “something is better than nothing.”

However, while “something” is indeed “better than nothing,” it is not adequate by itself. A rubric or grading checklist, used alone, is too generic to convey specific information about a text to a student writer. An AWE tool is just a computer algorithm, not a human brain, and there are limits on its abilities to truly evaluate a piece of writing. The best solution is for writing instructors to provide personalized feedback in addition to the information given by the rubric or the AWE tool. While these instruments can give students more feedback and can streamline the response process, they should not substitute for teachers’ own engagement with their students’ writing. Rubrics can be designed to allow space for brief personalized comments under each criterion, and/or teachers can add a summary note of their own or in-text commentary to supplement the more standardized information expressed by the rubric. Teachers might choose to include a round of AWE during a multi-draft writing process while still incorporating other human feedback sources. For example, students might receive peer feedback on a first draft, AWE on a revised draft, and then written or oral teacher commentary on a near-final draft. In short, tools to streamline the response process to make it more efficient and less burdensome can be beneficial for teachers and students—but they should not be used instead of teacher-provided or -facilitated feedback.

Summary

Providing or facilitating feedback for L2 student writers is a critical intervention that can assist them both in their writing development and second language acquisition. Though creating and implementing effective response systems (Ferris, 2015) for L2 writers requires effort and expertise on the part of teachers, several decades of research on response to L2 writers have helped us to identify specific ways to both make the response process most helpful for students and (somewhat) less arduous for teachers.

Future Directions for Response to L2 Writing

In the still-brief history of second language writing as a (sub)discipline, response to writing, particularly as to the specific subtopic of WCF, has been a major focus of research relative to other topics. This means that, as discussed in the previous section, we have some good data-driven guidance on how teachers can respond to student writing and set up response systems to help students to succeed. That said, there remain several topics related to response that could benefit from continued advances in research. Specifically, we could benefit from learning more about the “teacher variable” (Ferris, 2006; Ferris & Kurzer, 2019) in response, from more in-depth examinations of how students engage with feedback or why they do not, and the present and future impact of technology on the delivery of response of various types.

Studying Teachers

Most response research to date has focused on text analysis (examining written teacher commentary or transcripts of teacher–student conferences or peer review sessions; examining student revisions to trace the effects of feedback) or on obtaining survey responses from students about their reactions to or preferences regarding various response options. WCF studies have been heavily researcher-driven, meaning specifically that it is typically the researcher, not the classroom teacher, providing the feedback in order to keep it consistent for research purposes. Yet it is the classroom instructor whose skills and willingness to provide good feedback and set up high-quality response systems will determine the success or failure of response in an L2 writing class.

We do not know enough yet about how teachers develop principles and philosophies of response, what they actually do with regard to response as they teach their classes, and how they develop expertise in providing feedback. In particular, with instructional practices having had to suddenly transform nearly overnight due to the COVID-19 pandemic, it could be interesting to find out how teachers have changed their response strategies in order to provide emergency remote instruction, how those changes have gone for them and their students, and how their post-pandemic pedagogy might be transformed as a result.

Examining Student Engagement

As already discussed, a key variable in whether or not feedback helps students to develop their writing and language skills is student uptake, or engagement with feedback of all types—teacher commentary on content, peer response, or WCF. If students do not perceive that feedback will help them and/or are not guided toward reflecting upon feedback and trying to learn from it, response is not likely to have much of an effect on their development. This may be why, some 25 years after their early, seminal work on teacher response to student writing, Knoblauch and Brannon (2006) wrote a piece called “The Emperor (Still) Has No Clothes,” which argued that to that point in time, there was no compelling evidence of student writing improvement resulting from teacher feedback. If teachers engage in magical thinking—“If I give feedback, students will write better”—experience and evidence suggest they will be disappointed (Ferris, Liu, et al., 2011).

We already know two things about students’ views of feedback. First, we know they generally value it and appreciate it. Second, we know that sometimes they ignore it or are unable to utilize it to improve their own writing. What we don’t know much about is *why*: what factors cause students to engage conscientiously and effectively with feedback they have received—or not. The answer to the “why” question is likely very complex and individual, and it would be best studied through a combination of case studies (with interviews and text analysis), perhaps supplemented for generalizability through large-scale surveys.

Taken together, the two points about studying what teachers do and what students do lend themselves to a call for classroom ethnographies of response systems. There are a few examples of this in the literature, for example Gilliland (2012), a dissertation study that examined the role of response in three different secondary English classrooms. On a smaller scale, Evans and Ferris (2019), using data also gathered for a dissertation study (Evans, 2017), studied the interaction of peer feedback, teacher–student conferences, and student reflection (through journaling) as students in two intermediate English for Academic Purposes courses at a U.S. university worked through a complex four-week research and writing task.

Most studies of feedback isolate one type of response, whether it be WCF, teacher written commentary, teacher–student conferences, or peer response. In real-life writing classes, these feedback modes tend to co-exist and interact at various stages of the writing process. Studies of intact

classrooms and their response systems could add a lot of information about how teachers operate and how students utilize and engage with feedback they receive.

Response and Technology

As already mentioned, a productive area for future research on response will be the examination of how teachers' practices and student engagement might be affected by greater reliance on technology for giving and receiving feedback. Even instructors who might previously have resisted changing their feedback approaches have had to adjust during the COVID-19 pandemic, relying on tools such as Canvas, Zoom, and Google Docs more than they ever have (or maybe even for the first time). The Canvas SpeedGrader feature allows for dialogic discussion among peers or between teachers and students; similarly, Google Docs allows multiple writers and editors to easily work on the same document. Zoom and other video-conferencing platforms make it easier to schedule and conduct peer feedback sessions and teacher-student conferences because of their remote screen-sharing capabilities. Many interesting questions could be investigated about how these technological affordances influence teacher practices and attitudes toward response, students' reactions to these modern approaches to feedback, and how the characteristics of feedback itself may change because of the use of computer- or web-based tools.

Similarly, interest in AWE tools is not going to disappear no matter how uncomfortable L2 writing experts may be about them, so it may be useful and important to design and extend research agendas that examine how such tools are used by teachers and students, the quality of the feedback they provide, and the effects of automated feedback on student attitudes and writing/language development (Stevenson & Phakiti, 2019; see also Kessler et al., 2012).

Concluding Thoughts

Understanding and gaining practical skills in providing or facilitating feedback to students is an area of L2 writing instruction that many teachers find daunting. Nonetheless, it is very important to students' success. As one writing teacher put it:

Responding to student writing IS the job of teaching writing. If they don't write and we don't respond, then how else are they going to learn to write? I can't learn to ride a bicycle by talking about it or watching Power Point presentations about it or even thinking about it.

(Ferris, Liu, et al., 2011, p. 40)

While responding well to student writing is hard work that can be frustrating, research over the past several decades has identified specific ways to make it more successful and even more efficient. Advances in technology promise directions to make feedback even more feasible and valuable for teachers and students alike. Response to L2 writing should therefore be an area of significant interest for both L2 writing instructors and writing researchers. Though there have been many studies on response, particularly on the specialized subtopic of WCF, there is still a great deal we can productively examine and learn about this fascinating and important aspect of L2 writing.

References

Andrade, M. S. & Evans, N. E. (2013). *Principles and practices for response in second language writing: Developing self-regulated learners*. New York: Routledge.

- Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing*, 9, 227–258.
- Beaufort, A. (2007). *College writing and beyond: A new framework for university writing instruction*. Logan, UT: Utah State University Press.
- Bitchener, J. (2019). The intersection between SLA and feedback research. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (2nd ed., pp. 85–105). Cambridge, UK: Cambridge University Press.
- Bitchener, J. & Ferris, D. (2012). *Written corrective feedback in second language acquisition and writing*. New York: Routledge.
- Brannon, L. & Knoblauch, C. H. (1982). On students' rights to their own texts: A model of teacher response. *College Composition and Communication*, 33, 157–166.
- Carson, J. G. & Nelson, G. L. (1994). Writing groups: Cross-cultural issues. *Journal of Second Language Writing*, 3(1), 17–30.
- Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing*, 12, 267–296.
- Cohn, J. & Stewart, M. (2016). Promoting metacognitive thought through response to low-stakes reflective writing. *Journal of Response to Writing*, 2(1), 58–74.
- Connor, U. & Asenavage, K. (1994). Peer response groups in ESL writing classes: How much impact on revision? *Journal of Second Language Writing*, 3, 257–276.
- Conrad, S. M. & Goldstein, L. M. (1999). ESL student revision after teacher-written comments: Text, contexts, and individuals. *Journal of Second Language Writing*, 8, 147–180.
- Crusan, D. (2010). *Assessment in the second language writing classroom*. Ann Arbor, MI: University of Michigan Press.
- Downs, D. & Wardle, E. (2007). Teaching about writing, righting misconceptions: (Re)envisioning “First-Year Composition” as “Introduction to Writing Studies” *College Composition and Communication*, 58(4), 552–584.
- Eckstein, G. (2013). The intersection of theory, philosophy, and practice in ESL writing conferences. *CATESOL Journal*, 24(1), 174–186.
- Edgington, A. (2020). Breaking the cycle: Using reflective activities to transform teacher response. *Journal of Response to Writing*, 6(1), 139–157.
- Elbow, P. (1973). *Writing without teachers*. Oxford: Oxford University Press.
- Elbow, P. (1999). Options for responding to student writing. In R. Straub (Ed.), *A sourcebook for responding to student writing* (pp. 197–202). Creskill, NJ: Hampton Press.
- Eskey, D. E. (1983). Meanwhile, back in the real world ... Accuracy and fluency in second language teaching. *TESOL Quarterly*, 17, 315–323.
- Evans, K. (2017). *Engaging undergraduate writers: A study of motivational dynamics in the second language writing classroom*. [PhD dissertation. University of California, Davis, USA.]
- Evans, K. & Ferris, D. (2019). Revision from multiple feedback sources: The attitudes and behaviors of three multilingual student writers. *Research in the Teaching of English*, 54(2), 131–160.
- Fathman, A. & Whalley, E. (1990). Teacher response to student writing: Focus on form versus content. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 178–190). Cambridge: Cambridge University Press.
- Ferris, D. & Kurzer, K. (2019). Does error feedback help L2 writers? Latest evidence on the efficacy of written corrective feedback. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (2nd ed., pp. 106–124). Cambridge: Cambridge University Press.
- Ferris, D. R. (1995). Student reactions to teacher response in multiple-draft composition classrooms. *TESOL Quarterly*, 29, 33–53.
- Ferris, D. R. (1997). The influence of teacher commentary on student revision. *TESOL Quarterly*, 31, 315–339.
- Ferris, D. R. (2001). Teaching writing for academic purposes. In J. Flowerdew & M. Peacock (Eds.), *Research perspectives on English for academic purposes* (pp. 298–314). Cambridge: Cambridge University Press.
- Ferris, D. R. (2004). The “grammar correction” debate in L2 writing: Where are we, and where do we go from here? (And what do we do in the meantime ...?). *Journal of Second Language Writing*, 13, 49–62.
- Ferris, D. R. (2006). Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (pp. 81–104). Cambridge: Cambridge University Press.
- Ferris, D. R. (2010). Second language writing research and written corrective feedback in SLA: Intersections and practical applications. *Studies in Second Language Acquisition*, 32, 181–201.

- Ferris, D. R. (2014). Responding to student writing: Teachers' philosophies and practices. *Assessing Writing*, 19(1), 6–23.
- Ferris, D. R. (2015). Inclusivity through community: Designing response systems for “mixed” academic writing classes. In M. Roberge, K. M. Losey, & M. Wald (Eds.), *Teaching U.S.-educated multilingual writers: Pedagogical practices from and for the classroom* (pp. 11–46). Ann Arbor, MI: University of Michigan Press.
- Ferris, D. R. (2018). “They said I have a lot to learn”: How teacher feedback influences advanced university students' views of writing. *Journal of Response to Writing*, 4(2). <https://journalrw.org/index.php/jrw/article/view/114>
- Ferris, D. R., Brown, J., Liu, H., & Stine, M. E. A. (2011). Responding to L2 students in college writing classes: What teachers say and what they do. *TESOL Quarterly*, 45, 207–234.
- Ferris, D. R. & Hedgcock, J. S. (2014). *Teaching L2 writing: Purpose, process, & practice* (3rd ed.). New York: Routledge.
- Ferris, D. R., Liu, H., & Rabie, B. (2011). “The job of teaching writing”: Teacher views of responding to writing. *Writing and Pedagogy*, 3(1), 39–77.
- Ferris, D. R., Liu, H., Sinha, A., & Senna, M. (2013). Written corrective feedback for individual L2 writers. *Journal of Second Language Writing*, 22, 307–329.
- Gilliland, E. A. (2012). *Talking about writing: Culturally and linguistically diverse adolescents' socialization into academic literacy*. University of California, Davis. *ProQuest Dissertations and Theses*, 255. <http://search.proquest.com/docview/123451468?accountid=27140>. (123451468).
- Goldstein, L. (2005). *Teacher written commentary in second language writing classrooms*. Ann Arbor, MI: University of Michigan Press.
- Goldstein, L. & Conrad, S. (1990). Student input and the negotiation of meaning in ESL writing conferences. *TESOL Quarterly*, 24, 443–460.
- Hairston, M. (1986). On not being a composition slave. In C. W. Bridges (Ed.), *Training the new teacher of college composition* (pp. 117–124). Urbana, IL: NCTE.
- Hamp-Lyons, L. (2006). Feedback in portfolio-based writing courses. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (pp. 140–161). Cambridge: Cambridge University Press.
- Hedgcock, J. & Lefkowitz, N. (1994). Feedback on feedback: Assessing learner receptivity in second language writing. *Journal of Second Language Writing*, 3, 141–163.
- Hedgcock, J. & Lefkowitz, N. (1996). Some input on input: Two analyses of student response to expert feedback on L2 writing. *Modern Language Journal*, 80, 287–308.
- Horowitz, D. (1986). Process, not product: Less than meets the eye. *TESOL Quarterly*, 20, 141–144.
- Hyland, F. & Hyland, K. (2001). Sugaring the pill: Praise and criticism in written feedback. *Journal of Second Language Writing*, 10, 185–212.
- Hyland, K. & Hyland, F. (Eds.) (2019). *Feedback in second language writing: Contexts and issues* (2nd ed.). Cambridge: Cambridge University Press.
- Kessler, G., Oskoz, A., & Elola, I. (Eds.). (2012). *Technology across writing contexts and tasks*. San Marcos, TX: CALICO.
- Knoblauch, C. H. & Brannon, L. (1981). Teacher commentary on student writing: The state of the art. *Freshman English News*, 10 (Fall), 1–4.
- Knoblauch, C. H. & Brannon, L. (2006). Introduction: The emperor (still) has no clothes. In R. Straub (Ed.), *Key works on teacher response* (pp. 94–111). Portsmouth, NH: Boynton/Cook.
- Krashen, S. D. (1984). *Writing: Research, theory, and application*. Oxford: Pergamon.
- Kurzer, K. (2018). Dynamic written corrective feedback in developmental ESL writing classes. *TESOL Quarterly*. doi: 10.1002/tesq.366
- Lalande, J. F. II (1982). Reducing composition errors: An experiment. *Modern Language Journal*, 66, 140–149.
- Leki, I. (1990). Potential problems with peer responding in ESL writing classes. *CATESOL Journal*, 3, 5–19.
- Leki, I. (1991). The preferences of ESL students for error correction in college-level writing classes. *Foreign Language Annals*, 24, 203–218.
- Li, M. (2018). Online peer review using Turnitin PeerMark. *Journal of Response to Writing*, 4(2), 99–117.
- Liu, J. & Hansen, J. (2002). *Peer response in second language writing classrooms*. Ann Arbor, MI: University of Michigan Press.
- Mangelsdorf, K. & Ruecker, T. (2018). Peer reviews and graduate writers: Engagements with language and disciplinary differences while responding to writing. *Journal of Response to Writing*, 4(1), 4–33.
- Matsuda, P. K. (2003). Second language writing in the twentieth century: A situated historical perspective. In B. Kroll (Ed.), *Exploring the dynamics of second language writing* (pp. 15–34). Cambridge: Cambridge University Press.

- Mendonça, C. O. & Johnson, K. E. (1994). Peer review negotiations: Revision activities in ESL writing instruction. *TESOL Quarterly*, 28, 745–769.
- Montgomery, J. L. & Baker, W. (2007). Teacher-written feedback: Student perceptions, teacher self-assessment, and actual teacher performance. *Journal of Second Language Writing*, 16, 82–99.
- Nelson, G. L. & Murphy, J. M. (1992). An L2 writing group: Task and social dimensions. *Journal of Second Language Writing*, 1(3), 171–193.
- Newkirk, T. (1984). How students read student papers: An exploratory study. *Written Communication*, 1(3), 283–305.
- Newkirk, T. (1995). The writing conference as performance. *Research in the Teaching of English*, 29, 193–215.
- Patthey-Chavez, G. G. & Ferris, D. R. (1997). Writing conferences and the weaving of multi-voiced texts in college composition. *Research in the Teaching of English*, 31, 51–90.
- Paulus, T. (1999). The effect of peer and teacher feedback on student writing. *Journal of Second Language Writing*, 8, 265–289.
- Radecki, P. & Swales, J. (1988). ESL student reaction to written comments on their written work. *System*, 16, 355–365.
- Reid, J. (1994). Responding to ESL students' texts: The myths of appropriation. *TESOL Quarterly*, 28, 273–292.
- Silva, T. & Leki, I. (2004). Family matters: The influence of applied linguistics and composition studies on second language writing studies—past, present, and future. *Modern Language Journal*, 88(1), 1–13.
- Sommers, N. (1982). Responding to student writing. *College Composition and Communication*, 33, 148–156.
- Sperling, M. & Freedman, S. W. (1987). A good girl writes like a good girl: Written responses to student writing. *Written Communication*, 4, 343–369.
- Stanley, J. (1992). Coaching student writers to be effective peer evaluators. *Journal of Second Language Writing*, 1(3), 217–233.
- Stevenson, M. & Phakiti, A. (2019). Automated feedback and second language writing. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (2nd ed., pp. 125–142). Cambridge: Cambridge University Press.
- Storch, N. (2019). Collaborative writing as peer feedback. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (2nd ed., pp. 143–161). Cambridge: Cambridge University Press.
- Storch, N. & Wigglesworth, G. (2010). Writing tasks: Comparing individual and collaborative writing. In M. del Pilar Garcia-Mayo (Ed.), *Investigating tasks in formal language learning* (pp. 157–177). London: Multilingual Matters.
- Thonus, T. (2002). Tutor and student assessments of academic writing tutorials: What is “success?” *Assessing Writing*, 8, 110–134.
- Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning*, 46, 327–369.
- Ware, P. (2011). Computer-generated feedback and assessment of student writing. *TESOL Quarterly*, 45, 769–774.
- Yancey, K., Robertson, L., & Taczak, K. (2014). *Writing across contexts: Transfer, composition, and sites of writing*. Boulder, Colorado: Utah State University Press.
- Zamel, V. (1985). Responding to student writing. *TESOL Quarterly*, 19, 79–102.
- Zhang, S. (1995). Reexamining the affective advantage of peer feedback in the ESL writing class. *Journal of Second Language Writing*, 4, 209–222.
- Zhu, W. (1995). Effects of training for peer response on students' comments and interaction. *Written Communication*, 12, 492–528.

Principles for Reading Instruction

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The ability to read well may be the most important skill needed by second language students who have academic aspirations. In academic contexts, reading provides a major source of input for further learning of both language and course content. Furthermore, reading typically generates increased interest and motivates students to explore topics further through additional reading. Yet, skilled reading is not a simple endeavor; it requires the mastery of reading component skills, the integration of comprehension abilities, the development of a large vocabulary, a reasonably good command of grammar, and skilled use of appropriate strategies as needed. The good news is that explicit instruction in reading-skills development makes a difference (Grabe & Stoller, 2018, 2020; Guthrie et al., 2013; Vaughn et al., 2017).

Here we introduce three sets of principles for reading instruction that are supported by first language (L1) and second language (L2) reading research (Cain et al., 2017; Grabe & Stoller, 2020; Grabe & Yamashita, 2022; Klingner et al., 2015; Pollatsek & Treiman, 2015; Schwanenflugel & Knapp, 2016; Seidenberg, 2017; Vaughn et al., 2017). These principles can guide language professionals in reading curriculum design and instruction. The principles, when translated into practice, will help students (a) improve their reading abilities and (b) become self-motivated, strategic readers. Most importantly, courses structured around these principles will prepare students for academic contexts in which they are likely to encounter challenging texts and the need to make effective use of textual information (e.g., writing papers, giving oral presentations, completing projects).

Foundational Principles for Teaching Reading Comprehension

Five core principles for teaching reading focus on requiring a lot of reading, ensuring purposeful reading and re-reading, providing students with deliberate practice, promoting class and group discussion, and developing student motivation. These factors are central to effective reading curricula, but also transcend reading because they are also fundamental to learning more broadly.

Principle #1: Ask Students to Read a Lot and Read Often

To become a good reader requires reading a lot and reading often. There are simply no short cuts, and the amount of reading completed by students may be the single most important factor for L2 reading-skills development. This principle, supported by a wide range of reading research, is generally referred to as *exposure to print* or *extensive reading*. Unfortunately, students, even in discrete-skill reading classes, typically read very little. In fact, reading classes are often more like conversation

classes because, rather than focusing on reading-skills development, class activities commonly center around (a) a quick *oral* review of post-reading comprehension questions, (b) vocabulary-building activities, and (c) “personalization” tasks that connect the topic of the assigned reading to students’ personal lives, without holding students accountable for what they have read.

In L1 contexts, exposure to print/reading amount has been extensively studied and recognized as essential for the development of strong academic reading skills (e.g., Mol & Bus, 2011; Sparks et al., 2014). In L2 contexts, extensive reading involves *reading more*; it is that simple. Extensive reading is not solely for entertainment purposes, as some assert, because students gain knowledge, confidence, and academic skills by reading content material that is engaging and that supports a shared content- and language-learning curriculum. Extensive reading programs are essential for (a) increasing students’ exposure to large amounts of reading, (b) improving reading fluency, (c) building motivation and confidence to read, and (d) supporting vocabulary growth and main-idea comprehension (Grabe & Yamashita, 2022; Nation & Waring, 2020; Robb & Kano, 2013; Suk, 2017; Yamashita, 2013; Yoshizawa et al., 2018). Reading extensively on a consistent basis in L2 contexts, in and out of class, is most straightforwardly carried out through a graded-reader program (that requires some level of investment in graded readers). Alternatively, there are online reading resources that can support extensive reading.

Principle #2: Have Students Read and Re-read for Well-defined Purposes

Purposeful reading and re-reading is a second core principle for teaching reading (Britt et al., 2018; Grabe & Yamashita, 2022; van den Broek & Kendeou, 2017). In many L2 classrooms, students are simply assigned to “read” a passage and answer post-reading comprehension questions “for the next class meeting.” Such assignments are typically made without establishing any meaningful purpose for reading (except to comply with a teacher request). Even well-respected textbooks often direct students to simply do a pre-reading activity and then “read.” Skilled readers, however, always read for a purpose. Well-defined purposes for reading influence (a) the ways in which skilled readers approach texts (e.g., reading faster, slower, more carefully, more casually, with pencil or pen in hand) and (b) their expectations of the reading experience. To illustrate, skilled readers might read quickly to search for information, understand the gist of a passage, or decide if a text is worth reading more carefully. In academic contexts, students might also read to evaluate, critique, or use information for other purposes (e.g., to write a summary, prepare for a debate). Readers may also turn to print or digital sources to simply read for general comprehension and enjoyment (Grabe & Stoller, 2020).

Skilled readers often re-read important texts for a second or third time, also for well-defined purposes. In fact, purposeful re-reading is a common strategy used by skilled readers to solve comprehension difficulties, identify important details, determine relationships among ideas (in one or more texts), find evidence of an author’s viewpoint, and, in school settings, review for quizzes or other assignments. Rarely, however, are L2 students directed to re-read for well-defined purposes.

Reading instruction should be structured to encourage L2 students to read and re-read for authentic purposes as one way to model and reinforce good reading habits. Specific purposes for reading vary, including all of the following: identify main ideas, identify discourse-structure signaling, organize key content information in a graphic display, write a summary, synthesize two or more texts, compare viewpoints, and critique an argument. Asking students to simply read, for no purpose at all, is counterproductive if we want students to develop the skills of strong readers. While promoting purposeful reading, students should be assigned a range of materials, including those that are well within their grasp for fluent reading and those that are more challenging (but not frustrating) so that students can practice using reading strategies to achieve their comprehension goals and, at the same time, feel a sense of accomplishment.

Principle #3: Incorporate Deliberate Practice into Reading Curricula

The role of practice in developing language skills is universally accepted as a requirement for mastering cognitively demanding skills (DeKeyser, 2015; Lightbown, 2019). However, reading-skills development, because it is driven in large part by incidental and implicit learning, requires more than sets of overt practice exercises. Research over the past 35 years—in the psychology sub-fields of expertise and expert performance (Ericsson, 2018, Ericsson et al., 2018)—has argued that skill expertise (and skilled reading is certainly a type of cognitive expertise) requires more than sets of practice activities in a reading coursebook. What reading requires is *deliberate practice* (as well as thousands of hours of reading). As Anderson (2020) states, “A great deal of deliberate practice is necessary to develop expertise in any field” (p. 305).

Ericsson (2018) and Ericsson and Pool (2016), in their discussions of the development of expertise, depict deliberate practice as purposeful, goal directed, and communicative. Deliberate practice, in the context of reading-skills development, entails more than just reading a lot (Anderson, 2020; Munger & Murray, 2014; Stigler & Miller, 2018). Some of the characteristics of deliberate practice include the following (and think of an Olympic gymnast):

- Well-defined goals for improving select aspects of the target performance; goals can be broken down into sub-goals and more specific sub-routines that develop the larger skill.
- A knowledgeable “coach” (teacher) who can provide feedback to improve skill development.
- Modification of effort in direct response to coach feedback.
- Carefully staged and sequenced tasks.
- Full attention and concentration on the part of the learner.
- Building on, or modifying, previously acquired skills to improve them.
- Learner self-monitoring, reflection on achievements, and motivation.
- Learner understanding of the purposes of practice goals and tasks, and also an appreciation for practice to achieve desired outcomes.

This principle of deliberate practice is new for many educational specialists because it stems from a concept in cognitive psychology centered on the development of advanced skills learning more generally, rather than on reading or language learning, more specifically. However, we believe that deliberate practice can help L2 students achieve advanced reading skills. How this concept is translated into the teaching and learning of reading skills should be a topic for future research (and action research). However, reading curricula that integrate elements of deliberate practice, with the teacher taking the “reading coach” role, are likely to witness accelerated learning and improved reading abilities among students (see especially Ericsson & Pool, 2016).

Principle #4: Promote Discussion Among Students About Text Comprehension

Discussion about texts is a common practice in many L2 reading classes. These discussions often are used to develop shared background knowledge for ideas prior to reading about them in a text. Another common use of discussion is to wrap up an instructional unit as a way to extend ideas from a text to more personal connections and interpretations. However, the role of discussion, as advocated here, is different. In line with the concept of deliberate practice (Principle 3), the major focus of discussion in reading courses should be on students achieving text comprehension and content learning from the texts they are reading.

The concept of discussion is essential for reading-skills improvement and the development of more strategic readers (Beck & Sandora, 2016; Boardman et al., 2017; Fisher & Frey, 2019; Garas-York

& Almasi, 2017; Guthrie & Klauda, 2016; Murphy et al., 2009). In-class discussions—as a full class, in student pairs, and/or in small student groups—can center on ways to (a) identify main ideas, (b) build awareness of what strategies other students are using to achieve better comprehension, and (c) monitor comprehension. These discussions need to be guided by the teacher on a consistent basis, as she/he introduces and reinforces sets of specific reading strategies that, in combination, will help students become more strategic readers. At the same time, discussions should also extend learning more broadly, build discourse structure awareness, and consolidate vocabulary learning more specifically. The key to effective discussions is to avoid simple teacher-question-and-student-answer sequences.

Teachers should regularly allocate class time for meaningful discussions that go beyond a simple review of answers to post-reading comprehension questions. Teachers need to develop ways to promote full-class participation in whole-class discussions and encourage students to engage in group discussions about specific reading tasks. The goal is discussions of *how* students achieved text comprehension, *what strategies* they used and *what purposes* they served, *why* certain text features aided text comprehension (e.g., bolded section headings, end-of-text summary), and *which* vocabulary was key to text comprehension. Students should be able to explain and analyze content from readings and do so in collaboration with other students. Through in-class discussions, teachers can nurture a collaborative classroom environment (Guthrie & Klauda, 2016). The discussions that we are advocating here should be part of the normal reading-classroom routine rather than something extra if, and only if, time permits.

Principle #5: Build Student Motivation to Read

Student motivation plays a vital role in learning, just as it does with reading-skills development. Research has consistently shown that motivation and positive attitudes toward reading lead to increased reading engagement, as measured by time on task, effort, concentration, and volume of reading (Guthrie & Klauda, 2016; Guthrie & Taboada Barber, 2019). Engaged readers—who read greater amounts—develop automaticity of many of the cognitive processes associated with skilled reading, including decoding skills; moreover, they use background knowledge for comprehension, rapid inferencing, reading fluency, and vocabulary growth (Guthrie et al., 2013). Students who self-identify as readers and who enjoy reading are more likely to develop into skilled, autonomous readers. Students' sense of self-efficacy, willingness to read, and openness to reading instruction and related activities contribute to their becoming autonomous readers. Motivation for reading can be nurtured in classroom environments that promote CAR (Komiya, 2009): **C**ompetence with reading skills and content learning, **A**utonomy (when given choices), and **R**elationships (the result of peer collaboration and support).

Building student motivation, however, can be a real challenge for teachers. Disinterested students will not read nearly enough texts, books, and/or digital media in English to gain the types of deliberate practice and sheer amount of time spent reading to become skilled readers. Teachers are often not sure about what they should, or can, do to motivate students to become better readers, more interested readers, voracious readers. The good news is that teachers can positively influence students' motivation to read when they:

- create collaborative and safe learning environments in which students feel comfortable taking more active roles in learning and working within supportive peer groups,
- give students some choices of texts and tasks,
- incorporate activities that make texts interesting and relevant,
- ensure that students experience reading success,
- emphasize the importance of reading, and
- guide students in discovering what they have actually learned *from* reading.

Reading-Skills Development Principles

Successful reading requires the coordination of language knowledge (e.g., vocabulary, syntax, discourse awareness) and numerous processes, subskills, strategies, and ways of reading. Translated into practice, this means, at a minimum, explicitly (a) helping students identify the main ideas, (b) guiding students in expanding their vocabulary and developing independent vocabulary-learning strategies, (c) building students' discourse-structure awareness to support comprehension, (d) providing students with opportunities for reading-fluency improvement, and (e) training students to become strategic readers while they are reading more challenging texts.

Principle #6: Teach (Not Test) Main-Idea Comprehension

Teachers, without realizing it, typically devote more time to “testing” reading comprehension than teaching for comprehension (Anderson, 2014). When structuring a reading lesson mainly (or solely) around a review of post-reading comprehension questions, teachers are essentially testing comprehension rather than taking advantage of opportunities to *teach* students *how* to comprehend texts. Teaching *for* reading comprehension entails, at a minimum, teaching students and engaging students in discussions of:

- when, how, and why to preview, predict, and check predictions;
- how to identify main ideas;
- how to make use of background knowledge; and
- when and for what purposes to re-read.

Explicit attention to these essential elements of skilled reading, when combined with class discussions about the steps taken to make sense of the texts that students are reading, is certainly more important in the long term than simply reviewing post-reading comprehension questions and moving on (e.g., to the next textbook chapter).

Comprehension tasks and classroom discussions provide valuable opportunities for students to talk—to one another and the whole class—about *how* to understand the texts that they read. A number of instructional tasks, completed as students are reading for comprehension, help students identify main ideas and talk with each other, in pairs or small groups, about ways to determine main ideas:

- Choose the best summarizing statement for each paragraph.
- Identify topic sentences or key sentences in each paragraph if they are present, and then summarize.
- Identify signal words that reveal discourse structure and predict the main ideas.
- Write down the most important idea for each paragraph.
- Provide 2–5 sentence summaries of a paragraph, text section, or text.

Teaching main-idea identification requires tasks carried out in class with students first working on their own, then working in pairs or groups to compare their answers, and then verifying the best main-idea solutions through discussion. Such activities should also be a focus for reading guides that support text comprehension (Grabe & Yamashita, 2022; Klingner et al., 2015; Taboada Barber, 2016).

Principle #7: Make a Commitment to Vocabulary Teaching and Learning

It should come as no surprise that vocabulary knowledge is closely related to reading abilities and reading comprehension (Ash & Baumann, 2017). In fact, vocabulary and reading have a symbiotic

relationship. That is, vocabulary growth leads to improved reading comprehension and, at the same time, amount of reading leads to vocabulary growth (e.g., Ganske, 2019; Suk, 2017). Students' vocabulary growth benefits from a commitment to reading-skills development (from beginning to advanced proficiency levels) in addition to explicit attention to vocabulary building, vocabulary recycling, and vocabulary-learning strategies.

As students develop more advanced language abilities, they read more complex informational texts and new textual genres with the expectation that their attention will shift from learning-to-read to reading-to-learn. When students are exposed to new content areas, they inevitably encounter new vocabulary that is important for comprehension (Gardner, 2013; Schmitt et al., 2011). One of the challenges that teachers face is that they cannot possibly teach all the words that students need to know. Thus, introducing students to strategies for independent vocabulary learning is imperative (Schmitt & Schmitt, 2020). At the same time, teachers can contribute to students' vocabulary growth by judiciously selecting the lexical items that they teach and recycle.

The importance (and challenge) of vocabulary is clarified when we consider that if students are to understand a range of texts on their own with adequate comprehension, they need to recognize at least 98% of the words that they encounter on the page (Schmitt et al., 2011; Schmitt & Schmitt, 2020). The number of words needed for 95% coverage of most texts, as an estimate, lies somewhere between 12,000 and 15,000 words; 98–99% of word coverage of most texts probably requires a recognition vocabulary of about 36,000–40,000 words (Graves, 2016; Schmitt & Schmitt, 2020). The 95% goal is useful when students are reading texts with instructional support. A goal for more advanced L2 reading is an L2 recognition vocabulary greater than about 33,000 words (or roughly 8,000 word families). Of course, the argument that students need to know the most frequent words as well as possible still retains its force as a key incentive for developing effective vocabulary instruction (Gardner, 2013; Grabe & Yamashita, 2022; Webb & Nation, 2017).

There are many recommendations for vocabulary teaching and learning (Grabe & Stoller, 2020; Schmitt & Schmitt, 2020; Webb & Nation, 2017). Over long time periods, the best way to learn a large amount of vocabulary is through extensive reading, primarily by incidental word learning through reading. There are other ways to encourage student word learning and guide students in tasks involving many words (word wall activities, sorting activities, word splash activities, word association maps). Teachers should also recycle vocabulary items over time, give students choices in self-selected word learning, motivate students to collect words that they like and learn about these words, and teach useful word-learning strategies.

Principle #8: Raise Students' Discourse-Structure Awareness to Improve Reading Comprehension

Good readers recognize the organization of textual information and the signals that provide cues to this organization. In fact, it is well established that reading comprehension depends on a reader's awareness of text structure. Good readers can identify and make use of (a) lexical forms that identify specific organizational patterns such as cause-effect, comparison-contrast, problem-solution; (b) words that signal main ideas, details, topic shifts, and transitions; and (c) headings, subheadings, and paragraphing. Furthermore, good readers recognize how topics are maintained through pronouns and other anaphoric cues. Research has provided evidence for the instructional effectiveness of teaching discourse signals explicitly, using graphic organizers to display organizational patterns, and raising students' discourse structure awareness through reading-strategy training (Duke & Martin, 2019; Mokhtari & Sheorey, 2008). Raising students' discourse-structure awareness and teaching them how to apply this awareness to achieve text comprehension should be key elements of reading curriculum planning (Grabe & Yamashita, 2022; Hebert et al., 2016; Jiang, 2012). Yet, few reading curricula focus on text structure awareness as a consistent component of instruction.

Teaching text structure awareness can be achieved through a number of specific tasks, which also help students identify main ideas in the texts that they are reading:

- Fill in an outline of a text.
- Select appropriate short headings for key paragraphs in a text.
- Underline words, generally, and transition words, more specifically, that signal discourse structure.
- Fill in a partially completed graphic organizer.
- Identify discourse-organization patterns in paragraphs.

There are many additional ways to guide students in discovering patterns of discourse organization. Many lead to discussions around main-idea identification and summarization tasks (Grabe & Stoller, 2018, 2020).

Principle #9: Promote Reading Fluency for Improved Reading Comprehension

Fluency in reading is central to efficient reading abilities. Reading fluency is, in fact, both a contributor to and a product of comprehension (Kuhn et al., 2019). Fluent reading involves automaticity (recognizing words and phrases without effort), rate (reading quickly), accuracy (reading accurately), prosody (reading with appropriate word groupings), and reading with comprehension. A commitment to reading-fluency development is needed at all levels of language instruction (through to advanced levels) and with learners of all ages; such a commitment is accomplished by means of reading fluency activities and plentiful reading opportunities (Principle 1). Making such a commitment recognizes the incremental process that, over time, moves students toward the reading fluency that they need for skilled reading, especially in academic contexts where students are likely to encounter large amounts of reading.

Unlike some common beliefs, fluency is not achieved when L2 students reach a certain number of words per minute (e.g., 200 words per minute). In fact, skilled readers read at different rates, depending on their purposes for reading. Rather than establish a specific reading rate goal, reading curricula need to regularly engage students in reading for different purposes, accompanied by a variety of fluency-building activities. Fluency-building activities include (a) re-reading a text multiple times, with a goal to read the text within a certain time; (b) reading along with a recording of a text or text excerpt; (c) reading a passage aloud multiple times for fluency and accuracy, with the goal of improved finishing times for each re-reading; (d) paired reading aloud; and (e) oral-reading fluency practice through Readers Theater (Grabe & Stoller, 2020; Rasinski et al., 2012; Young & Rasinski, 2018).

Principle #10: Train Students to Be Strategic Readers

Skilled readers, by definition, are strategic. Strategic readers know *which* strategies to use—in addition to *when*, *how*, and *why* to use them—to overcome comprehension difficulties and achieve comprehension goals (see Grabe & Stoller, 2020, p. 156, for evidence-based reading strategies). Reading curricula that are committed to training strategic readers, rather than simply teaching strategies one at a time, are best positioned to help students develop skilled reading abilities (Almasi & Hart, 2019; Klingner et al., 2015; Taboada Barber, 2016).

Consider the differences between teaching individual reading strategies and training strategic readers. The former is perpetuated by textbooks that introduce one reading strategy at a time, often within a decontextualized lesson segment. With this common approach, students might be introduced to previewing (in Chapter 1), predicting and checking predictions (in Chapter 2), connecting text to background knowledge (in Chapter 3), creating mental images (in Chapter 4), inferencing

(in Chapter 5), and so forth. With this (sadly) conventional instructional approach, students are rarely asked to use such strategies while actually reading for comprehension. Nor are they guided in using multiple strategies in combination, which is what skilled readers do.

When training strategic readers, on the other hand, teachers:

- provide explicit introductions to reading strategies used to achieve text comprehension;
- incorporate multiple opportunities for deliberate practice in strategy use *while* students are actually reading for comprehension;
- guide class discussions about strategy use (focusing on which strategies are used, when, how, why);
- recycle strategies (in new combinations) with new passages; and
- give students opportunities to read (or re-read) more challenging texts, followed by pair and group discussions about strategies used for improving text comprehension.

A curricular commitment to such strategic-reader training practices is likely to result in more skilled and confident readers. When strategic reading is regularly addressed across the curriculum, students develop the habits of strategic (and independent) readers.

Instructional-Design Principles

The five instructional-design principles introduced here emphasize the importance of (a) structuring lessons around a pre-, during-, and post-reading framework; (b) selecting and adapting suitable texts for instruction; (c) addressing digital literacy; (d) connecting reading and writing; and (e) incorporating assessments *for* learning into reading instruction.

Principle #11: Structure Reading Lessons Around a Pre-reading, During-reading, and Post-reading Framework

Reading lessons, interpreted broadly, should be structured around pre-, during-, and post-reading stages that permit students to be exposed to and practice the range of reading subskills and strategies used by skilled readers at different points in the reading process (Grabe & Stoller, 2020; Hedgcock & Ferris, 2018; Klingner et al., 2015). The amount of class time devoted to each stage of the reading lesson is variable, depending on instructional goals, students' reading proficiencies, length of class meetings, and the texts assigned. A single lesson might include all three reading stages, though the text would have to be quite short and/or the class session quite long to do so. Probably more typical would be a span of numerous class sessions during which the teacher could incorporate pre-, during-, and post-reading activities.

Each stage of the reading lesson provides opportunities to introduce and have students practice stage- and text-appropriate reading strategies. During each stage, the teacher has the opportunity to guide, model, and set students up for success. Of the three stages, it is the during-reading stage that is most often neglected in published textbook materials. Adapting textbook materials to incorporate during-reading strategies (and authentic purposes for reading) can truly enhance a reading curriculum.

Principle #12: Select and Adapt Texts to Support Students' Comprehension Development

What teachers ask students to read, and how teachers use those reading materials, can greatly influence students' progress in reading-skills development (in addition to students' motivation for reading).

In ideal circumstances, text selection is guided by identifying print and digital reading materials that (a) complement students' L2 proficiency levels, ages, maturity levels, and interests and (b) can be read with scaffolded instruction or independently. Yet in most settings, textbooks are selected by others for teacher use. In these cases, teachers can build upon those textbooks to promote reading improvement. For example, if the mandated textbook does not include any fluency-development activities, teachers can design them around textbook reading passages and add them to their lessons.

Similarly, if the textbook does not explicitly address strategic-reader training, teachers can adjust their lessons to do so. If the textbook does not include read-to-write tasks that hold students accountable for reading-passage content, teachers can devise such tasks. If a textbook chapter (or unit) includes only one reading passage on a particular topic, teachers can locate related readings (print and digital) to build students' content knowledge and permit more cognitively challenging tasks, such as syntheses. With supplementary readings, topic-related vocabulary is recycled and content learning is likely to be more successful, thereby simulating academic contexts where students commonly read related texts to build their content knowledge. Even teachers with little extra time to modify their reading lessons can augment their textbooks in small but principled ways to more fully promote reading-skills development (Stoller et al., 2013).

Reading curricula that include both easy and sufficiently challenging reading passages permit teachers to address students' varied reading needs. Easy reading materials (e.g., level-appropriate **graded readers**) can be read for enjoyment, without frustration, and with opportunities for reading success (Nation & Waring, 2020). Appropriately challenging (but not frustrating) texts, on the other hand, lend themselves to scaffolded instruction, during which students actively and purposefully use (and practice) strategies that skilled readers would use to understand the text (e.g., previewing, making predictions, reading to confirm or modify predictions, inferencing, re-reading, taking notes, summarizing). Reading materials that are too challenging (i.e., at the frustration level because of, e.g., too many unknown words, grammatical complexity, or poorly signalled organization) are instructionally ineffective. Such materials quickly de-motivate students and de-motivated students do not enjoy reading, do not read much, and, therefore, do not (and cannot) improve their reading abilities.

In addition to integrating easy and appropriately challenging texts into instruction, students benefit from reading texts of different types, including print and digital texts, narrative and expository texts, prose and non-prose texts, texts with different types of discourse organization (e.g., description, comparison-contrast, problem-solution, chronology), and non-linear texts (e.g., charts, diagrams, figures, graphs, maps, and tables).

Principle #13: Address Students' Digital-Literacy Skills

Now that we are well into the 21st century, it is time to make a commitment to digital-literacy training in our L2 reading curricula. In today's world, most language students seem to spend much more time on their electronic devices than with print texts (Kervin et al., 2018). Yet, the skills (and comfort levels) that students have developed using their digital devices for (mainly) social purposes do not transform themselves into the reading comprehension skills and strategies that they need for more academic digital texts and tasks (Dobler, 2015; Zawilinski et al., 2019). What this suggests is that digital texts and tasks should become an increasingly important part of reading comprehension instruction (Cobb, 2017). To prepare students for the digital-literacy demands inherent in reading-to-learn contexts, at school and in the workplace, language teachers should address the digital tasks that have implications for academic success (Dobler & Eagleton, 2015), including:

- navigating the convoluted pathways inherent in online information searches;
- locating academically relevant online information;

- reading online sources critically;
- determining the relative importance of information;
- judging the accuracy, reliability, and bias of online sources;
- determining authorship;
- making effective connections within and across online texts; and
- using online information responsibly for written assignments.

Principle #14: Connect Reading to Writing to Prepare Students for Academic Tasks

In academic settings, tasks that require the integration of reading and writing are commonplace. In fact, the ability to integrate reading and writing is critical for academic success (Grabe & Zhang, 2013; Hirvela, 2016). Using textual resources to complete academic writing tasks is challenging for students and requires a lot of practice. When making a curricular commitment to reading–writing integration, students can be guided in numerous tasks, including summarizing, synthesizing information from multiple sources, and responding critically to textual input. Students can also practice taking notes while reading and using notes for authentic purposes (e.g., writing a paper).

Grabe and Zhang (2013) recommend initiating reading–writing integration early in language-program curricula and providing opportunities for a lot of iterative practice. At the point when students are reading informational texts, reading curricula can connect reading and writing by focusing explicit attention on reading comprehension with the texts that students will use in read-to-write tasks. Reading–writing integration creates natural opportunities for (a) reinforcing the importance of being responsible for text information (rather than relying on personal opinions) and (b) introducing the expectations of different read-to-write tasks.

Principle #15: Assessment for Learning is Key for Students' Reading Development

In our discussion of Principle 6, we stated that the teaching, rather than the testing, of main-idea comprehension should be central to what we do in our reading classes. Nonetheless, in reading curricula, there is an important place for assessment, which, for practical purposes, can be divided into two basic types: Assessments *of* learning (i.e., proficiency and achievement) and assessments *for* learning, the latter used for guiding and supporting student learning (William & Leahy, 2015). Assessments *for* learning—also referred to as learning-oriented assessment (Turner & Purpura, 2016)—measure students' day-to-day (or weekly) improvements; results are used to provide *forward-looking feedback* (Carless, 2007). Both assessments *of* and *for* learning are important indicators of the effectiveness of a reading curriculum.

The major difference between assessments *of* and *for* learning centers on how indicators of student performance are used. In assessments *of* learning, teachers gather evidence, from formal and informal measures of student performance, to decide how well students seem to be learning and how well the curriculum is working. Assessment *for* learning, on the other hand, is a concept that all teachers should embrace as part of their ongoing efforts to improve students' learning. Assessment *for* learning focuses on students' performance “at the moment,” most commonly through informal measures of progress. In the context of classes focused on reading–skills development, this form of assessment should result in forward-looking teacher feedback that (a) raises students' awareness of their learning progress, (b) leads to classroom discussions and student self-reflection to improve learning outcomes, (c) facilitates teacher–student and student–student interactions centered on ways to improve reading performance, and (d) results in active student engagement with feedback to improve their reading abilities. This way to approach assessment also ties in strongly with the concept of deliberate practice (Principle 3). Assessment *for* learning is different from common conceptions of assessment, but it is fundamental to student learning and, in this case, reading–skills development.

Conclusion

Here we have introduced 15 principles that can inform the development and/or refinement of L2 reading curricula. Underlying our 15 principles are five assumptions that are worth pointing out. First is the recognition that students engage most enthusiastically in reading instruction when text materials are interesting, relevant, abundant, and accessible. Second, students respond well to reading instruction when given some choices in reading texts and tasks; some degree of student choice encourages student engagement, motivation, and autonomy. Third, explicit instruction and reading-skills development tasks should build upon the main texts being read in students' textbooks. If key reading skills, comprehension strategies, and language features cannot be exemplified initially with the texts being read in class, then either the textbook does not complement students' needs (and should be reevaluated) or the skills, strategies, and language features targeted for instruction may not be as important as assumed. Fourth, students need to have successful reading experiences; a steady diet of frustration with L2 reading leads to student disengagement. Finally, some actual reading of texts should be included in every class session; too often, this practice is overlooked.

It is worth noting, in closing, that our 15 principles cannot possibly apply equally across all L2 student groups or instructional settings, given the diversity of our students, resources, programs, locations, and goals. It would be unrealistic to devote equal time to all 15 principles at every curricular level. Prioritizing certain curricular principles over others is the responsibility of reading teachers, curriculum designers, and material developers. Emphases among the principles should shift as students move from beginning reading proficiency to more advanced reading abilities. The aim is to prioritize the principles that benefit students the most as they become more skilled readers. Despite these caveats, the evidence-based principles introduced here represent excellent starting points for those reviewing, revitalizing, and/or developing L2 reading curricula.

References

- Almasi, J. F. & Hart, S. J. (2019). Best practices in narrative text comprehension instruction. In L. M. Morrow & L. B. Gambrell (Eds.), *Best practices in literacy instruction* (6th ed., pp. 221–249). Guilford Press.
- Anderson, J. R. (2020). *Cognitive psychology and its implications* (9th ed.). Worth Publishers.
- Anderson, N. J. (2014). Developing engaged second language readers. In M. Celce-Murcia, D. Brinton, & M. A. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 170–188). Cengage/National Geographic Learning.
- Ash, G. E. & Baumann, J. F. (2017). Vocabulary & reading comprehension: The nexus of meaning. In S. E. Israel (Ed.), *Handbook of research on reading comprehension* (2nd ed., pp. 377–405). Guilford Press.
- Beck, I. L. & Sandora, C. (2016). *Illuminating comprehension and close reading*. Guilford Press.
- Boardman, A. G., Boelé, A. L., & Klingner, J. K. (2017). Strategy instruction shifts teacher and student interactions during text-based discussions. *Reading Research Quarterly*, 53(2), 175–195.
- Britt, M. A., Rouet, J.-F., & Durik, A. M. (2018). *Literacy beyond text comprehension: A theory of purposeful reading*. Routledge.
- Cain, K., Compton, D., & Parrila, R. (Eds.) (2017). *Theories of reading development*. John Benjamins.
- Carless, D. (2007). Learning-oriented assessment. Conceptual bases and practical implications. *Innovations in Education and Teaching International*, 44(1), 57–66.
- Cobb, T. (2017). Reading and technology: What's new and what's old about reading in hyperlinked multimedia environments? In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning: Volume III* (pp. 312–327). Routledge.
- DeKeyser, R. (2015). Skill acquisition theory. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition* (2nd ed., pp. 94–112). Routledge.
- Dobler, E. (2015). E-textbooks: A personalized learning experience or a digital distraction? *Journal of Adolescent & Adult Literacy*, 58(6), 482–491. <https://doi.org/10.1002/JAAL.391>
- Dobler, E. & Eagleton, M. B. (2015). *Reading the web: Strategies for internet inquiry* (2nd ed.). Guilford Press.
- Duke, N. K. & Martin, N. M. (2019). Best practices in informational text comprehension instruction. In L. M. Morrow & L. B. Gambrell (Eds.), *Best practices in literacy instruction* (6th ed., pp. 250–270). Guilford Press.

- Ericsson, K. A. (2018). The differential influence of experience, practice, and deliberate practice on the development of superior individual performance of experts. In K. A. Ericsson, R. R. Hoffman, A. Kozbelt, & A. M. Williams (Eds.), *The Cambridge handbook of expertise and expert performance* (2nd ed., pp. 745–769). Cambridge University Press.
- Ericsson K. A., Hoffman, R. R., Kozbelt, A., & Williams, A. M. (Eds.). (2018). *The Cambridge handbook of expertise and expert performance* (2nd ed.). Cambridge University Press.
- Ericsson K. A. & Pool, R. (2016). *Peak: Secrets from the new science of expertise*. Houghton Mifflin Harcourt.
- Fisher, D. & Frey, N. (2019). Best practices in adolescent literacy instruction. In L. Mandel Morrow & L. B. Gambrell (Eds.), *Best practices in literacy instruction* (6th ed., pp. 150–172). Guilford Press.
- Ganske, K. (2019). Best practices in vocabulary instruction. In L. Mandel Morrow & L. B. Gambrell (Eds.), *Best practices in literacy instruction* (6th ed., pp. 199–220). Guilford Press.
- Garas-York, K. & Almasi, J. F. (2017). Constructing meaning through discussion. In S. E. Israel (Ed.), *Handbook of research on reading comprehension* (2nd ed., pp. 500–518). Guilford Press.
- Gardner, D. (2013). *Exploring vocabulary: Language in action*. Oxford University Press.
- Grabe, W. & Stoller, F. L. (2018). Reading: Section I. In J. Newton, D. Ferris, W. Grabe, C. Goh, F. L. Stoller, & L. Vandergrift, *Teaching English to second language learners in academic contexts: Reading, writing, listening, speaking* (pp. 7–72). Routledge.
- Grabe, W. & Stoller, F. L. (2020). *Teaching and researching reading* (3rd ed.). Routledge.
- Grabe, W. & Yamashita, J. (2022). *Reading in a second language: Moving from theory to practice* (2nd ed.). Cambridge University Press.
- Grabe, W. & Zhang, C. (2013). Reading and writing together: A critical component of English for academic purposes teaching and learning. *TESOL Journal*, 4(1), 9–24.
- Graves, M. F. (2016). *The vocabulary book: Learning and instruction* (2nd ed.). Teachers College Press.
- Guthrie, J. T. & Klauda, S. L. (2016). Engagement and motivational processes in reading. In P. Afflerbach (Ed.), *Handbook of individual differences in reading: Readers, text, and context* (pp. 41–53). Routledge.
- Guthrie, J. T., Klauda, S. L., & Ho, A. (2013). Modeling the relationships among reading instruction, motivation, engagement, and achievement for adolescents. *Reading Research Quarterly*, 48, 9–26.
- Guthrie, J. T. & Taboada Barber, A. M. (2019). Best practices in motivating students to read. In L. Morrow & L. Gambrell (Eds.), *Best practices in literacy instruction* (6th ed., pp. 52–72). Guilford Press.
- Hebert, M., Bohaty, J., Nelson, J. R., & Brown J. (2016). The effect of text structure instruction on expository reading comprehension: A meta-analysis. *Journal of Educational Psychology*, 108(5), 609–629.
- Hedgcock, J. S. & Ferris, D. R. (2018). *Teaching readers of English: Students, texts, and contexts* (2nd ed.) Routledge.
- Hirvela, A. R. (2016). *Connecting reading and writing in second language writing instruction* (2nd ed.). University of Michigan Press.
- Jiang, X. (2012). Effects of discourse structure graphic organizers on EFL reading comprehension. *Reading in a Foreign Language*, 24(1), 84–105.
- Kervin, L., Mantei, J., & Leu, D. J. (2018). Repositioning online reading to a central location in the Language Arts. In D. Lapp & D. Fisher (Eds.), *Handbook of research on teaching the English Language Arts* (4th ed., pp. 327–358). Routledge.
- Klingner, J. K., Vaughn, S., & Boardman, A. G. (2015). *Teaching reading comprehension to students with learning difficulties* (2nd ed.). Guilford Press.
- Komiyama, R. (2009). CAR: A means for motivating students to read. *English Teaching Forum*, 47(3), 32–37.
- Kuhn, M. R., Rasinski, T. V., & Young, C. (2019). Best practices in fluency instruction. In L. Mandel Morrow & L. B. Gambrell (Eds.), *Best practices in literacy instruction* (6th ed., pp. 271–288). Guilford Press.
- Lightbown, P. (2019). Perfecting practice. *Modern Language Journal*, 103(3), 703–712.
- Mokhtari, K. & Sheorey, R. (Eds.) (2008). *Reading strategies of first- and second-language learners: See how they read*. Christopher-Gordon.
- Mol, S. & Bus, A. (2011). To read or not to read: A meta-analysis of print exposure from infancy to early adulthood. *Psychological Bulletin*, 137(2), 267–296.
- Munger, K. A. & Murray, M. S. (2014). Text complexity and deliberate practice: Common cores of learning. In K. A. Hinchman & H. K. Sheridan-Thomas (Eds.), *Best practices in adolescent literacy instruction* (pp. 99–119). Guilford Press.
- Murphy, P. K., Wilkenson, I. A. G., Soter, A. O., & Hennessey, M. N. (2009). Examining the effects of classroom discussion on students' comprehension of text: A meta-analysis. *Journal of Educational Psychology*, 101, 740–764.
- Nation, I. S. P. & Waring, R. (2020). *Teaching extensive reading in another language*. Routledge.
- Pollatsek, A. & Treiman, R. (Eds.) (2015). *The Oxford handbook of reading*. Oxford University Press.

- Rasinski, T. V., Blachowicz, C., & Lems, K. (Eds.). (2012). *Fluency instruction: Research-based best practices* (2nd ed.). Guilford Press.
- Robb, T. & Kano, M. (2013). Effective extensive reading outside the classroom: A large-scale experiment. *Reading in a Foreign Language*, 25(2), 234–247.
- Schmitt, N., Jiang, X., & Grabe, W. (2011). The percentage of words known in a text and reading comprehension. *Modern Language Journal*, 95(1), 26–43.
- Schmitt, N. & Schmitt, D. (2020). *Vocabulary in language teaching* (2nd ed.). Cambridge University Press.
- Schwanenflugel, P. & Knapp, N. (Eds.) (2016). *The psychology of reading: Theory and applications*. Guilford Press.
- Seidenberg, M. S. (2017). *Language at the speed of sight*. Basic Books.
- Sparks, R., Patton, J., & Murdoch, A. (2014). Early reading success and its relationship to reading achievement and reading volume: Replication of ‘10 years later’. *Reading and Writing*, 27, 189–211.
- Stigler, J. W. & Miller, K. F. (2018). Expertise and expert performance in teaching. In K. A. Ericsson, R. R. Hoffman, A. Kozbelt, & A. M. Williams (Eds.), *The Cambridge handbook of expertise and expert performance* (2nd ed., pp. 430–452). Cambridge University Press.
- Stoller, F. L., Anderson, N. J., Grabe, W., & Komiyama, R. (2013). Instructional enhancements to improve students’ reading abilities. *English Teaching Forum*, 51(1), 2–11, 33.
- Suk, N. (2017). The effects of extensive reading on reading comprehension, reading rate, and vocabulary acquisition. *Reading Research Quarterly*, 52(1), 73–89.
- Taboada Barber, A. M. (2016). *Reading to learn for ELs: Motivation practices and comprehension strategies for informational texts*. Heinemann.
- Turner, C. E. & Purpura, J. E. (2016). Learning-oriented assessment in second and foreign language classrooms. In D. Tsagari & J. Banerjee (Eds.), *Handbook of second language assessment* (pp. 255–273). DeGruyter Mouton.
- van den Broek, P. & Kendeou, P. (2017). Development of reading comprehension. In K. Cain, D. Compton, & R. Parilla (Eds.), *Theories of reading development* (pp. 283–305). John Benjamins.
- Vaughn, S., Martinez, L. R., Wanzek, J., Roberts, G., Swanson, E., & Fall, A-M. (2017). Improving content knowledge and comprehension for English language learners: Findings from a randomized control trial. *Journal of Educational Psychology*, 109(1), 22–34.
- Webb, S. & Nation, I. S. P. (2017). *How vocabulary is learned*. Oxford University Press.
- William, D. & Leahy, S. (2015). *Embedding formative assessment: Practical techniques for K-12 classrooms*. Learning Sciences International.
- Yamashita, J. (2013). Effects of extensive reading on reading attitudes in a foreign language. *Reading in a Foreign Language*, 25(2), 248–263.
- Yoshizawa, K., Takase, A., & Kyoko, O. (2018). How does extensive reading help Japanese EFL learners develop grammatical knowledge and reading fluency. *Extensive Reading World Congress Proceedings*, 4, 1–11.
- Young, C. J. & Rasinski, T. (2018). Readers theater: Effects on word recognition automaticity and reading prosody. *Journal of Research in Reading*, 41(3), 475–485.
- Zawilinski, L., Forzani, E., Timbrell, N., & Leu, D. J. (2019). Best practices in teaching the new literacies of online research and comprehension. In L. Mandel Morrow & L. B. Gambrell (Eds.), *Best practices in literacy instruction* (6th ed., pp. 337–358). Guilford Press.

Building a Convergent Model of the Interlanguage Reading System

Barbara Birch

This chapter focuses on some important interlanguage implications within the field of applied L2 adult literacy research and classroom practice. It makes the case that first language (L1) knowledge and processing strategies matter a lot when readers encounter a second language (L2) writing system. This chapter argues for a complex L1 literate linguistic infrastructure that converges on an optimal L1 reading system by paying attention to acoustic, phonological, and other distinctive features in the print environment, including direct instruction. The optimal L1 reading system has important implications for subsequent multicompetent interlanguage reading systems. The chapter concludes with a discussion about one very high metalinguistic standard for any L1 or interlanguage linguistic infrastructure: how readers know if a word is legal to use in Scrabble. I am taking my inspiration from this quote from Seidenberg (2017, p. 139): “Reading involves using orthography to compute the semantic and phonological codes for words, which can then be used in performing various tasks: comprehending words, pronouncing them aloud, and deciding if a word is a legal Scrabble word.” Scrabble is sold in 121 countries, in 29 languages, with almost 150 million sets sold worldwide and 4,000 Scrabble clubs around the world (Wikipedia, n.d.).

When the term **interlanguage** was coined in the 1970s, the L1 language system was considered a system of internal grammatical phrase structure rules to generate grammatical structures and a lexicon to insert words into the structures to generate sentences. When people learned an L2, they relied on their L1 rules and lexicon because their L2 knowledge was insufficient. This resulted in transfer effects either positive (**facilitation**) or negative (**interference**). The interlanguage period was characterized by deficits remedied only when learners gained sufficient mastery of the L2 rules and lexicon. At that point, the L1 system would no longer affect the L2 system, and the interlanguage (and interference) would vanish. This description of interlanguage is no longer viable.

There are assets in the interlanguage, not just deficits. Mohanty (1994, p. 92) suggests that bilinguals develop certain strategies that allow them to control and monitor their cognitive and linguistic processing, making them more effective in intellectual tasks. Cook (1995, p. 94) coined the term **multicompetence** for “an individual’s knowledge of a native language and a second language, that is, L1 linguistic competence plus L2 interlanguage.” Multicompetent people show evidence of increased metalinguistic awareness, creativity, and cognitive flexibility. It is possible that the experience of learning and maintaining two or more languages, including diverse knowledge and strategies in the interlanguage reading system, leads to the more effective deployment of different strategies in the learning of additional languages.

Recently, Jiang et al. (2019, p. 86) define interlanguage as a form of natural language that reflects learners' cognitive and linguistic strategies aimed at constructing a new linguistic system that progressively approaches the target language. Interlanguage reading then refers to a rich and strategically productive transition between the L1 reading system and the L2 reading system. On the other hand, there may be no endpoint of a perfect L2 reading system free from L1 transfer. Instead, interlanguage reading systems may be unique, hybrid, multicompetent systems with permanent transfer effects in knowledge and strategy. Furthermore, researchers can make more accurate predictions about transfer effects because they know more about universal principles and strategies, acquisition models, distinctive features of language, and the cause of transfer effects in reading.

Universals of L1 Reading

In 1990, Hoover and Gough proposed **the simple view** of L1 reading. It was simple because there were only two components that affected reading comprehension: listening comprehension and word recognition. The simple view of reading is still a good way to think about reading (Verhoeven & van Leeuwe, 2012). Children acquire an extensive language awareness system and linguistic processing strategies for listening and speaking as they become adept at processing oral language in their surroundings. This pre-literate linguistic infrastructure is a network of what Seidenberg called **codes** in the quote on p. xx. Pre-literate codes are stable memory traces that link pronunciations of words to meanings. This oral/aural system is available for children as a resource when they begin their experiences with literacy, which requires the addition of graphic representations to the system of codes. In particular, when children learn to read, they develop their capacities for written word recognition to connect spellings to the codes in their pre-literate linguistic infrastructure. Literate codes are firm three-way memory associations linking sound, spelling, and meaning. In successful reading, the associations among sound, symbol, and meaning must be automatic and effortless, so that readers can extract meaning quickly while reading. The simple view of reading depends on four universal reading principles and two processing principles.

Universal Reading Principles

The four principles that characterize all known writing systems based on spoken languages are acculturation, phonology, mapping, and word recognition.

Acculturation

Languages and writing systems are subsystems in the cultural production created by human groups in order to communicate with each other across time and space. Reading acculturation means acquiring a language-dependent system in the mind. The way that the system emerges and develops is the same in everyone with a normal brain but the reading systems themselves are different because different writing systems offer different challenges to readers. When readers develop their L1 reading skills, their brains acquire the cognitive architecture necessary for mastering the particular writing system for their L1. The resulting neural pathways in different reading systems differ in predictable ways because the writing systems differ in predictable ways. Exposure to and use of writing systems change people's brains; this is confirmation that culture changes the way our brains work.

Phonology

Readers need phonological awareness to read because in all writing systems, graphic symbols link spoken representations (sounds) with their corresponding written representation (spellings).

Phonology is involved in different ways in reading different writing systems because the linkages vary across orthographies and writing systems. **Phonemic awareness** is one type of phonological awareness, one that is largely dependent on learning an alphabetic script.

Mapping

Spoken words map onto graphic symbols in the writing system but the mapping details differ for each language and its writing system (Koda, 2008, p. 73). In particular, the mapping between sound and spelling occurs at different **grain-sizes**, a metaphor that refers to the different sizes or levels of representation: sounds, syllables, or words. In an alphabetic writing system, the correlation is between letters and phonemes (a unit of sound in a language), but other writing systems have different correlations. Successful reading involves the development of strong mapping connections. Learning to read means learning the mappings among visual symbols, meanings, and sounds and unconscious linguistic strategies to process them. Some mappings are **transparent** (i.e. easy to learn) and some are **opaque** (i.e. difficult to learn). Another factor that makes the mappings in some writing systems harder is **syllable complexity**, or how complex the syllables are in the language.

Word Recognition

Seidenberg (2017) points out that successful reading depends on the rapid and automatic recognition of words based on their phonological, orthographic, and semantic information. Word recognition means that a unique memory trace linking sound, spelling, and meaning, a **code**, activates in memory. **Familiarity** is one factor, because firm neural connections between the spelling of a word and its sound and meaning have formed through frequent encounters with the word in print. Common grammatical **system words** (*the, if, then, we*) and **sight words** (*enough, here, there*) are often the most familiar words.

Despite these universals, there will always be variation in how and why people learn to read. Personal variables (gender, age, parental behaviors, motivation, amount of leisure, or peer group influences), cognitive factors (memory limitations, attention span, or intelligence; physical factors like vision, hearing, or speech), and linguistic factors (degree of phonological awareness, amount and depth of vocabulary knowledge and so on) will cause individual and societal variation in reading.

Implications

Because the L1 reading system is language-dependent, interlanguage reading requires either the construction of a new cognitive architecture or the repurposing of existing architecture. Interlanguage reading systems may require learning new phonological data and new segmentation skills along with the acquisition of new words in the second language. Learners may need to acquire new linguistic strategies at different grain-sizes to read successfully. The “hard-wired” L1 reading system must adjust to a writing system which presents different challenges because it may be opaque or have more complex syllables. Fluent interlanguage reading may require much more practice with reading L2 words and texts so that familiarity leads to firm memory traces in a robust network of codes.

Universal Processing Strategies

Word recognition also relies on two very general cognitive/linguistic strategies: a **holistic strategy** based on retrieving complex written symbols as unified chunks, and an **analytical strategy** based on breaking down complex written symbols into smaller units, analyzing them, and then

reassembling them in order to retrieve them from memory. These are universally available but preferences for one or the other depend on the writing systems learned.

Holism

When a written symbol like a number or a traffic sign is very familiar through repeated use, practice, and exposure, its code can be retrieved from memory as a whole without further analysis. Readers often read high frequency words like *the* or *this*, or words with highly irregular spellings (*yacht*, *sword*, *answer*) holistically, because they can't be decoded in a regular way. Readers use the appearance of the word as the cue to retrieve it without bothering to analyze the word into any smaller units.

Analysis

Ben-Yehudah et al. (2019) propose that as readers decode the orthography of a word, they retrieve the associated sounds and meaning, which are then integrated together to achieve word recognition. The ability to perceive smaller symbolic units or pieces within a larger symbol is **decoding**. Once analysis of the smaller units is sufficient, they are reassembled, a process called **recoding**. For instance, English readers can use an analysis/assembly strategy to read a sequence of letters as *s t a ck*, they can associate each graphic symbol with its most common sound, and then assemble them together to identify the code for the word *stack*. Alternatively, readers can divide the word into an **onset** and a **rhyme** *st-* *-ack*, retrieve the phonemic representations, and identify the code with its associated meaning.

Implications

Readers use both the holistic strategy and the analytic strategy to identify words, but they may prefer one over the other. One factor in the choice of preferred strategy is familiarity, because highly frequent words tend to be read holistically. Another factor is the grain-sized used in the writing system (Bhide, 2015). Logographic systems lend themselves to word-level holistic strategies; alphabets are perfect for analytical reading strategies. Ben-Yehudah et al. (2019) point out that English and Korean Hangul are both alphabetic so they map letter or letter clusters onto minimal and meaningless speech sounds, although the two scripts have a different visual organization. In English, the letters are arranged linearly, while Hangul letters are formed as squares that represent syllables. In each case, beginning readers benefit from knowledge about letter-sound correspondences to analyze (or decode) the pronunciation of an unfamiliar printed word to determine if they know a word orally or not.

Three Acquisition Models of L1 Reading

Most of the brain's activity is taken up with world knowledge and cognitive strategies used to navigate the world. However, language awareness and linguistic strategies form an important system within the brain, a **linguistic infrastructure** for language which forms through a convergence of general learning mechanisms, exposure, and use. Three models help to understand this convergence and the relationships among languages, writing systems, and reading. The first is a traditional information processing model, the second is a networked learning system, and the third is a data structure to represent the packages of information in a system of codes.

The Linguistic Infrastructure

The linguistic infrastructure combines both linguistic processing components in working memory (WM) and a language awareness system in long-term memory (LTM). The LTM language awareness

system includes what has been called the mental lexicon (word storage), semantic memory (word meaning storage), and phrase structure (syntax). The linguistic infrastructure has connections to cognitive and world knowledge areas, and comprehension takes place by means of those connections. WM linguistic strategies mediate between the LTM language awareness system and spoken or written language in the world. They take the flow of speech or written text as input and build, package, store, and retrieve different language units so that listening and reading can be carried out successfully, effortlessly, and efficiently.

WM Strategies

Linguistic strategies work in coordination simultaneously, so that people can listen or read successfully. **Phonological strategies** allow people to recognize the sounds of their language as they hear speech and process words during reading. **Orthographic strategies** permit readers to recognize letter shapes of a writing system (decoding), and match them with the sounds of a language, forming a visual/auditory image of a word (recoding) in the mind (Apel et al., 2019). **Lexical strategies** allow people to recognize words and combinations of words, and connect them to meanings and grammatical information. **Syntactic strategies** allow readers to arrange the words and meanings into phrases and sentences to construct an overall meaning. **Semantic strategies** allow people to compose sentence and text-level meanings for comprehension. (Both syntactic and semantic strategies are beyond the scope of this chapter, but see Birch (2013) for a view of syntactic, pragmatic, and discourse features in English writing.)

Implications

In the 1960s and 1970s, researchers thought that reading systems in different languages were largely equivalent. Some thought there was a **common underlying proficiency** (CUP) shared by both L1 and L2 reading systems so that the interlanguage reading system had an interdependent structure accessible in cognitively demanding tasks like reading and writing. In the 1980s, reading experts focused primarily on cognitive strategies and vocabulary learning, and assumed that there was a common **cognitive academic language proficiency** (CALP) that would serve both L1 and L2 reading ability (Cummins, 1979). The assumption was that if people were fluent readers in their L1, it was because they had strong cognitive abilities and CALP, and they should be fluent readers in their L2 too. If learners were poor readers in their L2 it was because they lacked CALP abilities, and would be expected to be poor L1 readers too. This led to the idea that learners should always become proficient readers in their L1 and develop their CALP, before attempting to learn to read a later language. Once cognitively and academically proficient in L1, learners could simply add on an L2 reading system. Increasing proficiency in the L2 would automatically lead to reading success. Nevertheless, there was little empirical evidence to substantiate this optimistic point of view, and neither CUP nor CALP factored in the differences in writing systems. In fact, the L1 linguistic infrastructure is highly language dependent with a lot of very specialized knowledge and strategies. It needs to undergo substantial reworking in order to read an L2, depending on how different the linguistic features and writing systems are.

Neural Networks

A neural network develops from repeated learning and practice experiences within the context of normal language and direct instruction. It models how a human brain learns by building pathways and connections among tiny linguistic microprocessors. The result of connecting millions of tiny microprocessors in a network is the linguistic infrastructure system described earlier. The brain is

composed of a dense network of tiny nerve cells called **neurons**. Neurons send and receive electrical or chemical stimulation to and from different sources like skin and muscles. The stimulation triggers the neuron to emit a signal across a connection (synapse) to another neuron, which activate as well. Because of the amount of activation it receives or sends, each signal gets strengthened or weakened in comparison with others.

Neurons are organized in layers. Neurons in the first layer activate upon detecting tiny physical features of sights and sounds in the world and mimic the first line of processing strategies in the human brain. The last layer is the output layer, where final processing (e.g. identification, recognition, decision-making, and selection) occurs. Between the input layer and the output layer are numerous hidden layers with neurons activating each other, and with time, neural pathways form, strengthen, and weaken. The hidden layers allow the tiny features of sound and shape detected by the first layer of neurons to combine into larger units of linguistic knowledge as partial information and these, in turn, combine into larger units up to the level of identifiable linguistic units like words.

Implicit or Statistical Learning

The brain learns a language by increasing and decreasing the connections between neurons, so that LTM traces and pathways form between sound stimulation (spoken words), visual images (written words), and meanings. The linguistic infrastructure stores these memory traces as recipes to recreate linguistic knowledge as needed while using language or reading. Thus, language learning involves the construction of neural pathways that over time and through exposure form the linguistic infrastructure that supports reading. The kind of learning modeled by neural networks is called **implicit learning**. Plante and Gomez (2018, p. 710) contrast implicit learning with explicit teaching:

Implicit learning is a process in which learners extract regularities from the world around them without conscious intent or knowledge of these patterns. Such learning contrasts with explicit teaching on the part of adults (e.g., “Wheat is a plant because it grows in the ground”; “When there are two, we say /s/”) or attempts by the learner to think explicitly about what constitutes correct language use (e.g., Should I use “he” vs. “him” this time?). Instead, implicit learning capitalizes on the learner’s own cognitive biases for tracking structure in the input.

The innate ability that underlies implicit learning is the ability to take advantage of regularities and probabilities in the linguistic environment in order to learn through use and exposure. Researchers understand what those regularities and probabilities are by using statistics to estimate frequency of occurrence. How often does the word “big” occur as opposed to “huge”? How often does the word “the” occur instead of “that”? People are unconsciously sensitive to the statistical nature of linguistic features of language even though they are not consciously aware of it, and this sensitivity pays off in learning. For instance, citing a number of studies, Elleman et al. (2019) link **statistical learning** to children’s development of word segmentation, early literacy-related skills, acquisition of orthographic structure, grapheme–phoneme correspondence, stress placement on bisyllabic words, and development of reading, spelling, and vocabulary.

Implications

The same kind of neural network architecture must be constructed in the interlanguage as the learner acquires an L2, but without the benefit of implicit or statistical learning in most cases, because L2 acquisition doesn’t usually take place daily, minute by minute, in a natural setting. The interlanguage linguistic infrastructure is at a disadvantage in that it must depend almost entirely

on direct instruction to provide shortcuts. Instead of knowledge of the probabilities that govern language use, the L2 interlanguage has rules and examples. The fundamental difference between acquiring L1 and learning L2 is a difference in presence or lack of statistical learning. That is why practice is crucial. The ways that people learn their L1 and L2 are largely the same (neural networks) but the lack of implicit or statistical learning will guarantee mixed results for most L2 learners. This is true in speaking, listening, reading, and writing.

Codes in a Concordance

WM uses spellings to retrieve or actually “recreate” memory traces or data structures in a dense LTM network; these memory traces/data structures are called **codes**. Neural networks learn what the codes are implicitly and statistically from interaction with the world. Seidenberg (2017, p. 140) hypothesizes that a basic literate code for a word has a complex three-way pattern of neural network activation representing a spelling, which is associated with another unique pattern (a sound), and a meaning.

Codes

A code begins as WM neural activity when a feature of sound is detected. This neural activity combines the newly detected sound feature with other acoustic features in order to identify the sound. Over time, with a number of exposures to this particular combination of features, the detecting neurons begin to activate each other automatically and a stable memory trace begins to form. That is the code. Pathways are created among the codes and a neural architecture is built in the LTM language awareness system. Implicit pre-literate codes form a network but they do not contain information about spelling. Learning to read requires more information, so existing pre-literate codes add an image of the appearance of the word and its spelling. The more elaborate the codes become, the better readers’ explicit language awareness.

Concordance

The language awareness system is a dynamic concordance, not a static dictionary of definitions. A concordance is a computational listing of linguistic expressions that keeps track of their various usages and the neighboring words used around them. The literate linguistic infrastructure is a concordance of basic and elaborate codes along with decoding procedures to unravel the mysteries of written language. The neural pathways and connections between orthography and phonology, semantics, and syntax strengthen through experience with reading. The pathways and connections acquire weights as they are activated, so the associations between a spelling and its phonology, meaning, and grammar change depending on experience or practice, as well as feedback about performance in instructional settings. Partial codes represent partial information like common spelling patterns, prefixes, or suffixes. Partial codes support efficient reading in English because they are overlapping patterns that reoccur in a number of words. Complex codes are linguistic constructions of any larger size than the word, such as common **collocations** like *set the table* or **idioms** like *raining cats and dogs* or *kick the bucket*. (Please note a terminological clash: In Construction Grammar, basic, partial, and complex codes are called constructions and they include grammatical tags for parts of speech, like proper name or verb (Birch, 2013).)

Priming

The glue that holds codes together in the linguistic infrastructure is a psychological process called priming. In **priming**, the use of one code, the “prime” (a word or phrase), results in the same or a

similar or related code (the “target”) being used subsequently by the speaker or the listener. Priming is strong when the prime and the target have a high probability of co-occurring in normal (as shown by statistical studies) language usage. Thus, what speakers and listeners have been exposed to implicitly influences the production or recognition of subsequent language. McDonough and Trofimovich (2009, p. 2) remark that:

A speaker’s sensitivity to previous encounters with language forms and meanings suggests that language use is sensitive to the occurrence of language forms and meanings in the environment. In other words, the exact forms and meanings that speakers use can be affected by the language that occurred in discourse they recently engaged in.

Priming refers to a variety of phenomena. **Semantic priming** refers to facilitation in the processing of a response word because of similar or related meanings. **Repetition priming** is facilitation in processing words because of prior exposure to those words. Repetition priming operates at the level of prefixes and suffixes, individual words, collocations, colligations, or sentences. For example, Grainger and Carreiras (2009, p. 935) report that there is evidence for priming across forms that share the same prefix (*REmake* primes *REthink*) and suffix (*farmER* primes *walkER*). **Lexical priming** is the tendency for people to process a word, phrase, or collocation more quickly and more accurately because they have had previous exposure to that code. **Syntactic priming** affects the likelihood that a speaker will produce a certain grammatical structure, like passive instead of active, when compared with an equally acceptable alternative. Hoey (2005) specifically applies the idea of priming to words (or codes) and collocations, which are complex codes composed of codes that have a high statistical probability of occurring together.

We can only account for collocation if we assume that every word is mentally primed for collocational use. As a word is acquired through encounters with it in speech and writing, it becomes cumulatively loaded with contexts and co-texts in which it is encountered, and our knowledge of it includes the fact that it co-occurs with certain other words in certain kinds of context. The same applies to word sequences built out of these words; these too become loaded with the contexts and co-texts in which they occur. I refer to this property as nesting, where the product of a priming becomes itself primed in ways that do not apply to the individual words making up the combination.

(Hoey, 2005, p. 8)

Implications

If priming is “the phenomenon in which prior exposure to specific language forms or meanings either facilitates or interferes with a speaker’s subsequent language processing” (McDonough & Trofimovich, 2009, p. xvi), then the acquisition of priming associations is paramount to language learning. If the linguistic infrastructure is a concordance of dense memory traces in a neural architecture, then the implications for acquisition in interlanguage reading are obvious. The task is daunting: to build up an equivalent but different linguistic infrastructure in another language. Such a task can only be accomplished slowly and implicitly through repetitive exposures, uses, practice, and direct instruction. Priming must also affect the choice between holistic and analytical processing in ways we don’t yet understand. The learning mechanisms may not be different in L1 and L2 but the prior cognitive architecture and neural networks geared to L1 will affect acquisition in the interlanguage reading system. In addition, the amount of time, exposure, and practice in implicit and statistical learning is very different in L1 and in the interlanguage.

Distinctive Features

According to Plante and Gomez (2018, p. 713), infants naturally seek regularity in trying to understand what they experience in the world around them. To deal with variability and perhaps confusion, they implicitly start noticing and remembering the features and regularities common to different experiences. Babies' earliest language awareness system emerges as they segment the flow of speech into stable memory traces that build neural networks associating distinctive features at the lowest level to spoken partial and basic codes at the upper levels. The ability to **segment** speech is an example of analysis. Segmentation of the flow of speech causes phonological awareness to emerge.

Distinctive features are the acoustic properties that discriminate and classify speech sounds in listening and in language production. The smallest detectors for learning in neural networks are **feature detectors**. Werker and Tees (1984) showed that infants 6 months and younger are sensitive to phonetic features used in the languages of the world, even those that do not occur in the infant's first language. By 12 months of age, infants narrow their attention to the distinctive features in their L1. As they start to comprehend and produce understandable language, their language awareness systems converge on the statistically more probable L1 sounds. By 7 years of age, children's linguistic infrastructures converge on networked adult sound systems with implicit awareness of certain sound segments, especially rhymes and phonemes.

Rhyme Awareness

Even very young children are sensitive to rhymes in stories, poems, and songs; awareness of rhyme is independent of literacy development (Cheung et al., 2001, citing Bertelson et al., 1989). Single syllables (*pie*) can be divided into an onset (*p-*) and a rhyme (*-ie*). The **onset** is the first part of a syllable, usually one or more consonants, and the **rhyme** is the vowel after it and anything after the vowel in the same syllable: *f/at*, *c/at*, *b/at*. Rhyme awareness predicts reading development, and it becomes explicit through exposure to nursery rhymes and stories. Children as young as 18 months catch on to the idea of rhyming words, as many games and songs exploit this ability. As children develop into pre-readers, they begin to organize words according to the syllable structure of onset-rhyme.

Phonemic Awareness

Under the influence of literacy instruction in a culture that uses an alphabetic writing system, implicit phonological awareness becomes explicit and begins to include phonemic awareness. **Phonemic awareness** is the knowledge of individual phonemes and their status within a sound system of **phonemes** in a language, and segmentation strategies to perceive them. Reading experts used to think children had to segment the stream of speech sound into individual sounds before learning the alphabet letters, but now they think that segmenting spoken words, although it is a helpful precursor, it is not a necessary one.

In fact, writing systems and the ability to segment speech into phonemes affect each other reciprocally. Cheung et al. (2001) studied both pre-readers and readers in Chinese and English, and concluded that orthographic as well as spoken language experience affected phonemic awareness. Chinese pre-readers and readers never developed the ability to segment speech into phonemes, but they got much closer if they learned to read and write Chinese using the Pinyin Roman alphabetization in addition to traditional characters. A character-based writing system doesn't lead to phonemic awareness because it is dependent on holistic processing. Exposed to an alphabetic system, however, children begin to segment syllables, onsets, and rhymes into smaller bits of sound, consonants, and vowels.

Graphemic Awareness

As children learn to read English as an L1, they start by detecting the shape features of letters to form memory traces that accumulate and strengthen over time. Graphemes have invariant features, and graphemic recognition occurs in neural networks with layers of features and letter detectors (Grainger et al., 2008). The lowest level of the network is a set of simple feature detectors (cells) that detect shapes and the orientation and location of the shapes. One cell is triggered by a shape like /, another by a horizontal shape --, and another by a shape like \. The intermediate levels of the network organize the shape and location information into composite cells like /-- or /\. The upper layers of the neural network contain shape-specific letter cells like **a**, **A**, **a**. At the top of the neural network, there might be a kind of template for all abstract grapheme shapes for the letter **A** in all fonts. Once the graphemes are recognized, candidate words that match the orthographic information are activated in the linguistic infrastructure. Feature, grapheme, and word recognition proceed from the bottom up, but the reading system also operates in a top-down direction. Higher level world knowledge from context, from semantics, and from statistical knowledge (familiarity) all assist readers in identifying graphemes and words.

Implications

The existing L1 linguistic infrastructure with its processing strategies, neural networks, feature detectors, and a system of codes in a concordance is not functional for the new demands of reading an L2 writing system, but beginning readers are forced to handle the demands somehow. Interlanguage is what happens when learners attempt to make sense of incoming L2 phonemic, graphemic, and lexical data that doesn't conform to L1 expectations. The beginning L2 reading systems have two options: either to incorporate the new data using L1 strategies as is, or to build up a new hybrid reading system with new phonemic and graphemic feature detectors, neural networks, codes, and concordances. In either case, there will be transfer from the L1 reading system strategies to the interlanguage reading system.

Focus on Forms

Focus on Forms is a time-tested classroom approach that leads to successful language learning and seems necessary for successful interlanguage reading in light of the universals and the models presented earlier. Methods with a primary emphasis on the sounds, alphabet letters, graphemes, spelling patterns, common syllables, prefixes and suffixes, word formation processes, and so on fall into the Focus on Forms approach. Language forms and structures are presented initially as decontextualized generalizations but they are practiced to the point of automaticity in both drills and meaningful communicative experiences in order to simulate the frequent use and exposure to language needed for implicit learning. The goal is to initiate memory traces efficiently and stimulate firm priming associations among them to build up the L2 reading system as rapidly as possible.

Focus on Forms is also a classroom approach with a long history of use in language education. In a Focus on Forms lesson, teachers introduce information about the lexical and grammatical structures of language that learners have already used productively in communication. It complements the Focus on Forms approach by drawing learners' attention to language patterns and exceptions in sound, spelling, morphological structure, etymology, collocational and phrasal requirements, semantic and pragmatic implications within the context of normal classroom activities like discussion, listening, texts, and writing. It provides interactive feedback and fine-tuning in response to learners' interlanguage needs but it also builds learners' overall awareness of language as a system and as a cultural resource.

Transfer: Estimating Interference and Facilitation

Koda (2008, p. 72) proposed that L2 readers from diverse L1s use qualitatively different linguistic strategies when reading the same target language. The explanation for the interlanguage strategic diversity is the structural variation in their L1 writing systems; their L1 reading systems interact with L2 print in complex but predictable ways. Their L1 reading systems are complete, dense, and largely hard-wired, but their interlanguage reading system is fragmentary, diffuse, and non-automatic. To become fluent in L2 reading, interlanguage neural pathways and connections need to form from learning and practice. Research on hybrid interlanguage systems, especially for reading, shows strong evidence for transfer and commonalities in how transfer takes place. There are two possible sources for facilitation or interference: the reading strategies that are available in the L1 infrastructure and the degree of difference between the two writing systems, or orthographic distance.

System Assimilation or Accommodation

Liu et al. (2007) discuss two hypotheses about what happens to the L1 reading system to handle L2 reading. First, the L1 system can assimilate to the L2 writing system and orthography without changing itself. If assimilation occurs, then brain activation patterns continue to show the same pattern as the L1 and linguistic processing strategies remain the same. Facilitation will occur if the two writing systems are similar and interference will occur if the two writing systems are very different. Psycholinguistic brain activation evidence from adult Chinese learners of English supports the idea that they are assimilating their existing neural architecture in their interlanguage reading. Some adult Chinese readers of English appear to read English as if it were Chinese, applying a holistic visual and meaning-based strategy rather than a decoding strategy. Liu et al. (2007, p. 143) suggest that although Chinese readers can read English as if it were Chinese, their reading success may be limited by using a holistic strategy.

Alternatively, the L1 reading system can adapt or accommodate to the features of the L2 writing system. In this case, brain activation patterns show a restructuring of neural pathways to handle the L2 print input, and consequently the interlanguage linguistic infrastructure begins to meet the needs of the L2 writing system. In this case, interference should disappear when readers become more proficient in reading their second language, so it becomes a matter of practice with the written L2. Liu et al. (2007, p. 143) found that better-skilled Chinese-speaking readers of English have different brain activation and behavior when compared to less-skilled Chinese readers. Indeed, “[h]igh levels of L2 alphabetic reading skill for an L1 Chinese reader may arise with experience at alphabetic decoding that requires accommodation to brain structures that serve alphabetic procedures.” Thus, greater proficiency in reading the English writing system may cause accommodation to supersede assimilation.

Strategic Availability

Birch (2011) suggested that all of the reading strategies that readers develop as they learn to read their L1 writing system remain available to them in their linguistic infrastructure, even though they go on to develop later strategies. Facilitation will occur if the knowledge and processing strategies learned for L1 are a) applicable to the L2 and b) available to the L2 reader. Interference will occur if the knowledge and strategies necessary for reading an L2 are a) not applicable to the L1 or b) not available to the L2 reader. A holistic visual meaning-based strategy will develop (or emerge) in order to read numbers or symbols in environmental print. Other scripts require the development of other reading strategies in addition to holism. For English, the following strategies/phases have been identified: pre-alphabetic holistic, partial alphabetic, fully alphabetic (looking at each

grapheme and assembling them to decode the word), consolidated alphabetic (retrieving common onset-rhyme patterns like *p-at* or *f-ame*), and fully consolidated holistic (retrieving common rhymes, syllables, prefixes and suffixes as wholes, like sight words). In addition, languages with transparent syllabic structures like Spanish or Italian require a syllabic reading strategy (“parsing” the word into syllables at each vowel grapheme: *sa-be*, *pe-ro*). In fact, the number of different reading strategies and the types of strategies could give an indication of the orthographic distance among writing systems. Orthographic distance is the idea that the further apart two writing systems are in their mapping grain sizes and details, the less the likelihood that there will be any reading strategies in common. The fewer the strategies in common, the less likelihood of facilitation and the greater the potential for interference.

Implications

English readers can accommodate their interlanguage reading system to a transparent alphabetic system like Spanish or Italian easily because they have already developed the fully alphabetic strategy. English readers need to acquire the syllabic strategy so that they see a word like *sabe* as *sa-be* not *s-abe*. The orthographic distance from English to Spanish is probably not great because of strategic availability. However, the need for Spanish/Italian readers to acquire the consolidated alphabetic strategy and the consolidated holistic strategy may make the distance from Spanish to English greater than the reverse.

In general, since decoding skills acquired in L1 affect L2 reading acquisition, the more similar the two writing systems are in their properties, the more facilitative transfer there will be. The closer two languages are in terms of syllable structure or orthography, the easier reading acquisition should be. It should be rather easy for a Spanish reader to learn to read Portuguese or Italian. Conversely, the more different the systems and orthographies are, the more difficulty there is. The more distant two writing systems are in their mapping grain sizes, the less the likelihood that there will be any processing strategies in common, as in Chinese readers of English. Nevertheless, the “distance” from Chinese to English may be greater than the “distance” from English to Chinese because English readers have an existing holistic strategy for reading logograms, but many Chinese L1 readers have few alphabetic strategies for reading English.

Playing Scrabble

Results from many different areas of language research suggest that the lexicon is representationally rich, that it is the source of much productive behavior, and that lexically specific information plays a critical and early role in the interpretation of grammatical structure.

(Elman, 2011, p. 1)

Universal principles and strategies, information processing and neural networked learning models, codes in a concordance, feature awareness, and transfer effects all converge on the idea that the L1 linguistic infrastructure is a dense, informationally rich system. Codes and their network of associations are the fundamental raw materials of a rich linguistic infrastructure, a concordance with firm pathways among sound, spelling, meanings, phrasal structure, contexts, pragmatics, and other memory traces. Priming associations link partial words, words, phrases, meanings, and pragmatic information.

Most people probably have around 20,000–40,000 codes in their literate L1 linguistic infrastructure available to them while they are reading. They know words in different ways, receptively or productively, denotation or connotation, metaphoric or literal meanings, and their ability to verbalize what they know about words is also variable. Although each person’s concordance is unique, there

are some common lexical competencies which range from the implicit to the explicit and from the most basic to most elaborate. On the basic end of the spectrum is the ability to hear and understand a word in a spoken sentence and to produce it oneself in speaking. Once literacy is acquired, readers can retrieve words based on their appearance and understand their meanings and significance in a text. Writers can produce words and phrases accurately based on stored knowledge about spelling and grammar. As their metalinguistic awareness increases, people can recognize inappropriate uses of words because of stored pragmatic associations. They may be able to provide definitions or paraphrases using other words, and even to explain something about parts of speech and phrasal requirements. They can give common words that are associated with other words through meaning associations, like synonyms, antonyms, and so on. Implicit and explicit metalinguistic awareness is an important goal for both L1 and L2 language and literacy instruction. Indeed, teachers themselves may need to expand their own awareness and knowledge of language as a starting point (Malakoff, 1992, p. 518; Thornbury, 1997, p. xii).

Scrabble players must retrieve words from memory that meet certain requirements: words must match the letters on the tiles they have and they must fit into the existing configuration of the board. Players use orthographical information from codes to decide on candidate words that meet the game requirements, trying to factor in how to get the most points with the words they play or how to open up more areas to play on the board. The rules of Scrabble are simple except for what words are “legal” and what words are “illegal.” Probably few players start out knowing these rules; the necessary associations that divide permitted words from prohibited words slowly emerge as the game is played over and over. Phonology seems largely irrelevant to the game because an incorrect pronunciation or two or many do not cause players to lose points. Semantics also seems unnecessary since players often use words whose meanings they are not sure of. In fact, players often consult a dictionary because the pragmatic associations necessary for fair play are highly specialized.

Legal words in Scrabble can be any part of speech except proper names; they can be of foreign origin but must still be English, like *chamois* or *taco*. Legal words can be slang, colloquial, archaic, or obsolete. Legal words must be complete free morphemes, not abbreviations, affixes, or bound roots. Compound words are allowed but not if they have a hyphen (*cupboard* but not *lexico-semantic*). Legal words can't have an apostrophe in them (*can't*, *o'clock*). Any experienced player would agree that there are quite a few generalized gaming strategies involved, beyond the rules that determine the legality of words in play, like bluffing and looking several plays ahead.

Scrabble is based on the dense and rich L1 literate linguistic infrastructure but playing the game shapes the infrastructure in ways that go beyond reading. Like reading and writing systems, Scrabble systems probably have commonalities across languages, but also areas of divergence where we might expect transfer, interference, and facilitation. Far from being a frivolous pastime, playing Scrabble successfully in the L2 may be a good test of just how successful language learning has been and how dense and rich the interlanguage language infrastructure is.

References

- Apel, K., Henbest, V., & Masterson, J. (2019). Orthographic knowledge: Clarifications, challenges, and future directions. *Reading and Writing, 32*, 873–889.
- Ben-Yehudah, G., Hirshorn, E., Simcox, T., Perfetti, C., & Fiez, J. (2019). Chinese-English bilinguals transfer L1 lexical reading procedures and holistic orthographic coding to L2 English. *Journal of Neurolinguistics, 50*, 136–148.
- Bhide, A. (2015). Early literacy experiences constrain L1 and L2 reading procedures. *Frontiers in Psychology, 6*, 1446.
- Birch, B. (2011). Out of my orthographic depth: Second language reading. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (Vol. 2, pp. 488–506). London: Routledge.
- Birch, B. (2013). *English grammar pedagogy: Global perspectives*. London, UK: Routledge.

- Cheung, H., Chen, H.-C., Lai, C. Y., Wong, O. C., & Hills, M. (2001). The development of phonological awareness: Effects of spoken language experience and orthography. *Cognition*, *81*, 227–241.
- Cook, V. (1995). Multi-competence and the learning of many languages. *Language, Culture, and Curriculum*, *8*(2), 93–98.
- Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers on Bilingualism*, *19*, 121–129.
- Elleman, A., Steacy, L., & Compton, D. (2019). The role of statistical learning in word reading and spelling development: More questions than answers. *Scientific Studies of Reading*, *23*(1), 1–7.
- Elman, J. L. (2011). Lexical knowledge without a lexicon? *The Mental Lexicon*, *6*(1), 1–33.
- Grainger, J. & Carreiras, M. (2009). Advances in morphological priming: An introduction. In R. Frost, J. Grainger, & M. Carreiras (Eds.), *Advances in morphological priming* (pp. 933–941). New York: Psychology Press.
- Grainger, J., Rey, A., & Dufau, S. (2008). Letter perception: From pixels to pandemonium. *Trends in Cognitive Sciences*, *12*(10), 381–387.
- Hoey, M. (2005). *Lexical priming: A new theory of words and language*. London and New York: Routledge.
- Hoover, W. A. & Gough, P. B. (1990). The simple view of reading. *Reading and Writing*, *2*, 127–160.
- Jiang, J., Ouyang, J., & Liu, H. (2019). Interlanguage: A perspective of quantitative linguistic typology. *Language Sciences*, *74*, 85–97.
- Koda, K. (2008). Impacts of prior literacy experience on second language learning to read. In K. Koda & A. Zehler (Eds.), *Learning to read across languages: Cross-linguistic relationships in first- and second-language literacy development* (pp. 68–97). New York: Routledge.
- Liu, Y., Dunlap, S., Fiez, J., & Perfetti, C. (2007). Evidence for neural accommodation to a writing system following learning. *Human Brain Mapping*, *28*, 1223–1234.
- Malakoff, M. (1992) Translation ability: a natural bilingual and metalinguistic skill. In R. J. Harris (Ed.), *Cognitive processing in bilinguals* (pp. 515–530). Amsterdam: North Holland.
- McDonough, K. & Trofimovich, P. (2009). *Using priming methods in second language research*. London: Routledge.
- Mohanty, A. K. (1994). *Bilingualism in a multilingual society*. Mysore: Central Institute of Indian Languages.
- Plante, E. & Gomez, R. (2018). Learning without trying: The clinical relevance of statistical learning. *Language, Speech, and Hearing Services in Schools*, *49*, 710–722.
- Seidenberg, M. (2017). *Language at the speed of sight: How we read, why so many can't, and what can be done about it*. New York: Basic Books.
- Thornbury, S. (1997). *Language tasks for teachers of English*. Cambridge, UK: Cambridge University Press.
- Verhoeven, L. & van Leeuwe, J. (2012). The simple view of second language reading throughout the primary grades. *Reading and Writing*, *25*, 1805–1818.
- Werker, J. F. & Tees, R. C. (1984). Cross-language speech perception: Evidence for perceptual reorganization during the first year of life. *Infant Behavior and Development*, *7*, 49–63.
- Wikipedia. (n.d.) *Scrabble*. <http://en.wikipedia.org/wiki/Scrabble>

Extensive reading

Rob Waring

How does extensive reading fit the curriculum?

Extensive reading (ER) is extremely simple to understand. We have all been doing it since childhood. It involves the reading of a large amount of material with high comprehension and minimal interruptions and is the type of reading we do in our daily life in our first language when we read novels, webpages, and emails. In foreign language learning, extensive reading mirrors this approach by giving students access to material at or about their fluent reading level so they can practice the skill of reading. However, as ER is often 'taught' as part of a learner's overall education, the implementation of ER needs to be systematized and made part of an overall balanced curriculum.

There are many forms of extensive reading but they all involve each learner independently and silently reading a lot of material which is at the right level for them. The reading is independent because learners differ in proficiency, reading speed, and interests, and so ideally, they need to read at their own level of text difficulty and at their own speed. The reading should be silent because it should eventually be done at a reasonable reading speed of around 200 words per minute so that plenty of material can be read. Reading necessarily involves comprehension so learners should be gaining comprehensible input and be focused on understanding what they read. They should read lots of material because the amount of comprehensible input they get will directly determine how much vocabulary they learn and how well their reading fluency and other aspects of language knowledge develop. The material should be at the right level for the learners so that only a small proportion of the words on a page are unknown (two words per hundred words or fewer) and so that the grammatical constructions are largely familiar. The content of the books should be interesting and motivating for the learners to read because this encourages them to comprehend and motivates them to read more (Nation & Waring, 2020).

Nation's four strands of a balanced EFL (English as a foreign language) curriculum (Nation, 2007) outline the components of a balanced curriculum, all of which are connected to ER. Extensive reading and extensive listening are examples of *meaning focused input* whereby students read for information, enjoyment, and to build fluency through comprehending material. *Language focused learning*, in contrast, builds language knowledge through intensive study of vocabulary, grammar, and reading skills often by using textbooks to build the knowledge to enable fluent reading to take place. *Meaning focused output* refers to activities designed to help learners communicate through speaking or writing. The fourth strand, *fluency building*, expressed as speed reading activities, should also be a component of an extensive reading course. Speed reading helps learners develop their ability to process continuous text at speed so they can move beyond bottom-up word-by-word level processing by allowing

them to process chunks of meaning rather than individual words. This higher-level processing allows learners to employ more top-down and higher cognitive skills and focus on text-level comprehension. When freed from bottom-up processes, learners can use more inferential and evaluative comprehension strategies to comprehend the text beyond the literal content of the text. This in turn allows learners to devote more attentional resources to enriching schematic knowledge networks making future processing easier and more efficient and thus improve overall reading ability.

Following this, the majority of ER practitioners do ER either as a stand-alone class where students only read or listen whether at home or in class, or integrate the reading in to the normal classes. This means that an ER program needs to be managed through building and managing a library of suitable materials, allocating class time to not only the reading but also to the follow-up activities that integrate the ER into the whole language curriculum.

Key concepts in extensive reading

Extensive reading as pedagogical pursuit first came to prominence in the 1920s and 1930s with the work of Michael West, Harold Palmer, and A.S. Hornby who developed the concept within foreign language learning. Following the ‘vocabulary selection’ focus of the day, West (1941) developed reading materials within a limited vocabulary to systematically recycle words and grammar features without introducing too many unknown or rare words that the learners did not need to meet at that time. The aim was to consolidate and strengthen the learners’ knowledge before they move up to higher levels. Despite this initial start, ER as a pursuit did not really take off in foreign language education until the 1970s with the introduction of L. G. Alexander’s *Longman Structural Readers*, which are often called the first recognized ‘graded readers.’ This series was followed by dozens more, leading to the current 6,000–7,000 graded readers on the market today.

One major spur to awareness of the need to read extensively was the introduction of Krashen’s (1985) Comprehensible Input hypothesis which is similar to the concept of graded reading formed by Palmer and his colleagues some 60 years earlier. His hypothesis states that in order to learn a language, learners need to understand the message and meet a massive amount of language just above their proficiency level ($i+1$), something graded readers were designed to facilitate. The hypothesis is based on the notion that there is a difference between ‘acquiring’ and ‘learning’ a foreign language. According to this hypothesis, when learners ‘acquire’ a language they are said to have internalized the language items from comprehended input which then enter the implicit system. When learners ‘learn’ a language they are using their conscious explicit system which cannot cross over and be automated in the implicit system. The implication here is that learners need to read without much instruction but reading ‘naturally’ as natives who learn their first language do, and as a result the learners will acquire the language. This is often framed as a ‘pure’ form of ER. There has been considerable debate about whether foreign language reading instruction should mirror that of how we read in our first language, namely for pleasure and to build a reading habit, or whether the reading should somehow be monitored or assessed.

Most ER practitioners reject the purist approach in favor of more integrated approaches because they need to ensure the reading is done and appropriately integrated into the curriculum. Other practitioners doubt the sufficiency of Krashen’s acquisition/learning hypothesis due to it not being falsifiable and the lack of evidence to support this distinction. Elgort (2011), for example, found that lexical items learned by intentional decontextualized study are accessed in a similar manner as items already acquired. This suggests that deliberate decontextualized vocabulary learning is, psychologically, an efficacious learning method and more importantly, that the knowledge from intentional explicit learning can become implicit. This does not discredit the input hypothesis itself, but suggests that the distinction between ‘acquisition’ vs. ‘learning’ linguistic is less clear than is posited. The need for massive input just above the learner’s fluent reading ability still remains a core concept in ER.

In terms of whether the reading should be assessed or not, we can categorize extensive reading along a scale from a 'purer' form to a 'freer' version. Some practitioners suggest learners only read things they enjoy and only if they want to so they can develop a 'reading habit.' While this is commendable, in practice this 'pure' version of extensive reading leads to many learners opting out of the reading even if they know it will benefit them. At the 'freer' end of the scale, the learners use graded readers which have a tightly planned syllabus, especially at lower levels, to scaffold the learning by building on previous learning from level to level in an efficient non-random manner. This is often followed up by post-reading activities to ensure the material was understood, such as by doing reading reports, discussions, or by taking a quiz. The majority of ER practitioners adopt the latter style.

The debate over 'purity' in ER extends in another direction, namely whether the graded readers accurately mirror 'real' language use and are thus 'authentic.' Some commentators reject the idea that graded readers are suitable for language learning because they are said to be overly-simplified versions of stories without the detail and richness of an original and are not 'authentic' native-level texts that the learners eventually will need to read. Simplified texts are also criticized because the restriction on writers to use short, simple sentences can result in choppy and unnatural discourse (Yano et al., 1994; Honeyfield, 1977), and may result in poor cohesive reference and an over-reliance on implicit rather than explicit conjunction relationships making texts difficult to comprehend. These criticisms may have been true of poorly written simplifications written at the time the criticisms were made, but Claridge (2005) looked at Honeyfield's (1977) and Swaffar's (1985) criticisms of simplification in modern graded readers comparing two original unsimplified texts and two simplified versions. The criteria included word frequency distribution, authorial cues, discourse markers, collocations, and redundancy. She concluded that "the writing in well-written graded readers can be, for its audience, experienced as authentic and typical of 'normal' English" (p. 144).

The implication in these counter arguments to the use of simplified or graded material is that only 'real' English is suitable. However, this confuses the goal with the way to get there. The input from unsimplified 'authentic' books is essentially random as they are not written to a syllabus because book A is not connected to book B and thus much of the vocabulary will not be recycled systematically. Moreover, unsimplified texts written for adult native speakers of English require a vocabulary size of at least 5,000 words before they can be read with any ease (Nation, 2006). Material written for young native speakers (Macalister, 1999; Webb & Macalister, 2013) is similarly difficult for most learners who do not live in communities in which English is the daily language outside the classroom. Therefore, the use of unsimplified texts would place an unnecessary burden on most learners in typical EFL settings where they meet the language only a few hours a month. We would not ask learners of mathematics to start with complex equations before they had learnt the fundamentals of arithmetic, and this is the same with learning to read in a foreign language.

In the early stages of extensive reading, the learners will benefit from having a structured approach restricting them to their 'level' in order to build foundational knowledge. The function of graded readers is to provide this systematically controlled input to recycle and consolidate language met in the class or textbook that allows learners to read quickly and smoothly to build the skill of reading, allowing the learners eventually to deal with unsimplified text. However, as their reading proficiency increases, higher ability learners will be given more freedom of choice in what they read and may choose something more outside their ability even if it is more challenging.

A more inclusive way to view authenticity is to see it not as a feature of the material itself but as existing in the relationship between the learner and the material. 'Authentic' reading, and by extension, 'authentic materials,' from this point of view, involves reading the 'authentic' text in the way a proficient reader, such as a native speaker, would read (Widdowson, 1976), irrespective of their language knowledge. When learners of EFL read texts that are too difficult for them, they do not have an authentic reading experience. The task becomes one of decoding words and phrases, and is not really reading in the traditional sense, because there are too many unknown words and other

difficulties (Gillis-Furutaka, 2015). When they read a graded reader at the right level for them, they can have an authentic reading experience. They can comprehend the story, they can enjoy it, or they can be thrilled or unimpressed by it, and they can see whether the book is relevant for their lives. This is an authentic reading experience and at the beginning and intermediate levels, graded readers are necessary to develop this authentic reaction to texts (Nation & Waring, 2020).

There is also some debate about when learners can move on from simplified to unsimplified materials. Graded readers series end at around the 3,000-word level, but a vocabulary of around 8–9,000 words is needed to get 98% coverage of unsimplified text. Nation and Anthony (2013) suggest that there is a need for ‘middle frequency’ readers to bridge the gap to unsimplified materials. The counter argument is that learners reading the top-level graded readers will most likely gravitate to unsimplified materials that they can comprehend, and are willing to accept a more intensive style of reading in order to deal with these texts. Uden et al. (2014) looked at the gap between the end of graded readers and unsimplified text with four advanced learners of English with tests that measured comprehension, fluency, and reading ease/pleasure of two Level 6 graded readers from the *Cambridge English Readers* series and two unsimplified novels. The study shows that learners can move successfully from the highest levels of graded readers to unsimplified texts while acknowledging some increase in difficulty if they have a large enough vocabulary size. This suggests well-motivated learners may be able to tolerate the large number of unknown words occurring only once without substantial loss of reading pleasure.

In a similar vein, some researchers claim that ER will not be sufficient on its own to provide the entire L2 lexicon. The debate is mostly between the ideas of Cobb (2007, 2008) versus those of McQuillan and Krashen (2008). Both agree that ER provides good lexical input, but while Cobb doubts the sufficiency of ER in attaining a high enough vocabulary level to be able to reach native speaker levels, McQuillan and Krashen suggest that an English language learner can meet over one million-plus words in a year or two. Cobb (2008) rejects this by saying that the ‘million-plus’ figure is only based on learners reading oversimplified texts (i.e. graded readers) and suggests a lack of support for the idea that ER can prepare a student for the rigors of a regular English university. When learning a first language, a child’s vocabulary ability jumps when they start to read, and jumps again when they enter middle school where they meet lots of new concepts in their math, geography, science, history, and arts classes. It is here, through this study which is largely intensive, that first language learners’ middle frequency and low frequency vocabulary grows, not through massive amounts of extensive reading. One reason for this is that fiction, in particular, does not include many mid- or low frequency words, but mirrors spoken language which contains a lot of high frequency vocabulary. It seems, then, that L1 native-like competency is developed through schooling and natural exposure to non-fiction material. This, however, is different in foreign language environments in which the target language is not met daily in the community, thus denying the learners of the rich input and concepts first language teens will be learning in their L1 at school and systematized ER programs can help build the knowledge the learners need.

This has led some commentators (see Bowman, 2017, for a discussion) to be skeptical about the adoption of an ER program because they feel the learning to read through extensive reading is too slow and we cannot ask students to devote hours a week on ‘just reading.’ Skeptics point to research (e.g. Nishizawa et al., 2017) that says that to learn to read smoothly and without translation, Japanese learners, at least, need to meet about 300,000–400,000 words of material within their fluent reading ability to be able to move beyond processing text through translation up to the elementary level. More would be needed at more advanced levels. Analyses of corpora (e.g. Cobb, 2008; Nation, 2014) also suggest that there is a certain amount of text that needs to be met in order to reach certain ability levels in English and suggests learners need to meet about four million words to approach an advanced level. While this amount would differ depending on the learner’s first language and the target language they are trying to learn, it is clear that massive amounts of input need to be required. It is for this reason that this is one of the core principles of extensive reading. We need to remember that it takes 10–15 years of daily access to massive amounts of reading materials to develop the vocabulary

and reading knowledge to read as a native speaker would, so we should not expect someone to learn to read well in a foreign language in a year or two of schooling.

Another debate revolves around whether the learner's reading should be assessed, or whether they should just read. The main reasons for taking a test on each book, such as those in Mreader, are to make sure that learners do the reading they are supposed to do, to motivate the learners to do the reading, to give the learners feedback on their comprehension and to help them notice their progress, as well as providing data for research and to convince others that the reading is being done and comprehended. Research by Stoeckel et al. (2012) suggests that the effects of such tests on motivation are minimal. A not insubstantial number of learners want to take a test provided it is not too intrusive to assess their general comprehension and confirm their understanding. However, there are many teachers who believe that no assessment is needed because the reading should be pleasurable and say that adding a test makes it feel like yet another school test, making learners see extensive reading only as a school subject, not as a tool for building a life-long reading habit. An extreme form of this approach is to allow learners not to do extensive reading if they do not want to, based on the notion of respect for learner choice. A major issue with this position is that given the option of not reading, naturally many learners will opt-out often because they are busy with other things even though they know it is beneficial. Allowing learners to opt-out will mean they will miss out on meeting the massive volume of text that is necessary to consolidate their language so their ability can grow. One way to avoid this polarization over assessment is to not assess the reading itself, but assess any task that follows the reading such as a reading report, discussion, presentation, or a debate, provided the task is structured in a way that can only be done if the book has been read.

A more recent major debate within ER concerns how ER should be defined and practiced. Day and Bamford (2002) put forward 10 principles of ER which they felt should be part of a successful ER program. They are as follows:

1. The reading material is easy.
2. A variety of reading material on a wide range of topics must be available.
3. Learners choose what they want to read.
4. Learners read as much as possible.
5. The purpose of reading is usually related to pleasure, information, and general understanding.
6. Reading is its own reward.
7. Reading speed is usually faster rather than slower.
8. Reading is individual and silent.
9. Teachers orient and guide their students.
10. The teacher is a role model for a reader.

This list suggests ER pedagogy be framed more at the 'pure' than 'integrated' end of the ER spectrum. Despite rational arguments being put forward to support each of the 10 principles (e.g. Jeon & Day, 2015), the list has been the subject of criticism not for the principles themselves, but for the possible outcomes that may result from their implementation. Waring and McLean (2015), for example, note that any list, however well-intentioned, that states how ER should be defined suggests there is only one valid form of ER. This may be misinterpreted to suggest that any ER program or practice that does not adhere to the stated guidelines is somehow not ER. The result is that this list could effectively be exclusionary and lead some practitioners to apologize for their ER program or discourage some practitioners from adopting ER altogether because they cannot follow the 'principles.' In reality, not all teaching situations are amenable to following these principles. There are perfectly valid reasons why a teacher may wish to assess the learners, or ask the class to read the same material that might even be above the learner's current level from time to time.

One source of confusion here stems from seeing ER as one thing, when we can actually see ER from two complementary positions. On the one hand, we can conceive of ER as a *noun*, whereby

we frame it as a pedagogical activity which involves the setting up of an ER program, building a library, getting students to read, and following up the reading to integrate the learning into the full curriculum. Another way to view ER would be to see it as a *verb* which involves building the skill of reading extensively, that is, in a fast fluent manner with high comprehension, something which Carver (1976) calls *rauding*. The distinction is important because a learner may be *doing ER* (the noun) by selecting graded readers, reading them and doing follow-up activities, but reading in a careful and slow manner. That is, they are not *reading extensively*. It is the teacher's responsibility to monitor for this and ensure the learner is reading extensively.

By framing ER in this way, we can divide the 10 guidelines into two dimensions or levels. One comprises the features that enable learners to process reading materials in a fast and fluent manner with high comprehension and would include items 1 and 7 on the Day and Bamford list. We might also add item 4 which requires learners to read massive amounts of material. These features would be necessary if we are to say the learners are 'reading extensively.' The other dimension would include optional pedagogical elements from their list which a teacher can select depending on their local conditions and needs. These would include deciding whether the teacher or learner selects books; whether the learners read silently, do buddy reading or read aloud or be read to; whether the reading is assessed or not; whether there are follow-up activities or not; whether the teacher is a role model of a reader, or not, and so on.

The following list (from Nation & Waring, 2020) suggests a 'big tent' framework within which we could work to build greater acceptance of ER in foreign language curriculums without our definition feeling restrictive. Nation and Waring suggest an extensive reading program is likely to be successful if:

- the primary focus of the extensive reading class is to get students to read something silently and fluently that they can understand without needing a dictionary
- the learners typically choose their own books at their own fluent reading level, but teachers can help them choose as well
- it requires learners to silently read large amounts of text to build and recycle vocabulary so they can create an internal sense of how the grammar, words, and phrases go together
- the reading is integrated into the curriculum by using follow-up activities to practice other skills and deepen knowledge
- there is a large variety of materials from various genres, levels, and topics, both fiction and non-fiction, which should be purposeful, interesting, and motivating, and should challenge the students cognitively
- the extensive reading program is set up so it is valued by the learners, teachers, and administrators (and even parents)
- learners spend some of the extensive reading time reading in class to show it is valued and to allow the teacher to provide guidance
- teachers and learners know their library well so they will select the right books
- the reading is monitored in some way so the student and teacher can observe progress
- goals are set for the amount of reading, and the program itself.

Review of current practices and innovations

Understanding of the need for ER as part of a balanced curriculum has grown in the past few years. One reason for this has been the work of the Extensive Reading Foundation (ERF) whose goal is to promote ER globally. The organization holds regular international conferences only on ER every two years as well as supporting regional events worldwide and offering grants to institutions. It also hosts the Language Learner Literature Awards which recognize the best graded readers published

each year. In addition, the ERF website has numerous resources that help teachers learn about ER and how to implement a program. It also runs the mreader.org graded reader quiz website and hosts sites with free graded reading materials. The ERF has a global outreach through its affiliate ER associations in Japan, China, Mongolia, South Korea, Taiwan, Indonesia, the Middle East, and North Africa, with more being added each year.

As more and more schools adopt ER practices, there has been a growth in the ways that ER has been practiced. In the past 30 years, thousands of graded readers have been written, both fiction and non-fiction, with new publishers entering the market every year. Moreover, we have seen a growth in online reading platforms, such as Xreading.com and ER-central.com,¹ that offer not only reading and listening materials, but they are also sophisticated learner management systems that allow teachers to track what learners read and help motivate learners to read more. All of these innovations have made graded readers and ER in general accessible to a far wider community than was possible even a few years ago.

So why is extensive reading not yet mainstream?

Despite the recent growth in interest in ER globally and the ever-expanding numbers of graded readers and online ER materials, extensive reading still is not fully accepted in foreign language teaching practice. Part of the reason lies in the perception of how one should learn a foreign language that is ingrained not only in the population at large, but within foreign language teaching in general. The average ‘man in the street’ would most likely say he learned his first language by communicating, listening, reading, and writing and doing things in that language. However, when asked about learning a foreign language, you most likely will hear the words *test, study, memorize, wordlists, course, lessons, level, and course book*. Rarely will you hear the words *massive input, reading fluency, a balance between form and use, etc.* We see this mindset when schools design their curriculum around the course book and adopt a ‘finish the book’ mentality. This is not a criticism of focus on form, but an unwitting outcome of this perception that ‘study matters.’

In this light, it is not surprising that extensive reading is therefore seen as supplementary, additional, or expendable. The materials on display at foreign language publisher stands at language teaching conferences and in language learning sections in bookstores also reflect this default position. They display course books, test preparation materials, intensive reading materials, and books promising huge vocabulary gains in a short period. If there are any reading books on display, they are most likely the latest native speaker novels or books written for native-speaking children, not literature for learning a foreign language which if there, is relegated to lower shelves and put spine forward. Despite the huge growth in international travel, we never see graded readers at airport or train station bookshops. Why? Why not? (Nation & Waring, 2020). It is against this default mindset which extensive reading must compete for time, resources, and eyeballs. ER practitioners have a lot of work to do to change this perception.

We cannot argue that ER is not as well accepted due to a lack of evidence or it is ineffective because there is a considerable body of research into ER from a multitude of perspectives that show the benefit of ER. The ERF Bibliography (<https://erfoundation.org/bib/bibliotop.php>) catalogues over 700 research or discussion articles on ER. Research by Brown et al. (2008); Elley (1991); Hafiz and Tudor (1990); Lituanas et al. (2001); Pigada and Schmitt (2006); Pellicer-Sánchez and Schmitt (2010); Suk (2017) and Waring and Takaki (2003), among others, report linguistic gains as a result of extensive reading. There are also improvements in general reading ability (e.g. Elley & Mangubhai, 1981, 1983), reading speed and fluency (Beglar et al., 2012; McLean & Rouault, 2017; Chung & Nation, 2006; Tran, 2012) as well as positive effects compared to standard intensive reading classes (Bell, 2001; Suk, 2017). Writing ability is said to improve as a result of extensive reading (Elley & Mangubhai, 1981; Hafiz & Tudor, 1990; Robb & Susser, 1989) as is spelling (Polak & Krashen, 1988). Oral proficiency was (anecdotally) said to have improved after reading large amounts of text

(Cho & Krashen, 1994; Lado, 2009). Reading extensively has also been reported to increase motivation to read and the development of a positive attitude to reading in the second language (Burrows, 2013; Constantino, 1994; McLean & Poulshock, 2018; Mikami, 2017; Mori, 2002; Takase, 2007; Tabata-Sandom, 2017; Yamashita, 2004, 2013) as well as personal growth (Yamashita, 2013; Stoeckel et al., 2012) and learner autonomy (Judge, 2011).

While this body of research is impressive and has helped us learn a lot about ER and how to practice it, there are still some reservations about the generalizability or applicability of the research which need to be addressed in the future. To my knowledge, no national or regional government or ministry of education has mandated systematic extensive reading as part of their curriculums. Some may suggest extensive reading, but most do not. As we have seen, ER is a cornerstone of foreign language development and should be part of all curriculums. The quality of the research base that underlies an approach is often a major influence on national or regional governments that impact whether an ER program will be adopted beyond an individual school or class. Unfortunately, much of this research is fragmented and has been criticized, not for their general findings, but for the rigor underlying the research. This may be one reason ER has not been adopted at national or regional levels.

A major drive in ER in the coming years is to replicate much of the body of ER research with a variety of populations and situations. Reviews of ER research methodology (e.g. Beglar et al., 2012; Beglar & Hunt, 2014; Bowman, 2017; Coady, 1997; McLean & Rouault, 2017; Nakanishi, 2015; Nation & Waring, 2020; and Huffman, 2016) show that most ER research has been conducted only with the learners of English and often with convenience populations. In several studies (e.g. Mason & Krashen, 1997; Robb & Susser, 1989) extra time for contact with English was given to the experimental (ER) group which makes interpretation unclear. A considerable number of these studies were probably affected by outside influences such as the presence of concurrent classes or tuition that were not part of the study (Mason & Krashen, 1997; Renandya et al., 1999; Robb & Susser, 1989 are a few examples). A further problem can occur when an extensive reading study is conducted with graded readers but without validating that the learners were in fact reading extensively such as by mentioning average reading speeds. There is also a tendency to use populations of individuals of a specific demographic, such as school age children or English majors at universities, with most subjects at the elementary or intermediate level or younger learners with almost all attending an educational institution. Very few adults appear in this research. Sometimes, it is not clear whether a study was conducted in a second language environment. This distinction is important because in second language settings, the subjects are asked to read books written for natives (e.g. Cho & Krashen, 1994) with the benefit of the target language in the community to support the reading. In foreign language settings, graded readers or other simplified materials are most often used so we should not assume that ER data gathered in a second language environment is necessarily directly relevant in foreign language situations. Only research conducted on the same relevant population as the target learners should be used to provide evidence of the effectiveness in that setting.

A very common way to conduct ER research is to compare it with other methods or approaches such as intensive reading or TOEIC instruction. The basic premise behind the research design of these studies is the assumption that approaches A and B differ only by one variable and the study will reveal a 'winner.' For example, comparisons have been made between ER and conscious word learning (Chun et al., 2012), 'audiolingual approaches' (Elley, 1991), 'translation' (Yamazaki, 1996), 'regular classes' (Mason & Krashen, 1997 experiment 2), or classes which were 'taught in the conventional way' (Lituanas et al., 2001). Sometimes extensive reading is typically compared with instructional approaches which do not have the benefit of the 'rich' environment of the extensive reading approach (Coady, 1997) or involved much more time-on-task (e.g. Chun et al., 2012).

McQuillan (2019) and Krashen (2004), for example, conclude that the incidental learning of vocabulary is better than intentional learning for the same time on task. The implied suggestion is that incidental learning is 'better' and time spent on the 'loser,' intentional learning, is somewhat

wasted. However, in real classrooms, different approaches and methods have different goals and are designed to develop different aspects of knowledge. For example, intentional learning focuses on acquiring the initial form-meaning level acquisition of word knowledge only, whereas extensive reading focuses on deepening and enriching the vocabulary such as developing a sense of collocation, register, use, and so forth.

Designing studies with variables in opposition to each, such as those mentioned earlier, creates false dichotomies or equivalences and hides the more fruitful ground between. A more valid paradigm would be to determine how much of each component of reading ability is needed in order to enable extensive reading for learners of differing backgrounds and abilities. It should seek answers to questions like, “how much intentional vocabulary learning needs to take place for a learner to start extensive reading?” or “what is a good balance of time spent on building reading skills versus extensive reading and at what proficiency levels?” (Nation & Waring, 2020) rather than asking which method is ‘better’.

Conclusion

In the coming decades it seems clear that the extensive reading will become more accepted. Indeed, in some areas of the world there is a growing hunger for extensive reading with the only constraint being that teachers do not ‘know how’ to do it, or know what their learners should be reading. More and more administrators, teachers, and learners will come to realize what extensive reading is and why all foreign language learners at least up to upper intermediate level should be doing it. But apart from having more practitioners and learners doing extensive reading, and better extensive reading research, what other changes are we likely to see?

It is likely we will see more niche graded readers series targeting specific audiences, and less reliance on blockbuster series from the major publishers. We are also likely to see more responses to the digitalization of language learning not only in the way languages are learnt, but also in how learners access materials. We are also likely to see different kinds of extensive reading research emerge as a result of these digital systems. One benefit of digital extensive reading systems is that data can be gathered from a far larger population of various backgrounds, first languages and levels, and over far greater learning intervals. These systems will be able to track the acquisition of an individual or of a community looking at what texts they read and like. Moreover, the systems could track which words, meanings, and grammar each learner had met, allowing us to get a clearer picture of how an individual’s language learning ability develops as a result of this reading, allowing for much more targeted and personalized pedagogical interventions.

The future for extensive reading seems bright, but considerable work remains to raise awareness to integrate ER into national and regional curriculums and move beyond its current predominantly small-scale adoption in single classes or schools. This work should involve publishers making sure ministries of education know about their materials. ER practitioners and researchers should create regional model ER schools to act as schools of excellence to develop awareness of the need for ER both nationally and locally. Leading teacher training institutions could do a better job of training teachers to understand the *need* for ER and show how it can be implemented. And we ER practitioners ourselves should promote the benefits of ER whenever we are given the chance.

Note

1 Full disclosure. The author is part owner and operator of this resource which is offered for free to the extensive reading community.

References

Beglar, D. & Hunt, A. (2014). Pleasure reading and reading rate gains. *Reading in a Foreign Language*, 26(1), 29–48.

- Beglar, D., Hunt, A., & Kite, Y. (2012). The effect of pleasure reading on Japanese university EFL learners' reading rates. *Language Learning*, 62(3), 665–703.
- Bell, T. (2001). Extensive reading: Speed and comprehension. *The Reading Matrix*, 1(1), 1–13.
- Bowman, A. (2017). Are there any negative aspects to doing extensive reading? 佐賀大学全学教育機構紀要 第5号, pp. 53–63. <https://core.ac.uk/download/pdf/80536189.pdf>
- Brown, R., Waring, R., & Donkaewbua, S. (2008). Incidental vocabulary acquisition from reading, reading-while-listening, and listening to stories. *Reading in a Foreign Language*, 20(2), 136–163.
- Burrows, L. (2013). *The effects of extensive reading and reading strategies on reading self-efficacy*. [Unpublished doctoral dissertation. Temple University, Tokyo, Japan.]
- Carver, R. (1976). Word length, prose difficulty, and reading rate. *Journal of Literacy Research*, 8(2), 193–203.
- Cho, K. & Krashen, S. (1994). Acquisition of vocabulary from the Sweet Valley Kids series: Adult ESL Acquisition. *Journal of Reading*, 37, 662–667.
- Chun, E., Choi, S., & Kim, J. (2012). The effect of extensive reading and paired-associate learning on long-term vocabulary retention: An event-related potential study. *Neuroscience Letters*, 521(2), 125–129.
- Chung, M. & Nation, I. S. P. (2006). The effect of a speed reading course. *English Teaching*, 61(4), 181–204.
- Claridge, G. (2005). Simplification in graded readers: Measuring the authenticity of graded texts. *Reading in a Foreign Language*, 17(2), 144–158.
- Coady, J. (1997). Extensive reading. In J. Coady & T. Huckin, *Second language vocabulary acquisition: A rationale for pedagogy*. Cambridge: Cambridge University Press.
- Cobb, T. (2007). Computing the vocabulary demands of L2 reading. *Language Learning & Technology*, 11(3), 38–63.
- Cobb, T. (2008). “Commentary: Response to McQuillan and Krashen (2008)” [Can free reading take you all the way? A response to Cobb (2007)], *Language Learning & Technology*, 6(27), 109–114.
- Constantino, R. (1994). Pleasure reading helps, even if readers don't believe it. *Journal of Reading*, 37(6), 504–505.
- Day, R. R. & Bamford, J. (2002). Top ten principles for teaching extensive reading. *Reading in a Foreign Language*, 14(2), 136–141.
- Elgort, I. (2011). Deliberate learning and vocabulary acquisition in a second language. *Language Learning*, 61(2), 367–413.
- Elley, W. B. (1991). Acquiring literacy in a second language: the effect of book-based programs. *Language Learning*, 41(3), 375–411.
- Elley, W. B. & Mangubhai, F. (1981). *The impact of a book flood in Fiji primary schools*. Wellington: New Zealand Council for Educational Research.
- Elley, W. B. & Mangubhai, F. (1983). The impact of reading on second language learning. *Reading Research Quarterly*, 19(1), 53–67.
- Gillis-Furutaka, A. (2015). Graded reader readability: Some overlooked aspects. *Journal of Extensive Reading*, 3(1), 1–19.
- Hafiz, F. M. & Tudor, I. (1990). Graded readers as an input medium in L2 learning. *System*, 18(1), 31–42.
- Honeyfield, J. (1977). Simplification. *TESOL Quarterly*, 11(4), 431–440.
- Huffman, J. (2016). Response to the critique of the Huffman (2014) article, “Reading rate gains during a one-semester extensive reading course”. *Reading in a Foreign Language*, 28(1), 148–150.
- Jeon, E. & Day, R. (2015). The effectiveness of core ER principles. *Reading in a Foreign Language*, 27(2), 302–307.
- Judge, P. (2011). Driven to read: Enthusiastic readers in a Japanese high school's extensive reading program. *Reading in a Foreign Language*, 23(2), 161–186.
- Krashen, S. (1985). *The input hypothesis: Issues and implications*. London: Longman.
- Krashen, S. (2004). *The power of reading* (2nd ed.). Portsmouth, NH: Heinemann.
- Lado, A. (2009). Motivating beginners to read by conducting oral activities with picture books. In A. Cirocki (Ed.), *Extensive reading in English language teaching* (pp. 439–450). Munich, Germany: Lincom.
- Lituanas, P. M., Jacobs, G. M., & Renandya, W. A. (2001). An investigation of extensive reading with remedial students in a Philippines secondary school. *International Journal of Educational Research*, 35(2), 217–225.
- Macalister, J. (1999). School journals and TESOL: An evaluation of the reading difficulty of school journals for second and foreign language learners. *New Zealand Studies in Applied Linguistics*, 5, 61–85.
- Mason, B. & Krashen, S. (1997). Extensive reading in English as a foreign language. *System*, 25(1), 91–102.
- McLean, S. & Poulshock, J. (2018). Increase reading self-efficacy and reading amount in EFL learners with word targets. *Reading in a Foreign Language*, 30(1), 76–91.
- McLean, S. & Rouault, G. (2017). The effectiveness and efficiency of extensive reading at developing reading rates. *System*, 70(1), 92–106.
- McQuillan, J. (2019). Forced pleasure reading may get you neither: Comment on Milliner (2017). *Language and Language Teaching*, 8(1), 18–20.

- McQuillan, J. & Krashen, S. (2008). Commentary: Can free reading take you all the way? A response to Cobb (2007). *Language Learning & Technology*, 12(1), 104–108.
- Mikami, A. (2017). Students' attitudes toward extensive reading in the Japanese EFL context. *TESOL Journal*, 8(2), 471–488.
- Mori, S. (2002). Redefining motivation to read in a foreign language. *Reading in a Foreign Language*, 14(2), 91–110.
- Nakanishi, T. (2015). A meta-analysis of extensive reading research. *TESOL Quarterly*, 49(1), 6–37.
- Nation, I. S. P. (2006). How large a vocabulary is needed for reading and listening? *Canadian Modern Language Review*, 63(1), 59–82.
- Nation, I. S. P. (2007). The four strands. *Innovation in Language Learning and Teaching*, 1(1), 1–12.
- Nation, I. S. P. (2014). How much input do you need to learn the most frequent 9,000 words? *Reading in a Foreign Language*, 26(2), 1–16.
- Nation, I. S. P. & Anthony, L. (2013). Mid-frequency readers. *Journal of Extensive Reading*, 1(1), 5–16.
- Nation, I. S. P. & Waring, R. (2020). *Teaching extensive reading in another language*. Oxford: Routledge.
- Nishizawa, N., Yoshioka, T., & Ichikawa, Y. (2017). Effect of a six-year long extensive reading program for reluctant learners of English. *Modern Journal of Language Teaching Methods*, 7(8), 116–123.
- Pellicer-Sánchez, A. & Schmitt, N. (2010). Incidental vocabulary acquisition from an authentic novel: Do *Things Fall Apart*? *Reading in a Foreign Language*, 22(1), 31–55.
- Pigada, M. & Schmitt, N. (2006). Vocabulary acquisition from extensive reading: A case study. *Reading in a Foreign Language*, 18(1), 1–28.
- Polak, J. & Krashen, S. (1988). Do we need to teach spelling? The relationship between spelling and vocabulary reading among community college ESL students. *TESOL Quarterly*, 22, 141–146.
- Renandya, W., Rajan, B., & Jacobs, G. (1999). Extensive reading with adult learners of English as a second language. *RELC Journal*, 30(1), 39–61.
- Robb, T. & Susser, B. (1989). Extensive reading vs. skills building in an EFL context. *Reading in a Foreign Language*, 5(2), 239–251.
- Stoeckel, T., Reagan, N., & Hann, F. (2012). Extensive reading quizzes and reading attitudes. *TESOL Quarterly*, 46(1), 187–198.
- Suk, N. (2017). The effects of extensive reading on reading comprehension, reading rate, and vocabulary acquisition. *Reading Research Quarterly*, 52(1), 73–89.
- Swaffar, J. K. (1985). Reading authentic texts in a foreign language: A cognitive model. *The Modern Language Journal*, 69(1), 15–34.
- Tabata-Sandom, M. (2017). L2 Japanese learners' responses to translation, speed reading, and 'pleasure reading' as a form of extensive reading. *Reading in a Foreign Language*, 29(1), 112–132.
- Takase, A. (2007). Japanese high school students' motivation for extensive L2 reading. *Reading in a Foreign Language*, 19(1), 1–18.
- Tran, Y. T. N. (2012). The effects of a speed reading course and speed transfer to other types of texts. *RELC Journal*, 43(1), 23–37.
- Uden, J., Schmitt, D., & Schmitt, N. (2014). Jumping from the highest graded readers to ungraded novels: Four case studies. *Reading in a Foreign Language*, 26(1), 1–28.
- Waring, R. & McLean, S. (2015). Exploration of the core and variable dimensions of extensive reading research and pedagogy. *Reading in a Foreign Language*, 27(1), 160–167.
- Waring, R. & Takaki, M. (2003). At what rate do learners learn and retain new vocabulary from reading a graded reader? *Reading in a Foreign Language*, 15(2), 130–163.
- Webb, S. & Macalister, J. (2013). Is text written for children useful for L2 extensive reading? *TESOL Quarterly*, 47(2), 300–322.
- West, M. P. (1941). *Learning to read a foreign language*. London: Longmans.
- Widdowson, H. (1976). The authenticity of language data. In J. F. Fanselow & R. Crymes (Eds.), *On TESOL '76* (pp. 261–270). Washington, D.C.: TESOL.
- Yamashita, J. (2004). Reading attitudes in L1 and L2, and their influence on L2 extensive reading. *Reading in a Foreign Language*, 16(1), 1–19.
- Yamashita, J. (2013). Effects of extensive reading on reading attitudes in a foreign language. *Reading in a Foreign Language*, 25(2), 248–263.
- Yamazaki, A. (1996). *Vocabulary acquisition through extensive reading*. [Unpublished Doctoral Dissertation, Temple University Japan.]
- Yano, Y., Long, M. H., & Ross, S. (1994). The effects of simplified and elaborated texts on foreign language comprehension. *Language Learning*, 44(2), 189–219.

Part V
Vocabulary and grammar



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Teaching and learning vocabulary

Paul Nation

This chapter looks at the teaching and learning of vocabulary both in classrooms and in independent learning. It recommends a principled approach based on a small set of well-established principles of learning and curriculum design. These principles are described as we look at various parts of a vocabulary program.

There is only a small difference between the parts of a general language course and the parts of the vocabulary components of a language course. This is because all courses should have a balance between learning through language use and deliberate learning. The learning through language use components, which should make up around three-quarters of the course time, will be the same no matter what the focus. These involve learning through the four skills of listening, speaking, reading and writing including fluency development in each of those skills.

The deliberate learning parts of a course can focus on particular skills, on particular language features such as pronunciation, spelling, grammar, vocabulary and discourse, and on the development of autonomy in language learning through training in language learning strategies and developing knowledge of how to learn a language. We will look at both learning through language use and deliberate learning in this chapter.

Providing a balance of learning opportunities through the four strands

The principle of the four strands says that a well-balanced language course should provide opportunities for learning through four equal strands – meaning-focused input, meaning-focused output, language-focused learning and fluency development (Nation, 2007, 2013b). Ideally, each strand should cover the same content material to maximise and vary the repetition of language features. While there is no research showing that the four strands should involve a roughly equal amount of time, there is a large amount of research showing the value of each of the strands. Let us now look in detail at each of the four strands.

Vocabulary learning through meaning-focused input

Meaning-focused input involves learning through the receptive skills of listening and reading. While extensive reading has received a lot of attention (Nation & Waring, 2020), it is only recently that extensive listening has begun to receive similar attention (Nation & Newton, 2020).

Extensive reading

Research shows that the single most effective change a teacher could make to a language course is to include an extensive reading program. Extensive reading involves each learner independently and silently reading large amounts of material which is at the right level for them. The reading needs to be independent because within a class all learners are typically not at the same level of proficiency and do not always share the same interests. The reading needs to be silent because reading aloud occurs at a slower speed than silent reading and learners need to read as much as they can at a reasonable speed. The learners need to read a lot of material so that they meet the words they need to learn and meet them enough times to ensure learning. The material needs to be at the right level so that the learners are not meeting words that are way beyond their current level and that are not as useful as other words at their present level of knowledge. Because the reading material needs to be at the right level, graded readers written within a controlled vocabulary are essential for learners at the beginning, elementary and intermediate levels. Fortunately, for the learning of English, there are several thousand graded readers available at a range of levels from a vocabulary size of 75 words up to 8000 words.

There has been considerable research and discussion on what is the right level. The pioneer of extensive reading, Michael West, suggested that from a vocabulary perspective, the right level should be around one unknown word in every 50 words (West, 1955). So, on a page of 300 running words there should be no more than 6 unfamiliar words. Comprehension improves as the number of unknown words decrease (Hu & Nation, 2000; Schmitt et al., 2011) and research largely supports West's figure of one unknown word in 50 or 98% coverage.

There is a very large amount of research on extensive reading showing that extensive reading has positive effects on motivation, reading fluency, reading comprehension, vocabulary growth, writing skills, grammar knowledge and general language proficiency (Nation & Waring, 2020).

Although extensive reading is classified under the strand of meaning-focused input, an extensive reading program should spend about one-third of the time on fluency development. Fluency development in extensive reading involves reading easy graded readers which contain little or no unknown vocabulary. Easy graded readers are ones that are from levels way below the learners' current level, or they may be books that the learners have read before. When they read them, learners should be trying to read them as quickly as possible with acceptable comprehension. As we shall see later, following a speed reading course can also be considered as part of an extensive reading program.

It is not difficult to set up an extensive reading program. The major requirements are books at the right level, and time to read them. Setting up a program has become even easier with availability of online extensive reading programs such Xreading. Xreading provides a wide range of excellent graded readers from most of the major publishers and provides tests and monitoring data to keep the learners on task. The cost is low.

The principle of the four strands and research on reading texts provides guidelines for how much extensive reading learners should do. Half of the meaning-focused input strand should involve extensive reading. This would occupy one-eighth of the course time. Fluency development in reading should take up one-quarter of the fluency development strand, which would be one-sixteenth of the total course time. One-eighth plus one-sixteenth equals three-sixteenths of the course time. If there were four English classes a week of around 50 minutes each, then about 40 minutes a week should be spent on extensive reading. Corpus-based research suggests that working on a 40-week school year and a five-day week (Nation, 2014a), learners should be reading around 40 minutes a week at a rather slow speed to meet the second 1000 word families of English enough times to learn them within a year and around an hour and 20 minutes a week to learn the third 1000 word families. At a moderate speed of 200 words per minute, these times would be halved, or better still, the amount of reading doubled. Learning 1000 words a year is a native-speaker rate of learning. A good extensive reading program should be able to achieve such rates.

When learners are introduced to extensive reading, the reading should be done in class time so that the learners truly understand the nature of extensive reading and are forced to do the reading. When they experience the success and enjoyment of extensive reading, some or all of the reading can be done outside of class time. Such reading should be monitored to make sure it is done. The Extensive Reading Foundation web site and Extensive Reading Central have many free resources to support extensive reading, including Moodle reader and a guide to extensive reading.

Extensive reading is easier to implement than extensive listening because there are now so many resources available to support it. Reading and reading-while-listening are also more effective at promoting vocabulary growth than listening (Brown et al., 2008). However, with more research and practice on extensive listening, extensive listening can also be a major contributor to vocabulary growth.

Extensive listening

The other half of the meaning-focused input strand is extensive listening. The requirements for extensive listening are similar to those for extensive reading. Extensive listening involves learners listening to large amounts of material which is at the right level for them. Extensive listening can include several different kinds of input – listening, listening while reading, viewing (watching films and TV series), and viewing with captions. Because it is difficult to control the vocabulary level of listening material, extensive listening requires various kinds of support so that the material is comprehensible and supportive for vocabulary learning. This support can include the use of written versions for study before listening or while listening, captions, the choice of familiar topics, pictures and visual accompaniment, repetition, support from the speaker, peer interaction and narrow listening.

Extensive listening can include a wide variety of material. Some may involve interaction with a speaker or speakers as in conversation and formal discussions. Some may involve listening while viewing, such as movies, TV programs or YouTube clips. Some may involve listening where a written version may also be available, as with listening to graded readers, pop songs or TV shows and movies. Informal spoken material tends to use a smaller vocabulary than written material but a vocabulary size of at least 2000 to 5000 words is needed to cope with such listening. Fortunately, technology now allows the slowing down and speeding up of listening material without much distortion of the sound and, combined with repetition and the use of transcripts, this can make listening easier.

As with extensive reading, an extensive listening program should include fluency development, with around one-third of the time in the extensive listening program given to easy extensive listening including activities such as repeated listening, listening to stories, 4/3/2 (Nation, 2013b), Quicklistens (Millett, 2014) and listening to easy graded readers.

Even with various kinds of support, knowing the vocabulary in a listening activity is important for successful listening.

Vocabulary learning through meaning-focused output

Meaning-focused output involves speaking and writing, and speaking and writing activities can push learners to make productive use of their vocabulary. This can strengthen and enrich knowledge of words. Being ready to make productive use of vocabulary requires stronger and more knowledge than is required for receptive use in listening and reading. This knowledge can be developed through the deliberate study of vocabulary and can also be at least partly developed through substantial receptive use.

Although we talk of extensive reading and extensive listening, there is no mention of extensive speaking and extensive writing, although there is plenty of justification for using such terms. “Extensive” needs to include the idea of large amounts but it also needs to include the idea of a variety of different uses of a skill. Extensive reading needs to include not only large amounts of reading

but also a variety of different kinds of reading – fact, fiction, short pieces of writing, novels, academic books, recipe books, newspapers, magazines, blogs, instructions, texts and emails. Similarly, extensive speaking and writing need to cover a variety of text types that are relevant to learners and that take account of the growing digital and multimodal nature of communication (Hockly, 2012). Digital story-telling has become a focus in some classrooms (Hafner, 2014) involving video production which integrates a range of receptive and productive language skills.

The integration of the skills of listening, speaking, reading and writing increases the opportunities for the repetition and varied use of vocabulary. Covering the same content through different skills sets up ideal conditions for informal vocabulary learning. In classes which have an academic focus, the process of gathering information about a topic from a variety of sources, discussing it with others, organising ideas and making written, oral and audiovisual presentations of the data is likely to greatly benefit vocabulary learning. Because around 20% to 30% of the running words (tokens) in an academic text involve topic-related vocabulary (Chung & Nation, 2003), it is important that each learner has a topic that is particularly relevant to their academic study or professional needs. Where it is not possible to match a learner to a highly relevant topic, it is useful to choose a topic where the topic-related words are high frequency or mid-frequency words.

The deliberate learning of vocabulary

The language-focused learning strand includes various ways of giving attention to vocabulary and other aspects of language learning. Some of the ways involve teaching and others involve the learners taking responsibility for their own learning. A course in English as a foreign language which includes deliberate attention to vocabulary will have advantages over a course that does not have a focus on vocabulary. This is largely because the deliberate learning of vocabulary using word cards or flash card programs is so effective in quickly expanding a learner's vocabulary knowledge up to a level where they can more easily deal with text which is written within a controlled vocabulary. The kind of knowledge focused on learning from flash cards is largely familiarity with the form of a word and its form-meaning connection. While this is very limited knowledge, it is nonetheless essential knowledge for using a word, and is readily enriched through meetings in context during language use.

There are very useful guidelines for making and using word cards which are well supported by research (Nakata, 2020). There are also useful related guidelines when designing or choosing flash card programs (Nakata, 2011). These guidelines include doing spaced retrieval, using a first language translation to represent the meaning, doing both receptive and productive learning (look at the word, recall the meaning, and look at the meaning and recall the word form) if the words are needed across all the four skills, using a core meaning that covers all the senses of the word, using mnemonic tricks like word part analysis and the keyword technique (Nation, 2013a) to help difficult words stick in memory, saying the word aloud when learning it and generally keeping the cards simple.

The research on word card and flash card learning (Nation, 2013a, Chapter 11) shows that a large number of words can be quickly learned, the learning is retained for a long time and the learning helps language use. The research also shows that learners differ considerably in their skill at learning from word cards, so systematic training in this very useful strategy is necessary.

There are other word learning strategies that fit into the language-focused learning strand. These include using word parts (Wei & Nation, 2013), guessing from context and using dictionaries to help vocabulary learning. These strategies all require training. The time spent on training is well justified by the large number of words that the strategies can be applied to.

The language-focused learning strand also includes intensive reading which may be in the form of grammar-translation, teaching vocabulary and doing vocabulary exercises such as those in course books.

The language-focused learning strand also includes activities that do not have a vocabulary focus such as pronunciation practice, grammar learning, discourse skills and guided activities for listening, speaking, reading and writing such as dictation, substitution tables, blank filling and cloze activities, and picture composition. The time given to the language-focused learning strand should be no more than one-quarter of the course time, so it is very important that teachers prioritise activities that are most effective so that the language-focused learning strand does not take over most of the course time as it does in many poorly planned courses.

Vocabulary learning through fluency development

The fluency development strand involves a separate focus on each of the four skills of listening, speaking, reading and writing. The fluency development strand has the goal of helping learners make the best use of what they already know. Fluency development activities should not involve unfamiliar language features. Useful fluency development activities include listening to stories, speed-controlled listening, 4/3/2, repeated speaking, easy extensive reading, speed reading, repeated writing and 10 minute writing (Nation, 2013b).

Fluency development activities strengthen and enrich knowledge of words that the learners have already met and encourage the development of collocational knowledge through repetition and restructuring. They also increase the speed with which learners can use the language and thus increase the opportunities to learn from input and output.

Planning a vocabulary program

There are two major focuses when planning a vocabulary program: deciding what vocabulary will be focused on and deciding how to focus on it. Let us look first at what vocabulary to focus on.

If we look at a frequency count of vocabulary in a text or a collection of texts, we will see that some of the words occur very frequently and well over half of the different words occur only once or twice. The most efficient way to learn vocabulary is first of all to learn the words that occur many times because learners will meet these words often and it will help comprehension if they already know them. These frequent words are also words that are needed for speaking and writing. The 3000 most frequent words of English cover around 90% of the running words of written text and around 95% of spoken text. These are clearly very useful words to know. There are several available lists of these high frequency words and while some are more carefully made than others, learners would gain great benefit by learning the words in any of the frequency-based lists. The BNC/COCA lists can be downloaded from the Victoria University of Wellington web site (www.wgtn.ac.nz/lals/resources/paul-nations-resources/vocabulary-analysis-programs) and an account of them and the research on them can be found in Nation (2016). Other high frequency lists include those made by Brezina and Gablasova (2015), and Browne (2014). Although graded readers use various word lists produced by publishing houses, most of the words in the graded reader lists are from the 3000 high frequency words of English.

The 3000 high frequency words are not enough to deal with listening to and reading unsimplified texts, so from a frequency perspective the next words to learn are the 6000 mid-frequency words which include the fourth to ninth 1000 word families. The 9000 high and mid-frequency words provide learners with over 98% coverage of the running words in most written text including newspapers, magazines and novels. The high and mid-frequency words need to be learned by meeting them across the four strands of a course, including listening, speaking, reading and writing, and deliberate study of vocabulary. Native speakers learn the first 9000 words of English at a rate of roughly 1000 words a year (Coxhead et al., 2015), and largely know them by the time they enter secondary school around the age of 13. Non-native speakers can also learn the vocabulary of English

at this rate, especially where English is learned as a second language. To reach this rate learners of English as a foreign language, especially those whose first language is not related to English, would need very large amounts of input over many years.

Using word frequency lists to plan the vocabulary learning in a course is applying the cost/benefit principle. The cost/benefit principle says that the cost of learning should be repaid by getting the greatest possible benefit from the learning. The cost of learning is the time and effort involved in learning. The benefit from learning vocabulary comes from the opportunities to meet and use the vocabulary. By learning high frequency vocabulary first, learners get the greatest benefit from their learning.

A well-planned vocabulary course is based on knowledge of learners' current vocabulary size and ensures that the high frequency words are well-known through large amounts of extensive reading and extensive listening and through deliberate study using word cards or flash card programs. It also involves training learners in the use of vocabulary learning strategies and making them aware of the nature of word frequency and the levels of high, mid- and low frequency words.

The second major focus in planning a vocabulary course is providing a balance of opportunities for learning across the four strands. Each lesson need not contain a balance of the four strands but over the period of a month or two, there should be a roughly equal amount of time given to each strand. This calculation of time should include work done in class and also work done outside class. The way to check if there is a balance is to keep a record of the activities done in class and the amount of time spent on each activity. Each activity then needs to be classified into the appropriate strand and the time spent added up. It should be roughly equal for each strand, and if it is not, then some adjustments need to be made to the running of the course.

Knowing where learners are in their vocabulary growth

Planning a course involves knowing where learners are in their vocabulary growth. There are tests available to help with this. For elementary and intermediate learners of English as a foreign language, the recent vocabulary level tests are the best measures (Webb et al., 2017; McLean & Kramer, 2015). Both of these tests are available from Paul Nation's web site. These level tests look at each of the first five 1000 word levels, and determine if each level has enough test items to ensure a good degree of reliability for each level. For low proficiency learners it may be enough to use just the first two or three levels to measure knowledge of the high frequency words. For intermediate learners, it may be enough to assume knowledge of the first 1000 or 2000 words and just use the third to fifth 1000 levels.

For advanced learners of English, particularly those learning English as a second language, the Vocabulary Size Test may be the most appropriate measure (Nation & Beglar, 2007). For young learners of English as a second language and for learners who are not literate in English, the Picture Vocabulary Size Test is an appropriate measure. This test is available from Laurence Anthony's web site.

Autonomy and vocabulary learning

There is such a lot of vocabulary to learn that it is important that learners take control of their own vocabulary learning. Taking control involves understanding the nature of vocabulary, understanding the principles of vocabulary learning and becoming skilled at using vocabulary learning strategies. Understanding the nature of vocabulary involves knowing about the frequency levels of vocabulary (high, mid- and low frequency words), and knowing that many words are not repeated enough to ensure learning and so learners need to use word cards or flash card programs to support the learning of those words. In the next section we will bring together the principles of vocabulary learning. Learners should explicitly memorise these principles and be aware of how to apply them. There is a free electronic book, *What do you Need to Know to Learn a Foreign Language?*, on Paul Nation's

web site that draws on the principles (Nation, 2014b). Now, however, let us look at the most useful vocabulary learning strategies.

The strategy of guessing from context involves the use of context clues, background knowledge and common-sense to guess the meaning of unfamiliar words met in reading and listening. The skills and conditions needed for guessing from context are the same skills and conditions needed for reading with good comprehension. Guessing is a trainable strategy (Walters, 2004, 2006), and there is a test to measure learners' control of the strategy (Sasao & Webb, 2018). A guess from context typically results in small increases in knowledge of the word, but this knowledge accumulates with each guess as long as there is plenty of comprehensible input. Training in guessing can occur during intensive reading. Training can focus on context clues in the immediate and wider context (Clarke & Nation, 1980). Guessing from context is most likely to be successful if it occurs in meaning-focused input where the unfamiliar words make up 2% or less of the running words.

We have already looked at the word card or flash card strategy and the guidelines for using it. Learners should practice the strategy in class, perhaps working in pairs, and should be able to state and apply the principles of spaced repetition, retrieval and quality of processing.

The word part strategy involves the skill of breaking a complex word into known parts and relating the meaning of the parts to the meaning of the whole. Developing skill in this strategy involves learning a relatively small group of prefixes and suffixes and practising breaking up words into their parts. Sasao and Webb (2017) have developed a test of the most useful prefixes and suffixes of English. Wei and Nation (2013) provide lists of the most frequent and useful word stems. Because English borrowed vocabulary from French, Latin and Greek, the word part strategy is one that can be used a lot when learning English. The word part strategy is a kind of mnemonic, helping words stick in memory. It is a dangerous strategy to use when guessing words from context, but can be used to check guesses.

The dictionary strategy is more than just looking up a word in a dictionary. It involves gathering as much information as possible from the dictionary to enhance the learning of a word. This can involve giving attention to the pronunciation of the word, looking at any examples of the word in a sentence to see what words it occurs with and in what patterns, and looking at other entries near the word to see if there are morphologically related words. It also involves looking through the various senses of the word to work out the core meaning of the word.

Each of these strategies requires repeated attention in the classroom in order to help learners gain the knowledge needed to understand and apply the strategy. Learners also need plenty of practice in applying the strategy so that it becomes easy to use the strategy. This all involves the investment of classroom time little by little over several months. The use of this time is easily justified by the usefulness of the strategies.

Principles of vocabulary learning and learning conditions

We have looked at the principle of the four strands as a way of making sure that learners get a balance of opportunities for learning. The most important part of understanding the four strands is understanding the conditions that typify each strand. If these conditions do not exist, then the strand does not exist.

The meaning-focused input strand requires only a small proportion of unfamiliar language items. If there are a lot of unfamiliar words, then it becomes hard to focus on the message and it is difficult to cope with large amounts of input. The research suggests that no more than 2% of the running word should be unfamiliar (Schmitt et al., 2011). These unfamiliar words provide opportunities for learning new words through guessing from context or dictionary look-up, and yet are few enough to allow reasonably fluent reading or listening. Having a focus on the message encourages enjoyment

Table 28.1 The four strands and the conditions needed for each strand

<i>Strand</i>	<i>Conditions</i>
Meaning-focused input	Some unfamiliar vocabulary (2%) A focus on the message Large quantities of input
Meaning-focused output	Slightly challenging output A focus on communicating Large quantities of output
Language-focused learning	A focus on language items Deliberate study
Fluency development	No unfamiliar vocabulary or grammar, and familiar content Pressure to perform faster Quantity of practice Focus on the message

and feelings of success which will help to maintain further reading. Having large quantities of input supports the critical condition of repetition which is needed for learning to occur. Table 28.1 summarises the conditions for each strand.

The meaning-focused output strand requires similar conditions to meaning-focused input, except that the focus is on output. Challenging output includes having to use partly unfamiliar vocabulary, having to deal with unfamiliar topics and having to perform with real-time pressure.

Language-focused learning involves focusing on vocabulary, grammar, sounds, spelling or discourse. It involves learning language features and learning about language. There has been some debate about whether the deliberate study of language provides the kind of knowledge needed for normal language use (Krashen, 1985). Research on vocabulary learning (Elgort, 2011), however, has shown that the deliberate learning of vocabulary establishes both explicit knowledge and the implicit knowledge needed for normal language use. The major problem with language-focused learning is that it tends to occupy too much course time, taking time away from meaning-focused input and fluency development.

The major condition for the fluency development strand is that the activities should be easy. That is, they should not involve unknown vocabulary or grammar and should draw on existing content knowledge. Because the activities are easy, they allow learners to perform at a higher than usual speed. Fluency development activities should contain some pressure to increase the speed of language use largely through time pressure. As with the other message-focused strands, fluency development requires time-on-task. The time-on-task principle says that if you want to become good at doing something, spend a lot of time doing it. If you want to be good at reading, read a lot. If you want to be good at speaking, speak a lot. Although this is a simple, quantity-focused principle, it is a very effective principle. Courses which provide plenty of opportunities to use the language produce learners who are good at using the language. As with meaning-focused input and meaning-focused output, fluency development is focused on language use. It involves the communication of messages. Fluency is not of great use unless it is connected to the communication of meaning either receptively as in listening and reading, or productively as in speaking and writing. That is why speed reading courses (see Sonia Millett’s material, www.wgtn.ac.nz/lals/resources/paul-nations-resources/speed-reading-and-listening-fluency) contain comprehension questions.

Vocabulary learning does not occur through some magic process. It occurs because various principles are applied that put good learning conditions into practice. Let us look at two examples before

we bring together a set of vocabulary learning principles. The first example, extensive reading, is a message-focused activity, and the second example, learning from word cards, is a deliberate learning activity.

When learners do extensive reading, they may meet words that they have not met before. This provides an opportunity to focus deliberately on vocabulary through guessing from context or through dictionary look-up. Ideally, less than two words in every one hundred should be new words so that learners' reading is not interrupted too much by the need to deal with words. If learners apply the time-on-task principle and read a lot, they are also increasing the likelihood that previously met words will occur again, thus allowing the very important condition of repetition to occur. The more words are repeated, the more likely they are to be remembered. The most effective repetition is spaced repetition. Spaced repetition occurs when an item is met and then some time passes before it is met again. Reading sets up good opportunities for spaced repetition, especially for high frequency words and topic-related words. The best repetition also involves good quality processing. The quality of processing principle says that the more deeply and thoughtfully words are processed, the more likely they are to be remembered. One way of adding quality to a repetition is by deliberate attention. Words that are deliberately focused on are more likely to be remembered. In language use, a very important way of adding quality of processing is through retrieval (Nakata, 2020). Retrieval occurs with words we already know something about. When we read and we meet a word that we have met before, we have the opportunity to retrieve the meaning of this word from our memory. Each successful retrieval strengthens the connection between the word form and its meaning. It also provides us with a successful recognition of the word form. Because in extensive reading we are likely to meet more partially known words than completely unknown words, extensive reading provides lots of useful opportunities for retrieval. There is a further way in which quality is added to a retrieval in extensive reading. When we meet a word we have met before and this word is in a different form or in a different context, then that varied meeting helps learning much more than if the word was met exactly as it appeared before. In reading, repetitions of words typically involve new phrase and sentence contexts and some words may occur with a different inflected form or with a derivational suffix or prefix (*sing-singer, cover-uncover*). So, in extensive reading, quality is added to meetings with words through spaced repetition, through retrieval and through varied meetings. Extensive reading is a very effective way of increasing vocabulary knowledge because it sets up effective conditions for learning.

Let us now look at the conditions for learning in our second example. Learning from word cards involves putting words on to small cards and writing their first language translation on the back of the card. The cards should be small enough to be easily carried around in a bag or a pocket. The learners should know how to check which words to put on to cards by referring to frequency lists or by considering the possible future opportunities to meet or use the word. When learners work with the cards, each learner goes quickly through their own pack of cards, looking at the word form and trying to recall (retrieve) the first language translation. The reason for writing the translation on the back of the card is so that learners have an opportunity to retrieve the meaning rather than just seeing it written next to the word. Unfortunately, the retrievals from word cards are not varied retrievals but they do involve the condition of deliberate attention. Because there can be up to 50 words in a pack of cards, when a learner goes through the pack of cards several times in one session, meeting the same word again is a spaced repetition. In addition, learners should come back to their pack of cards several times after a few days. This also provides spaced repetition. As learners use the cards, they should keep changing the order of the words in the pack so that the preceding word does not end up triggering the meaning of the next word. A good flash card program takes care of reordering the words and keeps a record of successful and unsuccessful retrievals using multiple-choice items. So, word cards and flash card programs set up good conditions for vocabulary learning through spaced repetitions, deliberate learning and retrieval.

We have looked at some principles that help vocabulary learning. The cost/benefit principle makes sure that the learners are making the best use of their learning by focusing on the most useful vocabulary. The principle of the four strands makes sure that there is a range of opportunities for deliberate learning and learning through use. The principle of the four strands also sets up opportunities for the very important principle of spaced repetition. Repetition is more likely to be effective if each repetition involves the principle of a deep quality of processing through retrieval and varied meetings and use.

Learning a language involves hard work and learners need to spend time working on what they need to learn (time-on-task). They need to do lots of listening, speaking, reading and writing and lots of well-directed language study.

The principles of cost/benefit, the four strands, spaced repetition, quality of processing and time-on-task are not just principles for the teacher to understand. Learners should also memorise these principles and understand how to apply them in their learning. They need to become autonomous language learners, taking responsibility for their own learning. When learners do this, they will find that these well proven principles apply not only to vocabulary learning but to all kinds of learning.

Activities for learning vocabulary

As a way of summing up what has been covered in this chapter on the teaching and learning of vocabulary, let us look at the major activities that can contribute to the learning of vocabulary.

Each of these activities are analysed in detail in Webb and Nation (2017, Chapter 5) to show what conditions are involved in their use and how to optimise these conditions. Several of the activities can be viewed at <https://tinyurl.com/Language-Teaching-Techniques>.

In Table 28.2, conversation appears in both the meaning-focused input and meaning-focused output strands because it is a mixture of listening and speaking. Problem-solving speaking involves activities like ranking, role play and simulation focused on a problem, and problem-solving tasks (Nation, 2013b). Vocabulary learning in such activities is helped by support from others through negotiation of meaning and through repetition which arises from having to keep dealing with the problem until a solution is found. Repetition of vocabulary can be increased by organising the

Table 28.2 The most useful vocabulary learning activities in each strand

1 Meaning-focused input	Extensive reading Extensive listening Conversation
2 Meaning-focused output	Problem-solving speaking Prepared talks Conversation
3 Language-focused learning	Intensive reading Strategy training Word card and flash card learning Deliberate study and exercises Teaching
4 Fluency development	Listening to stories, Quicklistsens 4/3/2 Speed reading, Easy extensive reading 10 minute writing

activity into a series of steps (a procedure). These steps can include preparation for the task, doing the task and reporting back on the proposed solution to the task. The pyramid procedure (Jordan, 1990) involves thinking of an individual solution to the task, then working in pairs to reach agreement, then working in a group of four and then finally as a whole class. Each step of increasing group size means that the same material needs to be covered again, thus increasing repetition of the vocabulary.

In the language-focused learning strand, intensive reading can involve individual or pair work, or more typically can involve the teacher guiding the class through a text. Vocabulary and collocations can be one of the many possible focuses in intensive reading. Intensive reading may also be a useful source of vocabulary for word card learning. Strategy training in Table 28.2 involves a deliberate focus on how to learn. Most of the strategies also involve deliberate attention to vocabulary and collocations.

The fluency activities in Table 28.2 strengthen and enrich knowledge of vocabulary. One effect of fluency activities is to push the learner to work with larger units of language, words rather than letters, word groups rather than individual words.

The learning of vocabulary does not just occur where there is a deliberate focus on vocabulary. It should occur across all four skills and all four strands. In well-planned courses, using the language through listening, speaking, reading and writing is supported by deliberate learning and using the language also provides vocabulary for later deliberate learning. Through all the opportunities for learning vocabulary both teachers and learners should be trying to put the principles of cost/benefit, the four strands, spaced repetition, quality of processing and time-on-task into practice so that the most favourable conditions for vocabulary learning occur.

References

- Brezina, V. & Gablasova, D. (2015). Is there a core general vocabulary? Introducing the New General Service List. *Applied Linguistics*, 36(1), 1–22.
- Brown, R., Waring, R., & Donkaewbua, S. (2008). Incidental vocabulary acquisition from reading, reading-while-listening, and listening to stories. *Reading in a Foreign Language*, 20(2), 136–163.
- Browne, C. (2014). A new general service list: The better mousetrap we have been looking for? *Vocabulary Learning and Instruction*, 3(1), 1–10.
- Chung, T. M. & Nation, P. (2003). Technical vocabulary in specialised texts. *Reading in a Foreign Language*, 15(2), 103–116.
- Clarke, D. F. & Nation, I. S. P. (1980). Guessing the meanings of words from context: strategy and techniques. *System*, 8(3), 211–220.
- Coxhead, A., Nation, P., & Sim, D. (2015). The vocabulary size of native speakers of English in New Zealand secondary schools. *New Zealand Journal of Educational Studies*, 50(1), 121–135.
- Elgort, I. (2011). Deliberate learning and vocabulary acquisition in a second language. *Language Learning*, 61(2), 367–413.
- Hafner, C. (2014). Embedding digital literacies in English language teaching: Students' digital video projects as multimodal ensembles. *TESOL Quarterly*, 48, 655–685.
- Hockly, N. (2012). Digital literacies. *ELT Journal*, 66, 108–112.
- Hu, M. & Nation, I. S. P. (2000). Vocabulary density and reading comprehension. *Reading in a Foreign Language*, 13(1), 403–430.
- Jordan, R. R. (1990). Pyramid discussions. *ELT Journal*, 44(1), 46–54.
- Krashen, S. (1985). *The input hypothesis: Issues and implications*. London: Longman.
- McLean, S. & Kramer, B. (2015). The creation of a new Vocabulary Levels Test. *Shiken*, 19(2), 1–11.
- Millett, S. (2014). Quicklists: Using what they already know. *Modern English Teacher*, 23(4), 64–65.
- Nakata, T. (2011). Computer-assisted second language vocabulary learning in a paired-associate paradigm: A critical investigation of flashcard software. *Computer Assisted Language Learning*, 24(1), 17–38.
- Nakata, T. (2020). Learning words with flash cards and word cards. In S. Webb (Ed.), *The Routledge handbook of vocabulary studies* (pp. 304–319). New York: Routledge.
- Nation, I. S. P. (2007). The four strands. *Innovation in Language Learning and Teaching*, 1(1), 1–12.
- Nation, I. S. P. (2013a). *Learning vocabulary in another language* (2nd ed.). Cambridge: Cambridge University Press.

- Nation, I. S. P. (2014a). How much input do you need to learn the most frequent 9,000 words? *Reading in a Foreign Language*, 26(2), 1–16.
- Nation, I. S. P. (2014b). What do you need to know to learn a foreign language? School of Linguistics and Applied Language Studies, Victoria University of Wellington. Retrieved from www.wgtn.ac.nz/lals/resources/paul-nations-resources/paul-nations-publications/publications/documents/foreign-language_1125.pdf
- Nation, I. S. P. (2016). *Making and using word lists for language learning and testing*. Amsterdam: John Benjamins.
- Nation, I. S. P. & Waring, R. (2020). *Teaching extensive reading in another language*. New York: Routledge.
- Nation, P. (2013b). *What should every EFL teacher know?* Seoul: Compass Publishing.
- Nation, P. & Beglar, D. (2007). A vocabulary size test. *The Language Teacher*, 31(7), 9–13.
- Newton, J. & Nation, I. S. P. (2021). *Teaching ESL/EFL listening and speaking*. New York: Routledge.
- Sasao, Y. & Webb, S. (2017). The Word Part Levels Test. *Language Teaching Research*, 21(1), 12–30.
- Sasao, Y. & Webb, S. (2018). The guessing from context test. *ITL International Journal of Applied Linguistics*, 169(1), 115–141.
- Schmitt, N., Jiang, X., & Grabe, W. (2011). The percentage of words known in a text and reading comprehension. *The Modern Language Journal*, 95(1), 26–43.
- Walters, J. (2004). Teaching the use of context to infer meaning: A longitudinal survey of L1 and L2 vocabulary research. *Language Teaching*, 37, 243–252.
- Walters, J. (2006). Methods of teaching inferring meaning from context. *RELC Journal*, 37(2), 176–190.
- Webb, S. & Nation, I. S. P. (2017). *How vocabulary is learned*. Oxford: Oxford University Press.
- Webb, S., Sasao, Y., & Ballance, O. (2017). The updated Vocabulary Levels Test. *ITL International Journal of Applied Linguistics*, 168(1), 33–69.
- Wei, Z. & Nation, P. (2013). The word part technique: A very useful vocabulary teaching technique. *Modern English Teacher*, 22(1), 12–16.
- West, M. (1955). *Learning to read a foreign language* (2nd ed.). London: Longman.

Re-examining some conventional assumptions in vocabulary teaching

What can we learn from the research?

Penny Ur

Introduction

A number of assumptions, in the form of prescriptive guidelines, are widely accepted by teachers and teacher educators in the teaching of vocabulary. These derive from various sources: teachers' own professional intuitions; language learning experience; teaching experience; teacher-training or teacher-development courses or books; advice from colleagues; currently popular theories and models of language teaching propagated through the literature and course curricula.

Not all of these guidelines are valid. The problem for teachers is how to distinguish between those that are indeed generally true and helpful, and those which are over-generalizations or even untrue and may impede rather than enhance learning. A major source of criteria for such distinction is the research literature. If empirical research shows that a particular claim about vocabulary teaching tends to lead to good learning, and if such research has been replicated with similar results in a variety of contexts, we can be fairly confident that it is likely to be helpful for our own teaching. If, on the other hand, there is little or no support for it in the research, or if there is evidence to contradict it, then we need to be more cautious.

The six assumptions to be explored in this chapter are the following:

1. Inferring meanings of new words from context is a useful strategy for vocabulary learning.
2. It is helpful to present new words in lexical sets.
3. It is important to teach prefixes and suffixes.
4. Unknown vocabulary should be pre-taught before encountering a new reading or listening text.
5. The use of the learners' L1 should be avoided in vocabulary teaching.
6. Vocabulary is best learned incidentally in the course of communicative texts and tasks.

With regard to each, I will discuss the relevant research and try to draw conclusions as to whether the assumption is probably valid, partially valid, or untrue and misleading. Following this discussion, I will make some suggestions as to practical implications for classroom teaching.

Inferring meanings of new words from context is a useful strategy for vocabulary learning

One of the reasons for the popularity of the practice of asking learners to *infer* (infer meaning from context) is the currently acceptable educational approach which rejects a top-down ‘transmission’ model of instruction in favor of facilitative learner-centered teaching that encourages student autonomy and initiative. Thus it would seem in principle preferable to get students to access the meaning of unknown words on their own rather than being told the right answer by the teacher, and should lead to better learning. In any case, inferencing does seem to be a strategy popular with, and assumed to be effective by, both teachers (Hulstijn, 1992) and students (Mokhtar & Rawian, 2012).

There are, however, two underlying assumptions here which require investigation:

1. The meanings of words in written or spoken discourse can usually be inferred from context.
2. Inferring meanings from context leads to better learning of the words.

Research evidence has repeatedly demonstrated that the first claim is not true. Bensoussan and Laufer (1984) found that out of 70 unknown words in a text, the meanings of 41 could in principle be guessed using contextual clues; but the average number of correct guesses by learners was only 17. Nassaji (2003), in a study of strategies used by students in guessing meanings of words in context, found that 111 of the total 199 inferential responses were unsuccessful, 37 partially successful, and only 51 successful. Kaivanpanah and Alavi (2008) report a similar proportion: only 50 words were guessed correctly out of 120. It appears that learners are normally able to guess the meanings of fewer than half of the unknown words in a text. In other words, if you ask a learner to guess the meaning of a new word in a text, the chances are that he/she will guess wrong.

The reasons are only partly a learner’s lack of knowledge of the surrounding vocabulary in the text. Even highly competent speakers of a language are often unable to infer the meaning of a new word from context, simply because most natural contexts are not *pregnant*: they do not clearly betray the meaning of the unknown word (Folse, 2004).

The claim that words with meanings that have been inferred from context will be remembered better is based on the assumption that any learning activity which involves a higher level of ‘processing’, or more cognitive effort, will result in better retention (Craik & Lockhart, 1972). In other words, if the student invests more effort in accessing the meaning of a word, by working it out on their own, they should learn it better.

However, the evidence does not clearly support this conclusion.

The main reason for this is, as we have seen, that learners often guess wrong. The ‘better learning’ idea, therefore, would apply only to those items which learners have successfully guessed from a pregnant context. Even if they have indeed guessed right, the fact that they did so is not, however, necessarily helpful in aiding retention. In some of the experiments reported by Hulstijn (1992), learners retained meanings better if they inferred them, helped by multiple-choice options, but in others they did not. Prince (1995) found his subjects learned the new words better if they were given L1 translations than if they were provided with L2 sentences contextualizing them. Mondria (2003) found no significant differences between the scores of those learners who inferred meanings from context and of those who were given L1 translations. However, the ‘meaning-inferred’ process took a good deal longer: so the conclusion has to be that telling students first to infer from context is probably not worth the extra investment of time and effort in terms of learning benefits. Mokhtar and Rawian (2012), in their research on Malaysian students, also found that although the students expressed a preference for guessing as a useful learning strategy, it did not in fact contribute to successful learning.

The reason why guessing from context, although involving more effort and thought, does not seem to produce better learning can perhaps be explained by looking at the focus of students' thinking during the process of inferring. Their attention is mostly directed at studying the context, repeated reading, asking questions, looking at the form of the word itself and so on (Nassaji, 2003), and only for the last second or two do they actually focus on the conclusion as to what the word means. In order that deep processing may benefit learning of the new item, most of the 'processing' time would need to be devoted to thoughtful engagement with the actual (correct) form-meaning link.

Implications

It is not, therefore, generally true that inferring meanings of new words from context is a useful strategy for vocabulary learning. However, we cannot conclude from this that such inferencing is in itself useless. Inferencing is a valuable reading strategy, important particularly in situations where the learner does not have access to a teacher or dictionary and is thrown back on his or her own resources. It makes sense, therefore, if the aim is reading comprehension, to give students experience guessing the meanings of new words in a reading text being taught in class – provided the teacher has selected ones that are in fact guessable – and to suggest strategies to help them do so successfully on their own. For the purposes of vocabulary teaching, however, it is probably preferable for the teacher to provide the meanings of new words quickly and clearly, and use the time thus saved for tasks that get learners to engage with the new items meaningfully in different contexts.

It is helpful to present new words in lexical sets

Lexical sets are lists of words that are all the same part of speech and are hyponyms of a single superordinate. For example, *red, yellow, green*, etc. are a lexical set belonging to the superordinate 'colors'. Other examples are *in, on, under, behind*, etc. (prepositions of place), or *hand, foot, head, shoulder* (parts of the body). Traditionally, such lexical sets are the basis of units in elementary coursebooks. A unit might, for example, be headed 'Animals' and focus on the teaching of names of animals. It is assumed by many that such groupings are learner- (and learning-) friendly.

This assumption is not, however, supported by the research. A number of studies have found that the presentation of such sets as new words to be learnt together in fact impairs learning; words that are totally unrelated, or words that are thematically or syntactically linked but not lexical sets, are likely to be learnt better. In a seminal study by Tinkham (1993), American students were asked to learn pseudo-words, that were 'translated' into English in two conditions: as lexical sets such as *shirt, jacket, sweater*; as unrelated words such as *frog, sky, car*. The students consistently remembered the unrelated words better. Repeated experiments, 'translating' the same pseudo-words as members of different sets, produced the same results. A later replication by Waring (1997), working with speakers of Japanese, resulted in similar conclusions. Erten and Tekin (2008) and Papathanasiou (2009), whose target learner populations were Turkish and Greek students respectively, performed a similar comparison using real English words rather than pseudo-words, and found the same, as did Wilcox and Medina (2013) working with novice learners of Spanish. There have, indeed, been a few dissenting voices: for example, Sarioğlu (2018), who found no difference; but these are in the minority.

The majority of applied linguists specializing in vocabulary learning today would support the basic principle that to ask learners to learn new words in the form of lexical sets is likely to be counter-productive: a summary of the issues can be found in Nation (2000). The underlying principle is the *interference effect*: if you teach two or more words that share underlying semantic or even formal properties (e.g. they are pronounced or spelt similarly), then they are likely to be confused with one another and such confusion will retard memorization.

It is interesting that to this day many beginner and elementary foreign-language coursebooks continue to base their vocabulary syllabus on lexical sets, although the principle that such grouping is likely to be detrimental to learning is fairly well established. The reason, apparently, is that lexical sets are very convenient to compose, and that once composed, they are easy to illustrate and practice. This does not, however, mean that they are learner-friendly. Apart from the negative effect on learning, the use of lexical sets as a basis for the words to be learnt in a unit may impede the main goal of vocabulary teaching at the early stages, which is in most cases to equip learners with a lot of simple, useful, and common vocabulary items, so that they can begin to communicate in the target language as soon as possible. If you teach lexical sets, then inevitably many of the words students are required to learn will be relatively rare: *toes* or *shoulders* for example if you are teaching parts of the body, *purple* if you are teaching colors. Conversely, basic and essential words like *only*, *just*, *things*, *ready* may get neglected because they happen not to be members of lexical sets; and the same is true of common multi-word items like *of course*, *at least*.

Implications

The main implication here is for materials writers. Elementary coursebooks need to be based on themes or situations rather than lexical sets. Thus the vocabulary to be taught in a unit on *family* would not just consist of a list of names of members of the family (*mother*, *father*, *daughter*, *son*, *sister*, *brother*, *uncle*, *aunt*, etc.) but include a mixture of single- and multi-word items of different parts of speech that would be likely to occur when talking about a family: *at home*, *together*, *love*, *kitchen*, *work*, *marry*, *look after*, *children*, as well as generally useful and basic items such as those mentioned above.

If teachers have to use a coursebook based on lexical sets, then what can they do about it? Some possibilities are:

- Lower the number of items in a set by deleting, or paying less attention to, the ones that are clearly less common.
- Review each of the remaining items in its own appropriate context, rather than as a list associated with the others.
- Make sure vocabulary tests and reviews include other useful interactive words and phrases presented in the unit; if there aren't many, add your own.

Note that the reservations discussed in this section apply only to the practice of introducing new words as a lexical set for the first time. Lexical sets can be useful for later vocabulary work. A new item, for example, may be introduced by linking it to one already learnt (*miserable* means the same sort of things as *sad* or *unhappy*). We may design vocabulary consolidation or expansion activities based on lexical groupings of one kind or another: identifying the 'odd one out', for example; suggesting opposites or synonyms; 'brainstorming' associated ideas from a basic theme (Ur, 2012).

It is important to teach prefixes and suffixes

A good deal of attention has been directed in recent years to the concept of 'morphological awareness': the ability of a language user to identify the component morphemes of a word, and use that knowledge to help them understand its meaning (Chen & Schwartz, 2018; Nagy et al., 2006). In most cases, the morphology referred to is the use of prefixes and suffixes attached to comprehensible basewords.

The knowledge of grammatical (inflectional) suffixes is essential: it enables learners to identify and produce a regular lexical item in its appropriate grammatical form: the noun plural *-s* suffix, for example; the *-ed* suffix which characterizes the past tense of a verb; the *-er* suffix indicating the

comparative of an adjective or adverb. It is therefore clearly important to teach these (Bauer & Nation, 1993). The usefulness of teaching derivational affixes (*pre-* meaning ‘before’ or *-ion* indicating a noun, for example) is, however, not so clear.

There seems to be little doubt that the more proficient the language learner, the better they are able to identify and use derivational affixes (Chen & Schwartz, 2018). Co-occurrence, even when confirmed by statistical correlation, does not, however, necessarily imply causality: one cannot conclude that teaching affixes will result in vocabulary expansion. Awareness of affixes may be the result, rather than the cause, of vocabulary knowledge; alternatively – and most probably – there may be some kind of recursive relationship: the more vocabulary language learners know the more they are aware of regularities in the morphological structure of words; the more they are aware of such regularities, the better they are equipped to understand and learn new words (Mochizuki & Aizawa, 2000).

The basic question to be answered here is: how many of the meanings of words with a given derivational affix could in fact be inferred through a knowledge of a (previously learned) baseword and the affix? If there is a substantial number of such words, then the affix is worth teaching. If not, then it is probably not.

In a recently-published study that analyzed a variety of texts (nearly a quarter-million words in all), Laufer and Cobb (2020) found that the number of such words was relatively small. My own research (Ur, 2022), based on a manual analysis of the 5000 most frequent words (lemmas) in the Corpus of Contemporary American English (COCA), aimed to establish how many word-meanings could reasonably and usefully be inferred by students at an intermediate level by combining knowledge of the meanings of a prefix with that of a previously-known baseword. Again, I found that the number was small. The only really useful affixes found were *-ly* and *-er*. This would imply that it is not helpful to teach most affixes at this level.

This would seem at first glance to be counter-intuitive. Surely a substantial percentage of words we use in English are derivations, using prefixes and suffixes? How is it possible that learning such morphemes is not helpful? The following illustration may clarify.

In the first sentence of the abstract of this chapter, copied below, the letters which might appear to a learner to represent prefixes or suffixes are highlighted:

There **exist** a number of **conventional** **assumptions** guiding **teachers** in teaching second-language vocabulary, some of which are **dubious** and may **impede** rather than **enhance** learning.

Seven of the 25 words appear to be derivatives. Of these, however, only the meaning of the word *assumption* could be perhaps guessed from a knowledge of *assume* + *ion*: though there is a tricky spelling inflection (*assume* → *assumpt-*), which may hinder immediate recognition. Note that the word *teacher* looks also as if it could be guessed from *teach* + *er*; but in fact the root *teach* is less common, and likely to be learned much later than the common derivative *teacher*; knowledge of the suffix *-er* in this case is therefore unhelpful to a learner. The same applies to the *-al* suffix of *conventional*. The meanings of others are opaque: usually because the affix is linked to a bound morpheme, unlikely to be known to a learner (*dubious*); or because what might appear to a learner to be an affix is in fact part of the baseword (*enhance*).

Implications

It is probably not worth teaching derivational prefixes and suffixes to elementary or intermediate classes, with the exceptions of *-ly* to indicate an adverb and *-er* to indicate someone engaged in an activity or profession. It may, however, be worth teaching some of them to advanced or academic classes: in the course of my own study described earlier (Ur, 2022) it became clear that the more

infrequent the word, the more likely it was that its meaning could indeed be inferred from the meanings of the affix and baseword combined. Some affixes which may be useful to higher-level classes include *-ion* (adjectival), *-al*, and *-ity*.

Note that prefixes joined to the baseword with hyphens produce easily-understood combinations (*pre-plan*, *sub-committee*, for example), where the same prefixes unhyphenated tend to produce opaque derivatives (*prevent*, *predicate*, *substitute*, *submerge*). Most prefixes can be hyphenated to coin new words, and it is an interesting awareness-raising exercise to invite learners to invent new words in this way.

An important conclusion is that the bulk of time spent teaching lexis needs to be devoted to deliberate presentation and review of words and expressions as they stand. Strategies such as learning affixes make a relatively minor contribution to vocabulary learning.

Unknown vocabulary should be pre-taught before encountering a new reading or listening text

This is an assumption which is treated as almost axiomatic by many teachers. It is usually applied to reading texts, less often to listening. The idea is that if learners are taught in advance words or expressions that they did not know before, but which appear in the text, they will be enabled to understand the text better, and are more likely to learn the items. In my own teaching, however, I found that in spite of the fact that I had explained the new vocabulary items, written them up on the board, and even asked students to write them down themselves, they often failed to remember what they meant when they subsequently encountered them in the new text.

I have only found two pieces of research specifically on the pre-teaching of vocabulary. Chang and Read (2006) compared different teaching strategies to support listening comprehension: pre-viewing the test questions, repetition of the input, providing background knowledge about the topic, and pre-teaching vocabulary. Of all of these, pre-teaching previously unknown vocabulary was the least helpful. Elgort et al. (2020) compared two conditions for the learning of vocabulary contextualized in a reading text. In the first, the new items were introduced and their meaning explained in advance (pre-taught); in the second, learners tried to guess what the new items meant in context, and the correct meaning was given to them immediately after they had guessed. The second condition resulted consistently in better learning of the vocabulary than the first. The aims of the two studies were, of course, not the same: the first was looking at the effectiveness of pre-teaching vocabulary for promoting comprehension of the full text, and the second at its effectiveness for vocabulary learning as such. In neither case does it seem to work very well.

The reason for the problems with teaching vocabulary before embarking on a comprehension text may be found in the research on the relationship between vocabulary review and retention. It appears that vocabulary encountered only once is unlikely to be retained; retention improves with each added encounter (Webb, 2007; Zahar et al., 2001). An item is unlikely to be permanently remembered with fewer than six or seven repeated encounters – though of course the exact number will vary, depending on the difficulty of the item in question and the proficiency of the learner. The quality of the encounter also makes a difference: a task requiring attention to meaning or form of the item in question will contribute more to its retention than incidental viewing or hearing in context (Laufer & Rozovski-Roitblat, 2011; Laufer, 2020). It is clear, however, that even if the quality of engagement with a new item is optimal, a substantial number of re-encounters remains essential.

Typically, when pre-teaching vocabulary before a reading text, teachers teach the new items only once, and do not require any further review before embarking on the reading or listening text. It is therefore not surprising, in light of the research summarized earlier, that learners do not retain the new items very well and are not easily able to use them to help understand the new text. I am not, of course, implying that the new items will be totally forgotten after one teaching! – only that the

incipient learning of such items is not yet, in most cases, solid enough to bring about immediate retrieval of meanings when the item is subsequently encountered in a text.

Implications

Pre-teaching vocabulary items as a preparation for a reading or listening text would seem to be, therefore, rather less effective than many teachers assume, whether the goal is mainly to learn the items themselves or whether it is to understand the text. There is still value, of course, to raising awareness of vocabulary that might come up in the text, as a general introduction to its topic; surely any extra exposure to, or reminders of, vocabulary perhaps partially remembered from past encounters has value.

If, then, the teacher decides to pre-teach vocabulary, he or she should be aware that teaching it immediately before working on a new text may not be very effective. It is probably better to focus on a few key items and teach them two or three lessons in advance, leaving time for review and consolidation before they are encountered in the text.

Another key implication of the preceding discussion, however, is that pre-teaching vocabulary does not need to be an invariable routine as an introduction to a new text. It can certainly be used, with the reservations mentioned earlier, but it is fine also to omit it in favor of teaching the new items in the course of reading the text itself.

The use of the learners' L1 should be avoided in vocabulary teaching

Probably many these days would not agree with this statement: there has been a swing in favor of using the L1 in language teaching, and a number of research-based publications supporting it (Cook, 2010; Hall & Cook, 2012; Witte et al., 2009). Many teachers, however, still hold to the belief that the L1 is something to be avoided: paradoxically, many, if not most, do in fact use it if they are teaching monolingual classes, but feel guilty about doing so.

This is largely because of a reaction against the traditional 'grammar translation' method, popular worldwide until the late 20th century (and in some places to this day), which used translation as a basis for most exercises and text study. This was replaced by methods focusing more on the goal of getting learners to communicate directly in the target language, culminating in the presently widely accepted communicative approach. Translation, or use of mother-tongue in general, is rejected as 'non-communicative'.

When I began teaching English myself in the late 1960s, I found myself translating new words into the students' L1. This was mainly because it saved time (explaining, miming, or otherwise clarifying meaning without using translation usually takes a lot longer) which could then be used to practice meaningful use of the item in context. The first article I ever published, in a local English teachers' journal in the early 1970s, was entitled 'In defence of translation'; (it is interesting that this title in itself seems already to be anticipating opposition!). I had not then read any research into English language teaching methodology – indeed, there was not very much available anyway at the time – and the content of the article was based only on my own teaching experience. Since then, however, there has been rising interest in and research into the role of the L1 in the learning of an additional language in general, and vocabulary in particular.

Recent studies on the use of L1 in the language classroom indicate not only that 'code-switching' (the occasional move to the use of the mother tongue in language lessons) in the classroom is very common, but also that it has a positive effect on learning (e.g. Brevik & Rindal, 2020; Corcoll López & González-Davies, 2016; Sampson, 2012).

Research indicates that the use of L1 is beneficial for vocabulary learning specifically. It appears, for example, that L1 margin glosses on new vocabulary in a reading text consistently contribute more

to learning and retention than do either L2 glosses, or no glosses at all (Fahimipour & Hashemian, 2013; Laufer & Shmueli, 1997; Teng, 2020). There has been less research on the use of L1 in vocabulary review activities, as distinct from its use to explain meanings: but here, too, the evidence seems to be that vocabulary review tasks that involve translation (Webb, 2009), or translation together with awareness of contrastive features (Laufer & Girsai, 2008), have a positive effect on learning.

Implications

A clear limitation on using L1 to teach vocabulary, even given the research in its favor, is the problem of multilingual classes, and/or the possibility that even if the class is monolingual, the teacher does not speak the students' first language. In these cases, the use of L1 is not impossible, but it is far more difficult and will depend on the students themselves as mediators between the teacher and classmates. However, the majority of language teachers in the world today are school teachers teaching predominantly monolingual groups, familiar with their students' language and culture, for whom the use of the L1 is not a problem.

In the latter situations, it seems to be fairly clear that it is helpful to use L1 translation as an aid to understanding meanings of new vocabulary items. Translation is clear, quick, and at least as accurate as other options such as L2 explanations, examples of the item in context, pictures, mime, realia, etc. However, these other options also have advantages: L2 explanations and samples of use in sentences provide added exposure to the L2, and information about appropriate contexts and collocation; the use of pictures, mime, and realia provide more impact, which is likely to help retention. Probably a sensible solution is to use translation as a backup, before or after one or more of the other means of clarification, rather than as a substitute.

It is less common to find L1 used in review exercises. This is partly because exercises, unlike clarifications of meaning, are typically provided by the teaching materials rather than by the teacher him or herself; and many coursebooks target learners with different mother-tongues. Where coursebooks are locally published, however, translation-based vocabulary work is on the increase: in my own country (Israel) it is relatively common today to find textbook activities that challenge students to identify or suggest translations to and from Hebrew or Arabic.

Useful for both initial clarification of meaning and later review is the contribution of contrastive analysis: raising learners' awareness of differences between specific items of vocabulary in the target language and parallels in the students' L1. Such differences may involve nuances of meaning and connotation, but also other aspects such as grammatical behavior, collocation, and appropriate contexts of use. Work on such contrasts can help students avoid errors rooted in L1 interference, and for many students is interesting in itself. Contrastive analysis as such is included in study tasks described in Laufer and Girsai (2008), as mentioned earlier, but I have not found any other research aiming to define and evaluate its use as a component in principle of effective vocabulary teaching. This seems to me a promising focus for future research.

Vocabulary is best learned incidentally in the course of communicative texts and tasks

The root of this claim is the assumption that instructed language learning – learning a new language through a course of study – works best if it is modelled on natural immersion-based language learning – the way children acquire a new language when their families migrate to a country where this language is predominant outside their home. The 'natural approach' promoted mainly by Stephen Krashen and his associates in the 1980s and 1990s (Krashen & Terrell, 1983) has had great influence on the thinking of language-teaching thinkers and researchers. The widely accepted communicative approach today has a similar underlying rationale: that language is best learned through

communicative tasks that get the learners to replicate the natural contexts and communicative needs of real life interaction in the target language.

The implication for the teaching of language components such as vocabulary is that this is best acquired incidentally through exposure to comprehensible input, enriched by interaction in the target language in the course of communicative tasks. In task-based methodologies associated with the communicative approach there is little or no room for pro-active vocabulary teaching, or conventional exercises that focus on 'getting it right' (sentence-completion, matching, multiple-choice and the like).

Teaching vocabulary only through comprehensible input and communicative tasks does not, however, seem to be optimally effective. Someone learning their own first language typically reads an enormous amount in that language, and is enabled thereby to amass a huge vocabulary. This is not true of people learning another language in an instructional situation: a French child learning English in school, for example. Typically learners in such situations may read less than 2000 words a week in the target language; and if vocabulary acquisition depended only on this source, Zahar et al. (2001) estimate that it would take a learner 27 years to amass a vocabulary of 2000 words! Even if this seems unduly pessimistic, the conclusions of other researchers on the rate of acquisition of vocabulary through reading are not much better: Waring and Takaki (2003), looking at how much vocabulary was learned by Japanese students reading a graded reader, conclude that very few new items are learned, and that the main benefit is probably in reinforcing previously learned ones. Pigada and Schmitt's (2006) case study provides evidence that show that some enhancement of aspects of vocabulary knowledge occurs during reading, though still relatively few words are completely mastered.

Proponents of the communicative approach, acknowledging the slowness of vocabulary acquisition through incidental encounter in context, have suggested that the solution in instructed language learning situations might be what is known as *focus on form*: drawing students' attention to new language during communicative tasks or work on texts, but without deliberate 'non-communicative' vocabulary exercises (*focus on forms*) (Long & Robinson, 1998). Focus on form might take the shape of correcting student errors, looking up words in the dictionary, providing margin glosses, boldfacing or otherwise highlighting new items in a text. Research by Laufer and her associates (Laufer, 2005; Laufer & Rozovski-Roitblat, 2011) compared learning outcomes by students learning through focus on form (operationalized as encountering new words in a reading text, using dictionaries, or asking the teacher to access meanings, then doing comprehension questions) with students learning through focus on forms (operationalized as reading the text and then doing vocabulary exercises such as sentence-completion or multiple-choice on words from the text). They consistently found that in follow-up vocabulary tests the focus on forms groups outperformed those using focus on form. However, other researchers, comparing focus on form (operationalized as doing comprehension tasks on a text) with focus on forms (operationalized as a 'present-practice-produce' sequence) have found superiority for the focus on form: Shintani (2013), looking at productive use of vocabulary by beginners, found that the two groups performed similarly when learning nouns, but that the focus on form group was better at learning adjectives. De la Fuente (2006) found better results for those learning through task-based procedures, but that their learning was enhanced when focus on forms tasks were added.

The differences can be explained by the different ways the terms *focus on form* and *focus on forms* were operationalized. The most effective classroom tasks enabling retention of new lexical items are the ones that involve learner *retrieval* – effortful but successful recall – of the form or meaning of these items. Retrieval is very likely to be the basis of focus on forms tasks (for example, inserting the right word to complete a sentence, as in the Laufer & Rozovski-Roitblat (2011) study), but may also occur in ones associated with focus on form (for example, requiring students to retrieve meanings in order to respond appropriately to a teacher's command using the target item, as in Shintani (2013)).

There is a substantial body of research on retrieval as the key component of effective vocabulary learning tasks. Barcroft (2007) found that retrieval helps retention even at the earliest stages of learning new vocabulary. Karpicke and Roediger (2008) compared the results obtained by students reviewing

previously-taught items through ‘study’ (time spent looking at and memorizing the new items and their meanings) and through ‘test’ (time spent doing tasks which required students to retrieve meanings or forms of the new items): the ‘test’ condition produced consistently better learning. Kang et al. (2013) found that retrieval-based learning was better than review based on repetition; and Candry et al. (2020) found the same when comparing retrieval with word-writing. Rice and Tokowicz (2020), in an overview of laboratory studies of adult vocabulary learning, reached a similar conclusion.

Implications

To return to the heading of this section: the interim conclusion would be that there is definitely a place for intentional, focused vocabulary work in the classroom (the teaching of new items reinforced by retrieval-based review), since incidental acquisition through extensive reading or communicative tasks is too slow to enable the accumulation of an extensive vocabulary in most instructional situations. On the other hand, most programs of study in foreign languages in schools worldwide cannot possibly provide enough classroom instruction time to enable students to master the huge amount of vocabulary needed for coping with unsimplified written or spoken texts. The conclusion has to be that both are needed (Webb, 2020), and that neither, in most instructional situations, is sufficient on its own.

Teachers need, therefore, to invest time and effort in deliberate teaching of vocabulary in the classroom, as well as encouraging their students to learn more by reading and listening to the target language outside it.

Conclusion

At the end of the day, practitioners will teach their classes in a way that accords with their own *sense of plausibility* (Prabhu, 1990). Teachers’ sense of plausibility is primarily based on experience, reflection, personal/professional judgement, and the guidance provided by authoritative sources in the local context: colleagues, directors of studies, teacher educators, Ministries of Education. Such knowledge-sources, however, may be insufficient to prevent teachers from relying on conventional assumptions such as those listed in this chapter, which may not be reliable; they need to be supplemented by information from the research.

A major problem here is that teachers are rarely able to access such information: mainly because they simply do not have the time to scan and select appropriate studies from the enormous amount of published research available. A partial answer is mediation (Ur, 2014): articles, conference presentations, and entire issues of journals which attempt to identify published studies on language teaching and learning relating to selected issues that are of potential usefulness to teachers, and discuss their relevance to classroom practice. The publication of such material – of which the present chapter and others in this collection are examples – is vital to the profession, and will, it is to be hoped, continue and increase in the future.

Further reading

- Folse, K. (2004). *Vocabulary myths: Applying second language acquisition research to classroom teaching*. University of Michigan Press.
Webb, S. (Ed.) (2020). *The Routledge handbook of vocabulary studies*. Routledge.

References

- Barcroft, J. (2007). Effects of opportunities for word retrieval during second language vocabulary learning. *Language Learning*, 57(1), 35–56.

- Bauer, L. & Nation, P. (1993). Word families. *International Journal of Lexicography*, 6(4), 253–279.
- Bensoussan, M. & Laufer, B. (1984). Lexical guessing in context in EFL reading comprehension. *Journal of Research in Reading*, 7, 15–32.
- Brevik, L. M. & Rindal, U. (2020). Language use in the classroom: Balancing target language exposure with the need for other languages. *Tesol Quarterly*, 54(4), 925–953.
- Candry, S., Declodet, J., & Eyckmans, J. (2020). Comparing the merits of word writing and retrieval practice for L2 vocabulary learning. *System*, 89, 102206.
- Chang, A. C. & Read, J. (2006). The effects of listening support on the listening performance of EFL learners. *TESOL Quarterly*, 40(2), 375–397.
- Chen, X. & Schwartz, M. (2018). Morphological awareness and literacy in second language learners: A cross-language perspective. *Reading and Writing*, 31(8), 1685–1694.
- Cook, G. (2010). *Translation in language teaching: An argument for reassessment*. Oxford: Oxford University Press.
- Corcoll López, C. & González-Davies, M. (2016). Switching codes in the plurilingual classroom. *Eli Journal*, 70(1), 67–77.
- Craik, F. I. & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior*, 11(6), 671–684.
- De la Fuente, M. J. (2006). Classroom L2 vocabulary acquisition: Investigating the role of pedagogical tasks and form-focused instruction. *Language Teaching Research*, 10(3), 263–295.
- Elgort, I., Beliaeva, N., & Boers, F. (2020). Contextual word learning in the first and second language: Definition placement and inference error effects on declarative and nondeclarative knowledge. *Studies in Second Language Acquisition*, 42(1), 7–32.
- Erten, İ. H. & Tekin, M. (2008). Effects on vocabulary acquisition of presenting new words in semantic sets versus semantically unrelated sets. *System*, 36(3), 407–422.
- Fahimipour, N. & Hashemian, M. (2013). The effect of lexical glossing types on reading and listening skills of Iranian EFL learners. *Journal of Language Teaching & Research*, 4(1).
- Folse, K. (2004). *Vocabulary myths: Applying second language acquisition research to classroom teaching*. University of Michigan Press.
- Hall, G. & Cook, G. (2012). Own-language use in language teaching and learning: State of the art. *Language Teaching*, 45(3), 271–308.
- Hulstijn, J. H. (1992). Retention of inferred and given word meanings: Experiments in incidental vocabulary learning. In *Vocabulary and applied linguistics* (pp. 113–125). Palgrave Macmillan, London.
- Kaivanpanah, S. & Alavi, M. (2008). Deriving unknown word meaning from context: Is it reliable? *RELC Journal*, 39(1), 77–95.
- Kang, S. H., Gollan, T. H., & Pashler, H. (2013). Don't just repeat after me: Retrieval practice is better than imitation for foreign vocabulary learning. *Psychonomic Bulletin & Review*, 20(6), 1259–1265.
- Karpicke, J. & Roediger, H. L. (2008). The critical importance of retrieval for learning. *Science*, 319, 966–968.
- Krashen, S. D. & Terrell, T. D. (1983). *The natural approach: Language acquisition in the classroom*. The Alemany Press.
- Laufer, B. (2005). Focus on form in second language vocabulary learning. *EUROSLA Yearbook*, 5(1), 223–250.
- Laufer, B. (2020). Evaluating exercises for learning vocabulary. In S. Webb (Ed.), *The Routledge handbook of vocabulary studies* (pp. 351–368). Routledge.
- Laufer, B. & Cobb, T. (2020). How much knowledge of derived words is needed for reading?. *Applied Linguistics*, 41(6), 971–998.
- Laufer, B. & Girsai, N. (2008). Form-focused instruction in second language vocabulary learning: A case for contrastive analysis and translation. *Applied Linguistics*, 29(4), 694–716.
- Laufer, B. & Rozovski-Roitblat, B. (2011). Incidental vocabulary acquisition: The effects of task type, word occurrence and their combination. *Language Teaching Research*, 15(4), 391–411.
- Laufer, B. & Shmueli, K. (1997). Memorizing new words: Does teaching have anything to do with it? *RELC Journal*, 28(1), 89–108.
- Long, M. H. & Robinson, P. (1998). Focus on form: Theory, research and practice. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 15–41). Cambridge University Press.
- Mochizuki, M. & Aizawa, K. (2000). An affix acquisition order for EFL learners: An exploratory study. *System*, 28/2, 291–304.
- Mokhtar, A. A. & Rawian, R. M. (2012). Guessing word meaning from context has its limit: Why?. *International Journal of Linguistics*, 4(2), 288–305.
- Mondria, J. A. (2003). The effects of inferring, verifying, and memorizing on the retention of L2 word meanings: An experimental comparison of the “meaning-inferred method” and the “meaning-given method”. *Studies in Second Language Acquisition*, 25(4), 473–499.

- Nagy, W., Berninger, V., & Abbott, R. (2006). Contributions of morphology beyond phonology to literacy outcomes of upper elementary and middle school students. *Journal of Educational Psychology, 98*, 134–147.
- Nassaji, H. (2003). L2 vocabulary learning from context: Strategies, knowledge sources and their relationship with success in L2 lexical inferencing. *TESOL Quarterly, 37*(4), 645–670.
- Nation, I. S. P. (2000). Learning vocabulary in lexical sets: Dangers and guidelines. *TESOL Journal, 9*(2), 6–10.
- Papathanasiou, E. (2009). An investigation of two ways of presenting vocabulary. *ELT Journal, 63*(4), 313–322.
- Pigada, M. & Schmitt, N. (2006). Vocabulary acquisition from extensive reading: A case study. *Reading in a Foreign Language, 18*(1), 1–28.
- Prabhu, N. S. (1990). There is no best method – why? *TESOL Quarterly, 24*(2), 161–176.
- Prince, P. (1995). Second language vocabulary learning: The role context versus translations as a function of proficiency. *The Modern Language Journal, 80*(4), 478–493.
- Rice, C. A. & Tokowicz, N. (2020). A review of laboratory studies of adult second language vocabulary training. *Studies in Second Language Acquisition, 42*(2), 439–470.
- Sampson, A. (2012). Learner code-switching versus English only. *ELT Journal, 66*(3), 293–303.
- Sarioğlu, M. (2018). A matter of controversy: Teaching new L2 words in semantic sets or unrelated sets. *Journal of Higher Education and Science, 8*(1), 172–183.
- Shintani, N. (2013). The effect of focus on form and focus on forms instruction on the acquisition of productive knowledge of L2 vocabulary by young beginning-level learners. *TESOL Quarterly, 47*(1), 36–62.
- Teng, F. (2020). Retention of new words learned incidentally from reading: Word exposure frequency, L1 marginal glosses, and their combination. *Language Teaching Research, 24*(6), 785–812.
- Tinkham, T. (1993). The effect of semantic clustering on the learning of second language vocabulary. *System, 21*(3), 371–380.
- Ur, P. (2012). *Vocabulary activities*. Cambridge University Press.
- Ur, P. (2014). Practice and research-based theory in English teacher development. *The European Journal of Applied Linguistics and TEFL, 3*(2), 143–156.
- Ur, P. (2022). Is it worth teaching prefixes and suffixes? *ELT Journal*. <https://academic.oup.com/eltj/advance-article-abstract/doi/10.1093/elt/ccac018/6575608>
- Waring, R. (1997). The negative effects of learning words in semantic sets: A replication. *System, 25*(2), 261–274.
- Waring, R. & Takaki, M. (2003). At what rate do learners learn and retain new vocabulary from reading a graded reader? *Reading in a Foreign Language, 15*(2), 130–163.
- Webb, S. (2007). The effects of repetition on vocabulary knowledge. *Applied Linguistics, 28*(1), 46–65.
- Webb, S. (2009). The effects of receptive and productive learning of word pairs on vocabulary knowledge. *RELC Journal, 40*(3), 360–376.
- Webb, S. (2020). Incidental vocabulary learning. In S. Webb (Ed.), *The Routledge handbook of vocabulary studies* (pp. 225–239). Routledge.
- Wilcox, A. & Medina, A. (2013). Effects of semantic and phonological clustering on L2 vocabulary acquisition among novice learners. *System, 41*(4), 1056–1069.
- Witte, A., Harden, T., & de Oliveira Harden, A. R. (Eds.). (2009). *Translation in second language learning and teaching* (Vol. 3). Peter Lang.
- Zahar, R., Cobb, T., & Spada, N. (2001). Acquiring vocabulary through reading: Effects of frequency and contextual richness. *Canadian Modern Language Review, 57*(4), 544–572.

Taking a practical approach to academic vocabulary in second language teaching and learning

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Introduction

The purpose of this chapter is to address two key questions that English for Academic Purposes (EAP) teachers often ask when dealing with academic vocabulary: Which words do learners need to know? How should I teach those words? In this chapter, we reframe those questions to: What do learners and teachers need to know about vocabulary in English for Academic Purposes? What can learners and teachers do to increase the knowledge and use of this vocabulary in English? This area of research, teaching and learning fits into second language (L2) teaching and learning in several ways. Firstly, it focuses on the vocabulary that learners with a particular purpose, in this case academic vocabulary, need to understand academic written and spoken texts in a particular context in English. That is, it is central to learning English for Academic Purposes (EAP). Secondly, it addresses ways in which learners and teachers can engage with the important task of undertaking the development of academic vocabulary knowledge. This means it fits within vocabulary studies overall, which is an ever increasing area of research and pedagogy. The chapter ends with suggestions and resources to support teaching and learning of academic vocabulary.

Important developments in vocabulary in EAP

This section is divided into two main parts. The first section focuses on features of academic vocabulary. The second section looks at why this vocabulary is important. Each section includes a reflection on issues that have arisen in these areas and why.

What do learners and teachers need to know about vocabulary in EAP?

Academic vocabulary can be divided roughly into two main groups. The first group includes words which are needed for general academic purposes and occur across a wide range of subject areas. Examples of such vocabulary items include *furthermore*, *research* and *findings*. These words are largely independent of the content of a subject but they are important because of the role they play in delivering the message. This group is somewhat controversial because, as Hyland and Tse (2007) point out, some general academic words may occur in different academic subject areas with different

meanings. They analyzed texts from Science, Engineering and Social Science, and found *consist*, for example, occurred more often in Engineering with the meaning of *made up of* than with the meaning of *stay the same*. The second group contains words which are needed for specific academic purposes. These words occur mostly in one academic discipline and relate closely to its content. Examples of specific academic vocabulary include *spectrum* and *acid* in Chemistry (see Valipouri & Nassaji, 2013, for example). These two groups are rough guides only, because there are words which can have a specific meaning in a particular subject area but also have a general meaning. A good example of such words is *significant* which has a specific meaning in statistics and is also used in academic texts generally to mean *important* or *key*. Coxhead (2020) provides more discussion and examples of such vocabulary.

These two groups of academic vocabulary include high, mid and low frequency words (Nation, 2013). High frequency words, as we will see later, occur often and learners will encounter them in written and spoken texts (for example, *area*). High frequency words are important because they account for the majority of words in any text. These words are essential for all language learners and are made up of the first 2,000–3,000 word families of English. This is not to say that all high frequency words are academic. Rather the point here is that high frequency words in general English may also occur often in academic English. Mid frequency words are less frequent than high frequency vocabulary, and are followed by low frequency words. The main issue here is that in the past, high frequency words were not included in studies of academic vocabulary such as Coxhead's (2000) Academic Word List (AWL). Now we understand that high frequency words can also be academic in nature.

Extract 30.1 contains an example of an academic written text. It is an abstract from a journal article (Donthu & Gustafsson, 2020) in the *Journal of Business Research*. Items from the Academic Word List (Coxhead, 2000) are underlined. Just over 14% of the words in the abstract are from the AWL. It is important to note that some words occur more often than others, for example, the word *and* is repeated six times and *change/s* appears twice. In general English, frequency categories have been developed based on word lists from Nation (2013). Also note from Extract 30.1 that some of the AWL items occur together (e.g., *economic consequences* and *ethical issues*). These co-occurring words are called *collocations*, and they do not appear together by chance. This is another important feature of academic vocabulary that learners and teachers need to know about – words occur in context and in patterns.

EXTRACT 30.1 AN EXAMPLE OF AN ACADEMIC WRITTEN TEXT (DONTU & GUSTAFSSON, 2020, P. 284) WITH AWL (COXHEAD, 2000) ITEMS UNDERLINED

The COVID-19 outbreak is a sharp reminder that pandemics, like other rarely occurring catastrophes, have happened in the past and will continue to happen in the future. Even if we cannot prevent dangerous viruses from emerging, we should prepare to dampen their effects on society. The current outbreak has had severe economic consequences across the globe, and it does not look like any country will be unaffected. This not only has consequences for the economy; all of society is affected, which has led to dramatic changes in how businesses act and consumers behave. This special issue is a global effort to address some of the pandemic-related issues affecting society. In total, there are 13 papers that cover different industry sectors (e.g., tourism, retail, higher education), changes in consumer behavior and businesses, ethical issues, and aspects related to employees and leadership.

Like high frequency general vocabulary, academic words can also be organized into frequency groups. The AWL (Coxhead, 2000), for example, contains 570 word families and they are organized in 10 sublists. Sublist 1 contains the most frequent 60 families, Sublist 2 contains the next most frequent 60, and so on to Sublist 10 which contains the least frequent 30 word families. Sublist 1 contains the families that occur most often and in most academic texts (e.g., *area* and *approach*) while Sublist 10 words appear less often (e.g., *so-called* and *intrinsic*).

Learners might find it difficult to learn academic vocabulary for several reasons. One is that academic words tend to occur mostly in academic contexts, meaning learners need to read academic texts and listen to academic speaking events to encounter these words. Miller (2011) found that university textbooks contained roughly double the amount of AWL items (Coxhead, 2000) compared to non-academic reading materials such as newspapers, magazine articles and biographies that are typically used in English as a second language reading skills classes. This means learners and teachers need to think carefully about the kinds of texts that are selected for reading for developing academic vocabulary knowledge. This issue has been taken up in studies of textbooks in English as a Foreign Language (EFL) contexts which are often used for EAP purposes. Coxhead et al. (2020) analyzed the academic vocabulary of two popular EFL textbooks which are commonly used as preparation for university study in Indonesia and China. They found that Gardner and Davies' (2014) Academic Vocabulary List (AVL) (see the next paragraph) covered between just over 13% to just over 17% of the Chinese textbooks and nearly 15% of the Indonesian textbooks, compared to the 14% coverage over academic written texts from Gardner and Davies. Many of these items occur in the first and second 1,000 lists of Nation's (2012) BNC/COCA frequency-based word lists, which means they are high frequency words in English. Sun and Dang (2020) also found that a series of Chinese textbooks contained mostly high frequency vocabulary.

Coxhead et al. (2020) also looked into the coverage of the AWL (Coxhead, 2000) over the Indonesian and Chinese textbooks because it is a widely used word list. The AWL did not include the first 2,000 words of English (from West, 1953). The AWL covered between 2.26% to 4.18% of the Chinese textbooks and 3.62% to 5.99% of the Indonesian textbooks compared to the average coverage over university-level academic written texts of 10% (see Coxhead, 2000, 2011). Furthermore, often the AWL items were not repeated in the textbooks, which reduces opportunities for learning the items incidentally. Coxhead et al. (2020) found that a total of 230 items (out of 2,468) from the Academic Collocation List (Ackermann & Chen, 2013) appeared in the Indonesian textbooks, and the Academic Formula List (Simpson-Vlach & Ellis, 2010) covered from 0.7% to 1% of the Chinese textbooks. Taken together, these results suggest that while these textbooks may well serve students for developing high frequency vocabulary knowledge, they would need careful and targeted supplementary resources if they were used for preparation for university study.

Academic vocabulary contains large amounts of words which come from Greek or Latin. These words are often made up of word parts from those languages. For example, *coordinate* is from Latin and is made up of a prefix from Latin (*co*) which means *together* and the word *ordinare*, which means *order*. For learners of Romance languages (e.g., Italian) or languages which draw on Greek and Latin (e.g., Russian), this feature will not cause as many difficulties as for learners whose first language does not draw on these languages. Sasao and Webb (2015) developed a Word Parts Level Test (available at <https://ysasaajp.info/en/resources-en>) which teachers can use to find out more about their learners' knowledge of these important aspects of academic vocabulary. There are plenty of lists of word parts online which can be used to help focus on common patterns of word formation in academic English. As with any kind of vocabulary learning, it is important to start with the most frequent patterns first because they give the best return for learning. Laufer and Cobb (2020) analyzed a variety of texts, including academic, and identified the most common affixes. They also show that learners

do not need to know all the words in a word family to be able to understand such texts. This point is important because there has been discussion about the use of word families as a counting unit for words, and an extrapolation that learners and teachers may need to focus on learning all the words in a family (rather than focusing on common word building patterns in the language). A word family includes affixes and derivations, and an example is *contribute*, *contributes*, *contributing*, *contributed*, *contribution* and *contributions*.

Learners need a large vocabulary to cope with reading academic written texts. Coxhead (2021) found that more than 9,000 word families in English were needed to cover 95% of the words in a corpus of academic written texts. At 95% coverage, learners would need support to help them read such texts (see Laufer, 2013) and for listening comprehension (van Zeeland & Schmitt, 2013). To be able to cope without support, a learner would need to know 98% of the words in the text (Laufer, 2013) but Coxhead (2021) found that 98% coverage was not achieved even with 25,000 word families, proper nouns, abbreviations, marginal words and compound nouns. Laufer (2020) points out that this coverage might not just include sight vocabulary – that is, the words that learners know before reading – but also the vocabulary that they correctly infer while reading. She finds that those with a good foundation of vocabulary knowledge (in this case, 3,000 word families) and good skills at inferring meaning from context could potentially understand a text at the same level as those with a vocabulary size of around 5,000 word families. This point is important, because it highlights the importance of developing inferencing skills for second language learners – and not just for those who are preparing for university-level studies in English.

Learners need a somewhat smaller vocabulary to cope with spoken academic texts than written academic texts. Dang and Webb (2014) found that learners would need 4,000 word families to reach 95% and 8,000 to reach 98%; while Coxhead and Dang (2019) found learners would need to know 3,000 word families to reach 95% of university tutorials and laboratory sessions. This amount increased substantially to 7,000 word families at 98% for laboratories, but not as much for tutorials which required 4,000 word families at 98%. Coxhead et al. (2017) analyzed 15 commonly used EAP textbooks and one English for Specific Purposes (ESP) textbook series to find out what recommendations they made for useful spoken academic English phrases in laboratory sessions and tutorials.

Dang et al.'s (2017) Academic Spoken Word List (ASWL) was developed based on academic spoken texts to help learners and teachers focus on the vocabulary of these texts. The ASWL contains 1,741 word families and has high coverage of academic spoken English – over 90%. It is available at <https://osf.io/gwk45/>. The ASWL contains large amounts of high frequency vocabulary, such as *group* and *particular*.

Academic collocations can be defined as the most frequent multiword units in academic texts (Biber & Barbieri, 2007) and include both lexical and grammatical collocations. Lexical collocations contain two content words (i.e., verb, noun, adjective or adverb), such as *conceptual framework* (adjective + noun) or *change dramatically* (verb + adverb). Grammatical collocations include at least one function word such as prepositions, pronouns or conjunctions, as in *and respectively* (conjunction + adverb) or *rely on* (verb + preposition). Research on academic collocations has mostly focused on lexical academic collocations (e.g., Ackermann & Chen, 2013; Li & Schmitt, 2010; Wongkhan & Thienthong, 2020) because they are more salient as complete expressions and are supposed to have more pedagogical value. Academic grammatical collocations, however, are no less important because they are more frequent and pervasive than lexical collocations in academic texts across disciplines (Durrant, 2009; Henriksen & Westbrook, 2017).

The meaning of academic collocations is often transparent (e.g., *critical role* or *research evidence*). This is different from general collocations whose meaning sometimes cannot be inferred from its components (e.g., *black sheep* refers to an odd member in a family). Due to the transparency of academic collocations, L2 learners may not have much difficulty in recognizing meaning of an academic

collocation if they have knowledge of the individual words that make up the collocation. Producing academic collocations, on the other hand, can be problematic. A number of studies (Granger, 1998; Howarth, 1998; Siyanova & Schmitt, 2008) have shown that even advanced L2 learners often experience problems with collocations in academic writing. For example, Siyanova and Schmitt (2008) found that 55% of adjective + noun collocations used by advanced Russian university students in their writing essays were inappropriate. The use of deviant collocations can signal the lack of academic expertise (Henriksen, 2013). This stresses the importance of incorporating academic collocations into EAP programs. Learning academic vocabulary (like any other vocabulary learning) requires multiple encounters, opportunities for use in speaking and writing as well as feedback to help it stick in learners' memories. The good news, according to Nation (2013), is that language teachers can focus on the development of academic vocabulary with learners. There is more on this point in the section later on what learners and teachers can do to increase the knowledge and use of academic vocabulary in English.

Why is academic vocabulary important?

Academic vocabulary is important for several reasons. Firstly, it is a core element in understanding and expressing ideas in written and spoken academic texts. Learners will encounter this vocabulary in their academic reading and listening, and will need to use it in their academic writing and speaking. Secondly, this vocabulary occurs more often in academic written texts than in other kinds of texts such as fiction (Coxhead, 2000) or newspapers (Nation, 2013). It often occurs in noun phrases in academic written texts (Biber, 2006). Finally, but no less importantly, the results of testing learners' knowledge of academic vocabulary suggest that learners need to develop this knowledge. It also shows that learners recognize more academic vocabulary than they can produce (Pecorari et al., 2019). The next section looks into supporting the development of this knowledge.

What can learners and teachers do to increase the knowledge and use of academic vocabulary in English?

This section focuses on several practical areas to support learning and use of academic vocabulary. The first section looks into measuring vocabulary knowledge, while the second section looks into working with available word lists on academic vocabulary. The third section discusses academic vocabulary in textbooks and dictionaries, and the fourth section focuses on making use of interactive tools to identify academic vocabulary in texts. The final section gives suggestions on how to apply Nation's (2007) four strands to working with academic vocabulary.

Measuring vocabulary knowledge as a first step

There are several reasons why EAP teachers might want to measure learners' current vocabulary knowledge. Measuring learners' knowledge of academic vocabulary helps to evaluate the effectiveness of instructional methods and estimate learning gains. A test on academic vocabulary can be administered at the beginning of a language course to examine the extent to which learners know academic vocabulary. Teachers can also administer the test again during, and at the end, of the course and compare the pre-test and post-test results. If the test results do not indicate a learner's growth in academic vocabulary knowledge, teachers may consider changing the teaching techniques. Several available tests are available for this purpose, including the Academic Vocabulary Size Test (Masrai & Milton, 2018) and the Academic Vocabulary Test (AVT; Pecorari et al., 2019). The test of Masrai and Milton (2018) consists of 114 words from the Academic Word List (Coxhead, 2000) and 19 control words presented as a checklist test. Test-takers are required to tick the words that they know. On the

- | | |
|--------------------------------|-----------------|
| ___ border | a. assertion |
| ___ explanation | b. exclusion |
| ___ making copies of something | c. fragment |
| | d. frontier |
| | e. rationale |
| | f. reproduction |

Figure 30.1 Sample items of the AVT

Source: Pecorari et al., 2019, p. 69

	ear	gold	lake	letter	office	people
information sent to people						
men and women						
place for working						

Figure 30.2 Sample items of the UVLT

Source: Webb et al., 2017, p. 61

other hand, the test of Pecorari et al. (2019) includes 57 target items drawn from the Academic Vocabulary List (Gardner & Davies, 2014). A sample of the AVT is presented in Figure 30.1.

It is also a good idea to test learners’ knowledge of general vocabulary. There is a common assumption that learners who want to start their academic study at an English-medium university should already have knowledge of the most frequent words in English (i.e., words from levels 1,000 and 2,000). However, research has pointed out that in many EAP classes, learners have not yet mastered knowledge of the most frequent 2,000 word families (Akbarian, 2010; Dang, 2020, Nguyen & Webb, 2017). This may make the acquisition of academic vocabulary more challenging as general high frequency words account for about 75% to 90% of the running words in any text (Dang & Webb, 2020). Therefore, to ensure that learners have the foundation of general high frequency words to learn academic vocabulary, the Updated Vocabulary Levels Test (UVLT) (Webb et al., 2017) can be used. This test measures knowledge of the first five 1,000 word levels of Nation’s (2012) BNC/COCA word lists. The UVLT uses the matching format (see Figure 30.2) with 30 test items divided into 10 clusters for each level. Teachers can administer levels 1,000 and 2,000 of the UVLT to check whether learners have mastered the first 2,000 word families in English. For the interpretation of the test scores, a cutting point of 29/30 is suggested for mastery of levels 1,000 and 2,000 (Webb et al., 2017). If the test results indicate that learners have insufficient knowledge of those two levels, teachers may consider setting high frequency words as priority before moving on to academic vocabulary.

Developing inferencing skills

As Laufer (2020) and Nation (2013), for example, have pointed out, learners have much to benefit from developing their vocabulary knowledge in English and from developing their ability to guess the meaning of unknown words from context. Sasao and Webb (2018, p. 116) point out that, “It should be reasonable to assume that the improved skill of guessing has the potential to facilitate vocabulary learning, because it provides learners with a greater chance to learn words while reading or listening.” It is difficult to guess meaning from context if a text contains a large number of unknown words. Laufer (2020) suggests that only 5% of the vocabulary of a text should be unknown when teaching inferencing skills. Nation (2013) provides a very useful chapter on learning vocabulary from context, including a discussion of clues in texts which can help facilitate guessing, such as

repetition and proximity of the unknown words that learners are focused on, clues such as definitions in brackets after words or synonyms, and how close or important a word is to the topic of the reading. Nation (2013) suggests that teachers can help learners to develop their inferencing skills by choosing texts that are not too difficult, strategy training and increasing the amount and fluency of reading. Learners need plenty of practice at guessing meaning from context, through steps such as isolating the unknown word and looking for clues in the close content, such as the sentence it appears in and the sentences around it. Grammatical aspects of the unknown words can be used (for example, is this word a noun? Is it a verb?) and the learners' guesses can be put into the original sentence to see whether the grammar and meaning fit. Other aspects of the words in context can be used, such as any word parts (e.g., *semi* meaning *half*; *photo* meaning *light*), or phrases that connect the word to the context and meaning, such as *for example* or *to put it another way*. Nation (2013) recommends that for learners in pre-university courses, this strategy could be practiced almost daily for 10 minutes or more at least in the initial six weeks, and longer if need be. This time is important because of the complexity of the strategy (Nation, 2013). Sasao and Webb (2018) developed a test for guessing meaning from context (available at <https://ysasaojp.info/en/resources-en>). The test has three parts: part of speech, using clues from context and finally, checking the capacity to extract meaning of the target unknown words from context. Test scores, therefore, can indicate which of the three areas of guessing meaning from context learners are struggling with, and need more practice on.

Working with available word lists on academic vocabulary

After ensuring that academic vocabulary is a suitable learning goal for learners, teachers can consider working with available academic vocabulary lists. Corpus-based word lists provide language teachers with a shortcut to identify which words are worth learning. These lists include items that are a representative sample of the corpus (i.e., a collection of texts) used to develop the list. For example, the Academic Vocabulary List (Gardner & Davies, 2014) was created from the largest academic corpus of 120 million words. The list includes 3,015 core academic words. Depending on the focus of the vocabulary for EAP and the needs of the learners, e.g., single words or multiword units, written or spoken discourse, teachers can select the lists that best meet the demand. EAP teachers can make use of the following published word lists on academic vocabulary:

Single academic vocabulary:

- The Academic Word List (AWL) (Coxhead, 2000)
- The Academic Keyword List (Paquot, 2010)
- The New Academic Word List (Browne et al., 2013)
- The Academic Vocabulary List (AVL) (Gardner & Davies, 2014)
- The Academic Spoken Word List (Dang et al., 2017)

Multiword academic vocabulary:

- The Academic Collocation List (Ackermann & Chen, 2013)
- The Academic English Collocation List (Lei & Liu, 2018)
- The Academic Formulas List (Simpson-Vlach & Ellis, 2010)

It should be highlighted that there are several lists sharing the same target vocabulary such as the single academic word lists of Coxhead (2000), Paquot (2010), Browne et al. (2013) and Gardner and Davies (2014) or the Academic Collocation Lists of Ackermann and Chen (2013) and Lei and Liu (2018). This overlap stresses the importance of evaluating word lists before making a decision on which list to use. Teachers should carefully look into the features of the lists as well as

Table 30.1 Nation's (2016) framework for word list evaluation

<i>Focus</i>	<i>Questions</i>
Purpose	Was the target population for the word list clearly described? Was the purpose of the list clearly described?
Unit of counting	Was the unit of counting suited to the purpose? Was the unit of counting clearly defined, including issues such as UK vs US spelling, alternative spellings, part of speech, abbreviations and numbers? Was the unit of counting explicitly well-justified?
Corpus	Was the content of the corpus suited to the purpose of the list? Was the corpus large enough to get reliable results? Was the corpus divided into sub-corpora so range and dispersion could be measured? Were the sub-corpora large enough, of equal size, and coherent? Was the corpus checked for errors?
Main word lists	Was there an explicit description of what would be counted as words and what would not be included? Were homoforms dealt with? Were proper names dealt with, including proper name homoforms? Were content bearing proper names distinguished? Were hyphenated words dealt with? Were transparent compounds dealt with in a way consistent with hyphenated words? Were acronyms dealt with, including acronym homoforms? Were the proper name lists and other lists revised on the basis of initial output?
Other lists	Were marginal words dealt with? Were any other supplementary lists used?
Making the lists	Were the criteria for inclusion and ordering in the list (frequency, range dispersion, or some composite measure) clearly described and justified? Were the criteria for making sub-lists clearly described and justified? Were any subjective criteria used? Were they described and justified? Were the lists checked against competing lists not just for coverage but also for overlapping and non-overlapping words?
Self-criticism	Are the weaknesses of the lists clearly acknowledged?
Availability	Are the lists readily available in electronic form for evaluation?

the compilation process to evaluate whether the lists could achieve intended purposes. Currently, Nation's (2016) framework (see Table 30.1) is one of the only available tools that guides the process of word list evaluation. Although this framework is designed specifically for evaluating lists of single words, it can also be adapted to be used with lists of multiword units. By answering the questions in this framework, teachers can gain more insight into the lists and form their own judgement about the suitability of the lists for pedagogical purposes.

Having identified the appropriate list to work with, the next point that EAP teachers may consider is the order in which the academic words should be taught. Frequency is an essential factor that should be taken into account because words that are encountered more frequently are considered important and useful (Dang & Webb, 2016; Vilkaitė-Lozdiene & Schmitt, 2019; Webb & Nation,

2017). Explicit attention, therefore, should be given to the most frequent items in the selected word list during class time. For lower frequency items in the list, teachers may provide guidance for independent learning outside the classroom. It is worth noting that word lists vary in size (e.g., the core Academic Formulas List has 607 items while the Academic English Collocation List has 9,049 items). Depending on the course length, the learning goal can be part of a list or a whole list. The rule of thumb is still ‘more frequent, learn first’. Antconc (Anthony, 2019) is a free software that can be used to check word frequency. This tool is available at www.laurenceanthony.net/software/antconc/ with video tutorials. The Compleat Lexical Tutor and the Corpus of Contemporary American English interactive tool (see more later) also have the function of frequency checking.

Using resources for developing academic vocabulary knowledge: textbooks and dictionaries

One area of development in textbooks and dictionaries is to include and highlight academic vocabulary to help EAP learners with their learning. Some publications have a focus on a particular word list. For example, there are a large number of textbooks which focus on the AWL, including a recent series by Coxhead and Nation (2018) called *Reading in the academic world* (Seed Learning). Other titles include *Contemporary Topics* (Longman), *Focus on Vocabulary: Mastering the Academic Word List* (Longman), *Inside Reading* (Oxford University Press), *Read This* (Cambridge University Press) and *Academic Vocabulary in Use* (Cambridge University Press).

Dictionaries which highlight academic vocabulary from Longman include the *Longman Exams Dictionary* and the *Longman Dictionary of Contemporary English*, and from Oxford University Press include the *Oxford Advanced Learner's Dictionary* and the *Oxford Student's Dictionary of English* which include the AWL. An early Macmillan Dictionary also included the AWL and a second edition used Paquot's (2010) Academic Keyword List (see <https://uclouvain.be/en/research-institutes/ilc/cecl/academic-keyword-list.html>) which contains 930 items. This list also features in the Louvain EAP dictionary.

Making use of interactive tools

A number of interactive tools have been designed to support teachers and researchers in working with academic word lists. The Compleat Lexical Tutor (available at www.lexutor.ca/) is a multifunctional web page that assists data-driven language learning. For academic vocabulary, the VocabProfile function allows users to analyze a text up to 35,000 words to see how many words belong to the AWL (Coxhead, 2000) (see Extract 30.1 earlier for an example). This tool not only lists all the academic words in the text, but also categorizes them into their sublists. Users can also find the UVLT on this website in both interactive and paper forms.

The EAP Foundation website (available at www.eapfoundation.com/tools/) is another useful page which provides access to several academic word lists previously mentioned. Similar to the Compleat Lexical Tutor, the EAP Foundation website also enables users to submit a text to highlight all the academic words in the text. It uses general academic word lists including the AWL, the Academic Collocation List (ACL) and the Academic Formulas List (AFL). It also has specific academic word lists, including Economics and Medical English. Another useful function of this web page is the Gap-fill Maker which helps to create gap-fill exercises with academic words from a text entered by users. There are three options, including a simple gap-fill with blanks only, a headword gap-fill in which each of the academic words is substituted by its headword (or by another word form if the substituted word is itself a headword) or a word family gap-fill, in which every academic word is replaced by another word from the same word family. Figure 30.3 shows an example of a headword gap-fill exercise created from Extract 30.1 based on the AWL.

The COVID-19 outbreak is a sharp reminder that pandemics, like other rarely _____ (occur). catastrophes, have happened in the past and will continue to happen in the future. Even if we cannot prevent dangerous viruses from _____ (emerge), we should prepare to dampen their effects on society. The current outbreak has had a severe _____ (economy) _____ (consequent) across the _____ (globally), and it does not look like any country will be _____ (affect). This not only has _____ (consequent) for the _____ (economist); all of society is _____ (affect), which has led to _____ (drama) changes in how businesses act and _____ (consume) behave. This special _____ (issued) is a _____ (globe) effort to address some of the pandemic-related _____ (issue) _____ (affect) society. In total, there are 13 papers that cover different industry _____ (sector) (e.g., tourism, retail, higher education), changes in _____ (consume) behavior and businesses, _____ (ethic) _____ (issue), and _____ (aspect) related to employees and leadership.

Figure 30.3 Sample output of the AWL headword gap-fill maker using an extract from Donthu and Gustafsson (2020)

HELP	<input type="checkbox"/> ?	CONTEXT	FREQ	ALL	%	MI
1	<input type="checkbox"/>	SIGNIFICANT	7840	60473	12.96	7.92
2	<input type="checkbox"/>	INDIVIDUAL	1376	51450	2.67	5.64
3	<input type="checkbox"/>	CULTURAL	943	41728	2.26	5.40
4	<input type="checkbox"/>	MEAN	588	33237	1.77	5.05
5	<input type="checkbox"/>	IMPORTANT	468	76613	0.61	3.51
6	<input type="checkbox"/>	ETHNIC	361	17020	2.12	5.31
7	<input type="checkbox"/>	MAJOR	335	37315	0.90	4.07
8	<input type="checkbox"/>	RACIAL	307	10510	2.92	5.77
9	<input type="checkbox"/>	STATISTICAL	246	9946	2.47	5.53
10	<input type="checkbox"/>	FUNDAMENTAL	212	10798	1.96	5.20

Figure 30.4 Sample output of the search for collocations ‘adjective + *difference*’ in COCA academic corpus

Last but not least, the Corpus of Contemporary American English (COCA) interactive tool (available at www.english-corpora.org/coca/) facilitates academic vocabulary learning in several ways. For single academic words, the online interface (available at www.academicvocabulary.info/) aids to analyze a text and highlight all the academic words in the AVL (Gardner & Davies, 2014). It also provides detailed information for any word clicked in the text, including definition, frequency and collocates. For academic multiword units, the main searching page allows users to find collocates of a word in the COCA academic corpus. Different searching span (i.e., how many words to the right and/or the left) and part of the speech of the collocates can also be adjusted by users. The searching results return statistical information of the phrases (e.g., frequency and mutual information score) as well as concordance lines to show how the academic phrases are used in authentic contexts. For example, a search of adjective collocates of the noun *difference(s)* returns 1,328 results with the top 10 collocates shown in Figure 30.4. Users can click on the word in the ‘Context’ column to see how the collocates are used in real academic settings (see Figure 30.5 for sample concordances of the collocation *significant difference*).

Applying Nation’s (2007) Four Strands

Nation’s (2007) Four Strands provide a framework to help learners and teachers with understanding what is needed to help learn academic vocabulary. The Four Strands include: 1) meaning-focused input, 2) meaning-focused output, 3) language-focused learning and 4) fluency development. Teachers should spend a roughly equal amount of time of the course on each strand.

CLICK FOR MORE CONTEXT				<input type="checkbox"/> [?]		SHOW DUPLICATES	
1	2019	ACAD	PeerJ	A	B	C	than SRCs. However, when sentence-initial subjects were inanimate, there were no significant differences in processing difficulty between SRCs a
2	2019	ACAD	PeerJ	A	B	C	not take part in the experiment. The results indicated that there was no significant difference in plausibility ratings between the four types of rel
3	2019	ACAD	PeerJ	A	B	C	than ORCs. When the main clause subjects were animate, there was no significant difference in accuracy between the two types of RCs (p = .706)
4	2019	ACAD	PeerJ	A	B	C	<.05). When the main clause subjects are animate, there was no significant difference between SRCs and ORCs (p=.950). In the older adults, SRC
5	2019	ACAD	PeerJ	A	B	C). Pairwise comparison revealed that in the older group, there was no significant difference between SRCs and ORCs in both animacy conditions.
6	2019	ACAD	PeerJ	A	B	C	main clause subjects are inanimate (p <.05), but there was no significant difference between the two types of relative clauses when the main clau
7	2019	ACAD	PeerJ	A	B	C	than ORCs when the main clause subjects were inanimate, but there was no significant difference in processing difficult between SRCs and ORCs
8	2019	ACAD	PeerJ	A	B	C	suggests that older adults relied on syntactic cues rather than animacy cues. No significant difference between SRCs and ORCs was found in the
9	2019	ACAD	Indian J Orthopaedics	A	B	C	IM and the EM guides are summarized in Table 2. There were no significant differences between the average alpha (P = 0.86, 95% CI: −0.
10	2019	ACAD	Indian J Orthopaedics	A	B	C	alignment than the EM guide. However, this study did not find any significant difference in terms of femoral alignment. # In this study, th align
11	2019	ACAD	... Pacific Journal of Reproduction	A	B	C	were subjected to one-way analysis of variance with the Tukey post hoc test. Significant difference was accepted when P <0.05. Values were rep
12	2019	ACAD	... Pacific Journal of Reproduction	A	B	C	weight of AAMF group was similar to all other groups. There was no significant difference in the pituitary weights of all treated groups at both d
13	2019	ACAD	... Pacific Journal of Reproduction	A	B	C	between each group (P >0.05). Table 4 # There were no significant differences (P >0.05) in the frequency of occurrence of the various estrous cyc
14	2019	ACAD	Indian J Orthopaedics	A	B	C	heads (P < 0.05). However, the Trab-Th value showed no significant differences in the left femoral heads (P < 0.05) as well as the value
15	2019	ACAD	Indian J Orthopaedics	A	B	C	terms of the same weight-bearing status, the final result did not show a significant difference in the same study group. In other words, all the rat

Figure 30.5 Sample concordances of the collocation *significant difference* in COCA academic corpus

With the first strand of meaning-focused input, academic vocabulary can be learned through reading and listening. It is important that the texts used for this purpose should be simplified or glossaries are provided so that learners can understand 98% of the texts and only a few academic words are new. By doing this, the academic vocabulary can be noticed easily and picked up incidentally. Teachers can make use of the interactive tools such as the Compleat Lexical Tutor to analyze the texts and modify the vocabulary where necessary. The main aim is that learners should feel comfortable when processing the texts with only very few new academic words or phrases to learn.

In the second strand of meaning-focused output, learners will have opportunities to practice academic vocabulary through speaking and writing. Teachers can ask learners to speak or write on a selected topic related to their academic study. Learners can be encouraged to use some provided academic vocabulary in their production. For example, learners could be asked to write an essay on how to achieve academic success, and they should include the following academic words in their writing: *target*, *attitude*, *communicate*, *sustain* and multiword units such as *achieve goals*, *critical thinking*.

For the third strand of language-focused learning, teachers can draw learners' attention to the features of academic vocabulary and train them to use interactive tools mentioned earlier for their self-study. For example, teachers can guide learners to analyze a written text to find out academic words using the Compleat Lexical Tutor and prioritize their learning following the order from Sublist 1 to 10. Teachers can also show learners how to find the meaning of new academic words, see how the words are used in contexts and look for their collocates with the COCA interactive tool. Students are encouraged to learn new academic words using flash cards and make sentences with the newly learned words.

Within the last strand of fluency development, teachers can create opportunities for learners to practice speaking and writing on familiar topics and encourage learners to use as many academic words as possible. Learners can be asked to use the EAP Foundation website to highlight all the academic single words and multiword units in their own texts and keep a record of how many academic words they can produce for each piece of their writing. Teachers can also require learners to write on the same topic again with an increasing number of academic words than the previous record.

Future directions

One avenue for future research is developing tests on academic multiword units from the existing word lists. Using a word list with a pedagogical purpose to develop a test will create a strong connection between vocabulary instruction and assessment. This has been seen in a case of the AWL (Coxhead, 2000) and the AVL (Gardner & Davies, 2014) which have had a significant impact on EAP teaching and testing. If results of a diagnostic test show that learners need more support in developing

their academic vocabulary knowledge, the list used to develop the test of academic words will become a clear goal for learners to work on. The same principle could also be applied to multiword units, given that the selected word list for the test development should be available and ready to use.

In addition, there is still a lack of empirical studies on evaluating academic word lists. Similar studies as Dang and Webb (2016), who compare and evaluate lists of high frequency words, should also be conducted with lists of academic vocabulary. Currently academic word lists are only evaluated as a part of a validation process when a new list is developed. For example, Gardner and Davies (2014) compare the performance of the AWL and the AVL on academic corpora and the AVL was found to achieve higher lexical coverage. Another example is Ackermann and Chen (2013) who report that the ACL has 14% higher coverage in an academic corpus than a non-academic corpus. Although these results help to provide the reliability of the academic word lists to some extent, an independent evaluation study combining different methods would increase the trustworthiness of the lists. Nation's (2016) word list evaluation framework (Table 30.1) can be a useful tool for such study. Clearly, we need to see more examples of successful programs based on frameworks such as the four strands (Nation, 2007) to evaluate their effectiveness.

Finally, we hope to see lists of academic multiword units being incorporated into textbook design and dictionary development. While we have seen a wide range of publications using the academic single word lists such as the AWL and the AVL, lists of academic multiword units have not yet been employed in similar ways. Academic multiword units are an important part of EAP pedagogy and appear to be challenging with L2 learners. With more textbooks and dictionaries, learners will have more resources to develop knowledge of this special group of academic vocabulary.

References

- Ackermann, K. & Chen, Y.-H. (2013). Developing the Academic Collocation List (ACL) – A corpus-driven and expert-judged approach. *Journal of English for Academic Purposes*, 12(4), 235–247. <https://doi.org/10.1016/j.jeap.2013.08.002>
- Akbarian, I. (2010). The relationship between vocabulary size and depth for ESP/EAP learners. *System (Linköping)*, 38(3), 391–401. <https://doi.org/10.1016/j.system.2010.06.013>
- Anthony, L. (2019). *AntConc* (3.5.8) [Computer software]. Waseda University. www.laurenceanthony.net/software
- Biber, D. (2006). Stance in spoken and written university registers. *Journal of English for Academic Purposes*, 5(2), 97–116. <https://doi.org/10.1016/j.jeap.2006.05.001>
- Biber, D. & Barbieri, F. (2007). Lexical bundles in university spoken and written registers. *English for Specific Purposes*, 26(3), 263–286. <https://doi.org/10.1016/j.esp.2006.08.003>
- Browne, C., Culligan, B., & Phillips, J. (2013). *A new academic word list*. www.newacademicwordlist.org/
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34(2), 213–238.
- Coxhead, A. (2011). The academic word list 10 years on: Research and teaching implications. *Tesol Quarterly*, 45(2), 355–362.
- Coxhead, A. (2020). Academic vocabulary. In S. Webb (Ed.), *The Routledge handbook of vocabulary studies* (pp. 97–110). Routledge.
- Coxhead, A. (2021). Vocabulary in English in tertiary contexts: Connecting research and learning. *LEARN Journal: Language Education and Acquisition Research Network*, 14(1), 1–14.
- Coxhead, A. & Dang, T. N. Y. (2019). Vocabulary in university tutorials and laboratories: Corpora and word lists. In K. Hyland & L. L. C. Wong (Eds.), *Specialised English: New directions in ESP and EAP research and practice* (pp. 120–134). Routledge.
- Coxhead, A., Dang, T. N. Y., & Mukai, S. (2017). Single and multi-word unit vocabulary in university tutorials and laboratories: Evidence from corpora and textbooks. *Journal of English for Academic Purposes*, 30, 66–78. <https://doi.org/10.1016/j.jeap.2017.11.001>
- Coxhead, A. & Nation, P. (2018). *Reading for the academic world*, 1, 2, 3. Seed Learning.
- Coxhead, A., Rahmat, Y., & Yang, L. (2020). Academic single and multiword vocabulary in EFL textbooks: Case studies from Indonesia and China. *TESOLANZ Journal*, 28, 75–88.
- Dang, T. N. Y. (2020). High-frequency words in academic spoken English: Corpora and learners. *ELT Journal*, 74(2), 146–155. <https://doi.org/10.1093/elt/ccz057>

- Dang, T. N. Y., Coxhead, A., & Webb, S. (2017). The Academic Spoken Word List. *Language Learning*, 67(4), 959–997. <https://doi.org/10.1111/lang.12253>
- Dang, T. N. Y. & Webb, S. (2014). The lexical profile of academic spoken English. *English for Specific Purposes*, 33, 66–76.
- Dang, T. N. Y. & Webb, S. (2016). Evaluating lists of high-frequency words. *ITL - International Journal of Applied Linguistics*, 167(2), 132–158. <https://doi.org/10.1075/itl.167.2.02dan>
- Dang, T. N. Y. & Webb, S. (2020). Vocabulary instruction and the good language teachers. In C. Griffiths, Z. Tajeddin, & A. Brown (Eds.), *Lessons from good language teachers* (pp. 203–218). Cambridge University Press.
- Donthu, N. & Gustafsson, A. (2020). Effects of COVID-19 on business and research. *Journal of Business Research*, 117, 284–289. <https://doi.org/10.1016/j.jbusres.2020.06.008>
- Durrant, P. (2009). Investigating the viability of a collocation list for students of English for academic purposes. *English for Specific Purposes*, 28(3), 157–169.
- Gardner, D. & Davies, M. (2014). A new academic vocabulary list. *Applied Linguistics*, 35(3), 305–327. <https://doi.org/10.1093/applin/amt015>
- Granger, S. (1998). Prefabricated patterns in advanced EFL writing: Collocations and formulae. *Phraseology: Theory, Analysis, and Applications*, 145(160), 3–18.
- Henriksen, B. (2013). Research on L2 learners' collocational competence and development—a progress report. In C. Bardel, C. Lindqvist, & B. Laufer (Eds.), *L2 vocabulary acquisition, knowledge and use: New perspectives on assessment and corpus analysis* (pp. 29–56). John Benjamins.
- Henriksen, B. & Westbrook, P. (2017). Responding to research challenges related to studying L2 collocational use in professional academic discourse. *Vocabulary Learning and Instruction*, 6(1), 32–47.
- Howarth, P. (1998). Phraseology and second language proficiency. *Applied Linguistics*, 19(1), 24–44.
- Hyland, K. & Tse, P. (2007). Is there an “academic vocabulary”? *TESOL Quarterly*, 41(2), 235–253. <https://doi.org/10.2307/40264352>
- Laufer, B. (2013). Lexical thresholds for reading comprehension: What they are and how they can be used for teaching purposes. *TESOL Quarterly*, 47(4), 867–872. <https://doi.org/10.1002/tesq.140>
- Laufer, B. (2020). Lexical coverages, inferencing unknown words and reading comprehension: How are they related? *TESOL Quarterly*, 54(4), 1076–1085. <https://doi.org/10.1002/tesq.3004>
- Laufer, B. & Cobb, T. (2020). How much knowledge of derived words is needed for reading? *Applied Linguistics*, 41(6), 971–998.
- Lei, L. & Liu, D. (2018). The academic English collocation list. *International Journal of Corpus Linguistics*, 23(2), 216–243. <https://doi.org/10.1075/ijcl.16135.lei>
- Li, J. & Schmitt, N. (2010). The development of collocation use in academic texts by advanced L2 learners: A multiple case study approach. In D. Wood (Ed.), *Perspectives on formulaic language: Acquisition and communication* (pp. 22–46). Continuum.
- Masrai, A. & Milton, J. (2018). Measuring the contribution of academic and general vocabulary knowledge to learners' academic achievement. *Journal of English for Academic Purposes*, 31, 44–57. <https://doi.org/10.1016/j.jeap.2017.12.006>
- Miller, D. (2011). ESL reading textbooks vs. university textbooks: Are we giving our students the input they may need? *Journal of English for Academic Purposes*, 10(1), 32–46. <https://doi.org/10.1016/j.jeap.2010.12.002>
- Nation, I. S. P. (2012). *The BNC/COCA word family lists*. www.victoria.ac.nz/lals/about/staff/paul-nation.
- Nation, I. S. P. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press.
- Nation, I. S. P. (2016). *Making and using word lists for language learning and testing*. John Benjamins Publishing Company.
- Nation, P. (2007). The four strands. *International Journal of Innovation in Language Learning and Teaching*, 1(1), 2–13.
- Nguyen, T. M. H. & Webb, S. (2017). Examining second language receptive knowledge of collocation and factors that affect learning. *Language Teaching Research*, 21(3), 298–320.
- Paquot, M. (2010). *Academic vocabulary in learner writing: From extraction to analysis*. Continuum.
- Pecorari, D., Shaw, P., & Malmström, H. (2019). Developing a new academic vocabulary test. *Journal of English for Academic Purposes*. <https://doi.org/10.1016/j.jeap.2019.02.004>
- Sasao, Y. & Webb, S. (2015). The word part levels test. *Language Teaching Research*, 21(1), 12–30. <https://doi.org/10.1177/1362168815586083>
- Sasao, Y. & Webb, S. (2018). The guessing from context test. *ITL – International Journal of Applied Linguistics*, 169(1), 115–141. <https://doi.org/10.1075/itl.00009.sas>
- Simpson-Vlach, R. & Ellis, N. C. (2010). An Academic Formulas List: New methods in phraseology research. *Applied Linguistics*, 31(4), 487–512. <https://doi.org/10.1093/applin/amp058>
- Siyanova, A. & Schmitt, N. (2008). L2 learner production and processing of collocation: A multi-study perspective. *Canadian Modern Language Review*. <https://doi.org/10.3138/cmlr.64.3.429>

- Sun, Y. & Dang, T. N. Y. (2020). Vocabulary in high-school EFL textbooks: Texts and learner knowledge. *System*, 93, 102279. <https://doi.org/10.1016/j.system.2020.102279>
- Valipouri, L. & Nassaji, H. (2013). A corpus-based study of academic vocabulary in chemistry research articles. *Journal of English for Academic Purposes*, 12(4), 248–263. <https://doi.org/10.1016/j.jeap.2013.07.001>
- van Zeeland, H. & Schmitt, N. (2013). Lexical coverage in L1 and L2 listening comprehension: The same or different from reading comprehension? *Applied Linguistics*, 34(4), 457–479. <https://doi.org/10.1093/applin/ams074>
- Vilkaitė-Lozdiene, L. & Schmitt, N. (2019). Frequency as a guide for vocabulary usefulness. In S. Webb (Ed.), *The Routledge handbook of vocabulary studies* (pp. 81–96). Routledge.
- Webb, S., Sasao, Y., & Ballance, O. (2017). The updated Vocabulary Levels Test: Developing and validating two new forms of the VLT. *ITL - International Journal of Applied Linguistics*, 168(1), 33–69. <https://doi.org/10.1075/itl.168.1.02web>
- Webb, S. A. & Nation, I. S. P. (2017). *How vocabulary is learned*. Oxford University Press.
- West, M. (1953). *A general service list of English words*. Longman.
- Wongkhan, P. & Thienthong, A. (2020). EFL learners' acquisition of academic collocation and synonymy: Does their academic experience matter? *RELC Journal*, 0033688219895046. <https://doi.org/10.1177/0033688219895046>

Teaching and Learning Multiword Expressions

Eli Hinkel

Introduction: Multiword Expressions of All Sorts

Language instruction almost always takes place under great time constraints for many teachers and learners, and it is important to maximize language gains and make learning as efficient as possible. Teachers are usually keenly aware of how short course and class times are and how limited resources can be. In language teaching across all the skills, a critical factor is to make student learning as efficient and strategic as possible.

For learners, becoming proficient in vocabulary and grammar takes a great deal of time and work simply because the English grammar system is complex, and the number of words to be learned, retained, and practiced is enormous. An excellent case in point is that English dictionaries intended specifically for language learners are large books, and some have upwards of a couple hundred thousand words, phrases, and examples. To further complicate matters, many frequent words are combined in various patterns to create new meanings that cannot be figured out from the meaning of their component parts, e.g. *take up, take down, take after, take on, take in, take off, take a raincheck, give credit, give in, give out, give up, give a hand, give a shout, give a break*.

A giant number of corpus analyses that have been carried out since at least the 1960s has shed a great deal of light on the types and frequency of multiword expressions in language uses in speech and writing. An undisputed research finding to date is that multiword expressions and phrases are extremely common. Some researchers have claimed that “up to 70% of everything we say, hear, read, or write is to be found in some form of fixed expression” (Hill, 2000, p. 53). Others have counted their occurrences in the hundreds of thousands, but the point is that multiword expressions are so numerous that their exact numbers are unknown (Nation, 2011, 2013; Webb & Nation, 2017).

In language teaching and research, at present, a clear consensus has been achieved that understanding and producing language is in fact impossible without the use of multiword expressions. Another, and equally important, finding is that without explicit instruction, most language learners cannot readily identify the occurrence or prevalence of multiword phrases in English discourse. In part for this reason, opportunities for learning how and when to use them in language comprehension or production are often diminished.

To add to the mix (this is a multiword expression), in English many words — and particularly frequent ones — are polysemous, that is, they have multiple meanings, and the more meanings words have, the more frequently they occur. For example, dozens of combinations with the verbs *have* and *tell* can be encountered in speech and writing, e.g.,

have — *have fun, have a meal, have a heart, have a meeting, have a baby, have a dentist, have a rest, have a break, have a shower, have an argument, have a chat, have a problem/have problems, have a talk, have a drink/coffee/tea, have a run*

tell — *tell a secret, tell a joke, tell a lie, tell a story, tell the truth, tell the difference, tell the time, tell apart, tell a tale.*

Definitions of multiword expressions and phrases that can be more rigid or more flexible vary greatly in language studies. However, the accepted basic premise is that they are recurrent combinations of words — words that are connected to other words — that are remembered and used as single lexical [vocabulary] items (Hinkel, 2015, 2019, 2020). Examples can be found anywhere: *get a job, get a degree, do homework, make a mistake, make do (with), make problems, tall order, short order, short shrift, short on cash, department store, know well, deal with, for sure, not on your life, in any shape or form, famous for, play piano/cards/chess/around/the field, learn one's lesson, quite a bit, a little bit, bit by bit, nowhere in sight, fast food, fast track, in the fast lane.*

In language teaching and research, there are more than 40 terms that refer to these expressions, e.g. chunks, lexical phrases, phrasal verbs, fixed expressions, lexical bundles, set phrases, collocations, prefabricated constructions, fixed strings, idioms, formulaic language, formulaic sequences, routines, phrasal constructions, phrasal vocabulary units, or frozen phrases (Wood, 2020). By and large, as in this chapter, combinations of words that frequently occur and re-occur together are called **multiword expressions or phrases**.

Multiword expressions have a few specific characteristics. Some are inflexible and do not allow much room for variation, e.g. *better late than never, get out of hand, miss the boat, a hill of beans, you can say that again*. Others can be variable and thus permit component substitutions, e.g.

*the purpose~/aim~/goal of this paper~/essay~/study, a careful
examination~/analysis~/discussion, an important aspect~/point~/issue~/consideration.*

A prominent property of most — but certainly not all — multiword phrases is that their meanings cannot be derived from the meaning of their component parts (more on this later). That is, they have non-literal meanings that typically have to be used and learned as whole meaningful (and lexical) units. Learning the meanings and grammatical components of multiword phrases is tedious and work-intensive because they cannot be assembled on the fly and in the process of communication (Hinkel, 2019, 2020; Nation et al., 2016).

This chapter provides an overview of the reasons that multiword expressions are difficult to learn and use, effective and ineffective teaching techniques, and how to select phrases for teaching. Multiword expressions can be taught at practically any proficiency level and in all language skills, and they can be found in any type of discourse and text. A few teaching tactics suggested here can be further modified as needed in any teaching context. Multiword expressions are extremely frequent. Their meanings and uses are highly conventionalized and idiomatic, and effective language comprehension and production can be practically impossible without them (Ur, 2012, 2014).

Why Multiword Expressions Are Difficult to Learn

Due to the fact that multiword expressions are essential in both speech and writing, many studies have undertaken to investigate their frequency and accuracy rates in L2 comprehension and production. For learners, multiword expressions have almost always presented an area of difficulty. For instance, L2 users may employ constructions that are hardly ever encountered in spoken or written English discourse. To be sure, in any language, there are probably different ways to say something, but

in the case of errors, even when their meanings can be transparent, “the problem is that native speakers do not say it in that way” (Shin & Nation, 2008, p. 340), e.g. **during we walked* instead of *while we walked*, or **hurt feeling* instead of *hurt someone's feelings*, or **pay to attention* instead of *pay attention*.

In English speech and writing, phrases and expressions are typically culture-specific with implicit references to abstract or metaphorical concepts that may or may not exist in learners' natal cultures or first languages (L1s) (Hinkel, 2017, 2018, 2019), e.g. *a dime a dozen*, *cut corners*, *cut it out*, *a cut above*, *to cut someone off*, *(to be) cut up about something*, *a cutting comment*, *cut the price/a price cut*, *cut and dried*, *cut some slack*.

At present, research has established that the frequencies of multiword expressions in L2 production trail far behind those encountered in L1 prose, and in general terms, this finding comes as little surprise. In the production of learners at the lower proficiency levels, the rates of multiword phrases are understandably lower than those in language uses at advanced levels. However, even in the language production of most advanced academic learners, multiword phrases are employed in incorrect forms or with incongruent meanings far more frequently than those that are used correctly, e.g. **a really problem*, **cause a trouble*, **brotherly law*, **expensive to developing*, or **make a humor* (Boers, 2020; Laufer & Waldman, 2011; Peters, 2016).

One of the most readily apparent causes of the learning difficulty clearly lies in the fact that multiword expressions consist of two or more component parts and thus learning and using them correctly requires more intensive work and attention, compared to single-word vocabulary items. However, further complications have been identified as multiword expressions compound learning and usage difficulty (Boers, 2021; Boers & Lindstromberg, 2012; Liu, 2011).

- Learners tend to notice and focus on single vocabulary items that are typically emphasized in grammar and vocabulary instruction and neglect multiword expressions in which these words can occur.

This is particularly true in regard to high frequency words that so often combine to form multiword constructions. For example, the verbs *do*, *have*, and *make* are among the most frequent ones in English, and they are components in the largest number of frequent multiword expressions. That is, these words themselves are not new, but the forms and meanings of the phrases with these words can certainly be.

For example, the words *call* and *look* are extremely frequent, and they can be found in dozens of combinations with other words that have more transparent or less understandable meanings, e.g. *call off/on/out/up*, *call forwarding*, *give a call back*, *call it a day*, *answer the call*, *a close call*, *call it quits*, *look on/up*, *look back on*, *look ahead*, *look forward to*, *look something up*, *look cheap*, *look out!*, *look like*, *look alike*, *take/have a look*, *look like a million bucks*, *things are looking up*.

- Learners tend not to notice structural differences between L1 and L2 expressions with similar meanings, e.g. **suffer/die from*, **in the phone*, **make homework*, **make a different*, **keep eyes on*, **a solution for a problem*, **move fastly*, **a lot of hardly work*, **pay expensive price*, **get a high test*.
- When multiword expressions have meanings that are easy to understand, their grammatical form and structure irregularities often go unnoticed. Furthermore, the frequent words can be combined when they should not actually be used together to produce idiomatic and accurate constructions. In fact, Laufer (2011, p. 44) refers to the uses of such incorrect expressions as the trap of “deceptive compatibility.”

These expressions look, sound, and feel familiar even when their formal elements are in fact incorrect, e.g. **take an appointment*, **make a walk*, **quick car*, **do a mistake*, **make an accident*, **make a picture*, **denied from*, **come into the car*, **high reputation*, **say a question*, **go into trouble*, **explain him/her*, **change the bus*, **commit an error*, or **have a restful*.

- The length of multiword phrases, taken together with their unfamiliar metaphorical (non-literal) meanings, makes them difficult to learn and use correctly. For instance, phrasal verbs consist of a verb and one or two particles, and these can create an additional layer of complexity that demands further attention in comprehension and production.

In English, the more meanings verbs have, the more frequently they tend to occur. The most frequent verbs in English are as follows, and these can be found in hundreds of combinations with other words.

THE MOST FREQUENT VERBS IN ENGLISH						
<i>be</i>	<i>have</i>	<i>do</i>	<i>say</i>	<i>go</i>	<i>make</i>	<i>know</i>
<i>think</i>	<i>see</i>	<i>take</i>	<i>come</i>	<i>want</i>	<i>look</i>	<i>use</i>
<i>find</i>	<i>give</i>	<i>tell</i>	<i>work</i>	<i>call</i>	<i>try</i>	

Most proficient language users attain proficiency with multiword expressions over time and through repeated (and repeated) encounters in speech, reading, and writing (Hinkel, 2015, 2016; Nation, 2011). Selecting the multiword constructions that are frequent and useful is important in instruction in listening, speaking, reading, and writing (more on this later).

Effective and Practical Teaching Techniques

A key technique is to bring learners’ attention and deliberate learning work to focus on the grammatical elements of multiword expressions — their uses, forms, and structures, e.g. the order of the language elements, singular and plural markers, articles, and prepositions. The teacher’s guidance is essential because, without it, learners are left to their own devices and simply do not notice or pay attention to these phrases.

In general terms, a few key factors lead to any type of vocabulary learning and language gains, be it single-word or multilingual expressions (Webb & Nation, 2017):

- repeated encounters
- spaced repetition
- purposeful and deliberate attention, work, and practice (and practice).

Incidental exposure provides little learning advantage, as discussed later.

Learning to Notice

When learners listen or read for meaning, a strong tendency is for multiword expressions to escape attention. For beginning and intermediate learners, these can occur in listening or reading selections, however short. Numerous phrases can be found in textbooks, test preparation materials, or even advertisements or flyers (Hinkel, 2019). The ones that are easier to work with

typically consist of two words and have transparent meanings that can be comprehensible at a glance. Here are a couple of examples of listening dialogues with the multiword expressions highlighted for teaching:

- 1) -- *They say* that breakfast is ***the most important meal of the day***.
 -- Who ***has the time*** to ***eat breakfast***?
 -- Well, ***getting up a few minutes*** earlier could give you ***enough time*** for a ***quick*** morning ***meal***.

In short and clear listening excerpts of conversations, the text can be repeated a couple of times as needed, and the frequent multiword expressions are easy to identify, notice, and elaborate with additional useful elements if the structures permit small variations:

- *they say / people say*
- *the most important / the most expensive / the most difficult*
- *have time (to do something) / have no time / give some time / enough time*
- *eat breakfast / lunch / dinner* (no article with the noun)
- *a few minutes / a few days / a few months* (the article *a* is required)
- *enough time / not enough time / plenty of time / lots of time*
- *a quick meal / break / stop*

A list with new vocabulary and multiword phrases that is handed out ahead of the listening or reading practice can provide additional opportunities for learning and remembering useful constructions. In general terms, many teaching moments can arise if the teacher chooses to focus learners' attention on the lexical and grammatical constraints that are indelible properties of all recurrent phrases, no exceptions.

- 2) -- Mr. Jones ***had an appointment*** in the city center, and so he had to leave the office.
 -- Did he say when he is ***coming back***?
 -- Well, it shouldn't ***take*** him more than ***a couple of hours*** if he doesn't ***run into heavy traffic***.

- *have an appointment / make an appointment / schedule an appointment*
- *come back*
- *take + time*, e.g. *take an hour, take a minute, take a week, take a day/month/year*
- *a couple of hours* (an article is required; the noun has to have the plural form)
a couple of weeks, a couple of sandwiches, a couple of dollars, a couple of students
- *run into*
- *heavy traffic*

Usually, the more frequent and transparent phrases are found in texts for beginners and intermediate learners. However, when listening and reading selections consist of familiar words and short expressions — and when their meanings are transparent — multiword constructions and their grammar variables can be particularly error-prone. Thus, the simpler and more understandable the text is, the more deliberate attention is required to address the grammar of the phrases (Boers, 2021).

Writing It Down to Remember

Analyzing multiword expressions and establishing their literal and then additionally metaphorical meanings can help learners remember and deploy them in L2 production (Boers, Lindstromberg

et al., 2014). A range of effective teaching techniques and learning activities can and do lead to retention rates that can go up to 70% when accompanied by memorization and practice (Laufer, 2005). Such language exposures as simultaneous reading and listening, with writing activities for follow-ups, have proven to be more effective for learning and retention than listening or reading alone. Repetition, written exercises, and writing production are usually seen as the most accessible and effective teaching techniques to promote learning.

Although any type of additional exposure, review, and repeated recall practice can lead to important vocabulary gains over time, written practice (see the Dictogloss section that follows), oral utterances (saying it aloud), and speaking exercises can make a difference in language retention. Deliberate and focused teaching, explicit and direct activities, drawing learners' attention to multiword constructions and their linguistic components can all combine to promote important language gains. Overall, repeated written tasks, writing practice, and oral review probably represent the most effective learning techniques when carried out with sufficient frequencies that can lead to durable language gains in the long run.

Dictogloss

(Probably one of the most effective multiword teaching techniques)

Dictogloss is a language teaching activity when the teacher reads a short text or plays a recording, usually more than twice, while learners listen, write down words and phrases that they identify and hear, and then reconstruct the entire texts after listening. The texts selected for dictogloss can be short or long to make them suitable for learners' proficiency levels.

Research has shown that dictogloss is one of the most efficient teaching activities for learning and that it provides a number of important advantages (Lindstromberg et al., 2016; Snoder & Reynolds, 2018). The list of unfamiliar vocabulary words, expressions, or grammar constructions can be pre-taught — and later reviewed — depending on the text length and complexity.

Here's an example of a short text that can be used in a dictogloss activity. The useful multiword expressions are highlighted.

*There are thousands of **kinds of** apples, but only **a few** are **the most popular** among farmers and gardeners. Three favorites **make up** more than **sixty percent** of all apples that are grown **in many locations around the world**. Apple varieties can have **different colors**, **such as** yellow, green, or red, and the taste can be tart or sweet. A typical **grocery store** sells **lots of** varieties of apples because people **include** them **in** their lunches they **bring from** home or buy **when it is convenient**. Apples can be **cut into** slices or wedges to eat **as a snack** and prepared **ahead of time**.*

*Apple trees grow **small to medium size**, and they **take up** far **less room in the garden** than larger trees. **A couple of** apple trees can produce **plenty of fruit for a family** and to **share with friends**. Apples require a **cool climate** to **do well in the summer**. To bloom, the trees need **lots of sun for several hours a day**.*

The text can be a conversation, a story, or an excerpt as short as one paragraph and as long as several. The first step is for students to listen — two or three times — and write down as many words and expressions as they can identify. A good practice can take two to four repeated readings. These noted language components provide the base for a written reconstruction of as much of the text as possible.

Students can work alone, in pairs, or small groups, and then they can check one another's work to supplement the additional exposures and practice. This activity can be very productive because it addresses a number of language skills at one time, e.g. spelling, word building, multiword expressions, vocabulary, grammar, and sentence constructions. A classroom dictogloss can take as little as 5–10 minutes, and it can be used as often as preferred.

Ineffective Teaching Techniques

The types of activities that lead to effective or ineffective learning of vocabulary and multiword expressions have been investigated for the past couple of centuries. Although learning single-word vocabulary is easier than learning multiword constructions, in many ways, the techniques for teaching and remembering them do not differ greatly.

The language exercises often found in student textbooks depend on the authors' personal preferences and book-related expediency, but not necessarily on research findings of what leads to better and more durable learning and retention. For instance, a large number of studies have demonstrated that **fill-in-the-blank** activities are the most common exercises included in student materials. These can take the form of filling in the missing elements of phrases or sentences, or choosing the phrase components from multiple choice sets, or sentence completion tasks. However, blank-filling practice is likely to be **least effective**, and it provides few learning advantages. For one thing, for learners, it is often impossible to figure out correctly what missing word or grammar component should go into the blank and result in a structurally or contextually accurate expression.

In vocabulary research, the work on multiword expressions is usually divided into at least two modes: (1) incidental learning when any sort of vocabulary is learned in the course of a lesson or during exposure to spoken or written text, and (2) deliberate (intentional) learning that takes place with effort, practice, and subsequent review. However, numerous studies have shown that incidental learning is hardly ever effective and typically provides few learning advantages.

In gist, the following teaching techniques have been found to be less than effective in the teaching and retention of multiword expressions:

- Fill-in-the-blank practice leads to particularly poor learning and retention, and results in particularly limited usage in production (e.g. Boers, Demecheleer et al., 2014; Pellicer-Sanchez, 2020).
- Without deliberate attention and focus on the grammar components of phrases, incidental learning of multiword constructions typically results in low language gains and very little learning (Boers, 2021; Hinkel, 2002, 2020; Laufer & Girsai, 2008).
- Providing insufficient review and too few repeated exposures represents one of the most pervasive ineffective instructional strategies. According to many studies to date, for adult learners, a strong and significant learning advantage can be obtained with at least 10 to 15 repeated exposures and follow-ups (Boers, 2000; Nation, 2011, 2013; Webb & Nation, 2017).

A Note on Teaching and Learning Multiword Expressions

In student textbooks and dictionaries, multiword expressions are regularly provided for their cultural distinctiveness and eccentricity, regardless of their frequency or practicality, e.g. *on cloud nine*, *on a dime*, *once in a blue moon*, *in the dog house*, *bark up a wrong tree*. However, the most useful and commonplace multiword phrases are those that are less exotic, and they tend to consist of high frequency words, e.g. *take off / on / out*, *take a break / a call / one's time*.

As stated earlier, the most frequent single-word verbs, such as **have**, **take**, **make**, **do**, and **go**, serve as the basis for the most statistically prevalent multiword constructions (Webb & Nation, 2017). Carefully selecting productive and useful expressions for learning can become an ongoing task for both teachers and learners.

According to long-established research findings, flash cards or electronic applications and tools, e.g. mini self-quizzes, review lists, or organized lists, represent the single most efficient way of

learning and practicing vocabulary and expressions for retention. Numerous electronic applications send automatic and timed review notifications and reminders — a great convenience for teachers and learners (Boers, 2021; Nation, 2011, 2013).

Multiword expression notebooks are also a very useful, efficient, and practical learning aid because reviewing the items that have been covered and learned previously can be made easier when they are collected in one place (Hinkel, 2016, 2017).

Selecting Multiword Expressions for Teaching

Although multiword expressions can be found anywhere, some are more frequent and valuable to learn, but others might be less so. In the classifications of multiword constructions, phrasal verbs have deservedly received much attention. In fact, their numbers are so large that exact or even proximate counts are unknown. An excellent case in point is that two highly-regarded and classical dictionaries published by Cambridge University Press and Oxford University Press, since the 1980s and to this day, have released dictionaries of phrasal verbs as separate volumes to supplement their main dictionaries of English.

Phrasal Verbs

(By far, the most frequent type of multiword expressions)

Phrasal verbs are not only very numerous, but they are also highly idiomatic, often untranslatable, and opaque. The *Cambridge Dictionary* defines these multiword expressions as “a combination of a verb and an adverb or a verb and a preposition [also called particles], or both, in which the combination has a meaning different from the meaning of the words considered separately.” Ubiquitous examples of these phrases are found in most student textbooks, e.g. *bring about, clean up, move forward, move around, move into, fill in, look up to, look for, turn down, turn around, turn off*.

Phrasal verbs have almost always presented a great deal of difficulty for language learners and, by extension, for teachers and for teaching. For example, such phrases as *take on* has at least a dozen main meanings (e.g. *hire, sign up, enroll, meet an adversary, acquire a particular quality, accept, take possession of, admit*), and *make up, take out, call out, or put down* can be nouns or verbs, and spelled together or separately, each with different meanings.

By and large, learners do not notice or learn phrasal verbs that occur in text because their language components may not be new, but word combinations are likely to be, e.g. *hand in, hand out, ask around, brush up, brush off, come by, come from, dust off, dust up, clear out, chip in, chip off, chip out, drop off, drop by, drop from, drop out*. Phrasal verbs are extremely common both in speech and informal writing, and they are prevalent and highly polysemous, that is, they have different meanings even when they consist of the same words (as in these examples). For instance, according to Gardner and Davis (2007), the 100 most frequent verbs with particles have an average of 5.6 meanings each.

Two- and three-word verbs are so frequent and their uses are so crucial for any sort of English comprehension and production that they are a teaching necessity. However, they are also so widespread that to select the most useful and practical ones for teaching and learning, the teacher's guidance is of the essence. Pointing out, identifying, and discussing phrasal verbs in context are the essential steps in teaching these verbs. Teachers need to explicitly focus students' attention on their form, structure, and meaning.

A few additional considerations are key when working with phrasal verbs in the classroom.

- The uses of multiword verbs can differ substantially according to degree of formality or informality of a specific text.

For example, *take off* can have a relatively formal meaning as in *departure*, e.g. *Please fasten your seatbelts for takeoff* (a noun), or a more informal *leave to go*, as in *I'm taking off now, and I'll see you tomorrow*. The same is true about such frequent constructions as *go on/up/down*, *take on*, *clean up*, or *drop down*.

- Two- or three-word verbs are **infrequent in academic writing**, but they are predominant in speaking and conversations (Biber et al., 1999). The most common academic phrasal verbs are to be set out in or to be set up in used at the rate of 0.002% (20 occurrences per million words).
- Particle movement is one of the thorniest issues in L2 production of multiword expressions, e.g. *put the bag down* — *put down the bag*, *turn the light off* — *turn off the light*, *make a story up* — *make up a story*.

The rules that govern the particle movement are complicated, but there are a couple of pointers that can be easy to teach and learn:

- most — but not all — phrasal verbs can have a mobile noun, but not a pronoun, e.g.
 - *put the hat on* / *put on the hat* / *put it on*, but not **put on it*
 - *clean up the spill* / *clean the spill up* / *clean it up*, but not **clean up it*
 - *bring the change about* / *bring about the change* / *bring it about*, but not **bring about it*
- phrases with two particles do not move around, e.g.
 - *feel up to*, *watch out for*, *pull out of*, *move on to*, *catch up with*, *add up to*

Two- and three-word verbs are time-consuming to learn, and they have to be chosen judiciously and with care. As mentioned earlier, most multiword constructions differ greatly in their usefulness and frequency. Accurate uses of phrasal verbs require a targeted spotlight on their lexical and grammatical features.

Here's a list of the 30 most frequent phrasal verbs that may be worth time and attention (Garnier & Schmitt, 2015).

THE 30 MOST FREQUENT PHRASAL VERBS (IN DECLINING ORDER)				
<i>go on</i>	<i>pick up</i>	<i>come back</i>	<i>come up</i>	<i>go back</i>
<i>find out</i>	<i>come out</i>	<i>go out</i>	<i>point out</i>	<i>grow up</i>
<i>set up</i>	<i>turn out</i>	<i>get out</i>	<i>come in</i>	<i>take on</i>
<i>give up</i>	<i>make up</i>	<i>end up</i>	<i>get back</i>	<i>look up</i>
<i>figure out</i>	<i>sit down</i>	<i>get up</i>	<i>take out</i>	<i>come on</i>
<i>go down</i>	<i>show up</i>	<i>take off</i>	<i>work out</i>	<i>stand up</i>

On the whole, corpus-based studies, such as Biber et al. (1999), Garnier and Schmitt (2015), and Liu (2011), indicate that around 20 verbs, such as *break*, *come*, *catch*, *open*, *pick*, *pass*, *put*, *take*, and *turn*, combined with particles and adverbs, make up a vast majority of phrasal verbs, that is, slightly over 500,000 usage instances. That is to say that the teaching and learning of two- and three-word verbs requires an intensive focus on their meanings and grammar attributes, rather than on learning these as vocabulary items.

Teaching Speaking

A large number of studies have shown clearly that conversations and specific sequences in conversations are routinized and highly structured (Coulmas, 1981; Shin & Nation, 2008; Hinkel, 2014, 2019). Conversational and stereotypical exchanges are almost universally presented in student textbooks for teaching listening and speaking.

In everyday conversations, routinized phrases can be readily identified in casual greetings, partings, or service requests, and most include highly recurrent expressions. These can be used with a practically unlimited range of functions, such as openings, introductions, answering the phone, making excuses, pre-closings (*alright then, sounds like we are all set*), closings, offering, ordering, asking for directions or clarifications, or making appointments.

Routine conversational exchanges can be utilized to develop learners' practical language skills, spoken fluency, and easily accessible lexical substitutions, e.g. *How are you / How is it going / How're things / How's everything going*.

The uses of routine multiword phrases readily provide a great resource when L2 speaking takes place in real-time and under pressure (Hinkel, 2014, 2015; Nation & Webb, 2011). Specific multiword expressions typically mark discourse junctures and conversation organizational structure. In this example of a conversation starter and a request, a few multiword phrases are easy to identify.

- 3) -- *Hello, **how are doing today?***
 -- *Great. **How're you. I'd like to make an appointment for a haircut.***
 -- ***What time would you like to come, in the morning or in the afternoon?***
 -- ***I have to work during the day. Do you have any evening appointments?***

Although conversations progress along predictable patterns, participants often need to adjust and readjust what they are saying to fit varied and variable social settings. The uses of multiword expressions can be strongly distinguished based on their formality levels and social suitability in a range of contexts. In many cases, textbook examples do not always differentiate clearly between expressions that are appropriate in, for example, small talk with friends and those that should be used in more formal exchanges. For example, the phrases *What's up?* and *How's it going?* are used almost exclusively in short and casual encounters with peers, but they do not seem to be the best options when talking to a boss, a teacher, or a doctor.

Another important characteristic of conversational phrases is that they can have divergent goals and functions in real-life interactions. For example, *How are you / today / this morning?* or *How is it going?* are not intended to be real questions or conversation openers. These phrases are typically used as greetings and to signal that the other party is recognized and acknowledged (see the example earlier). As an outcome, these formulaic expressions do not require a response, beyond the formulaic, e.g. *Fine, Great, Good, OK*.

In teaching, it is important to note and notice a great number of formulaic multiword expressions when the conversational function can be difficult for learners to determine and when it is not directly apparent from their linguistic form and components, e.g.

- *Call me **some time** vs. Call me **on Tuesday**.*
- *Let's get together/have lunch **some time** vs. Let's get together/have lunch **on Friday**.*
- *Call me **if you have any questions** vs. Call me **any time**.*
- *Do you have **any questions?** (it is now time to ask questions, if you have them) vs.*
- *I'll be happy to answer all your questions **during the office hours** (that is, please do not ask me any questions now but come to my office at the designated time).*

- *Your paper needs **a little work*** (this expression does not mean necessarily that the paper needs only a little bit of work to be improved).
- *Maybe, you need to **spend more time** on your homework* (does not mean that spending more time without greater effort would result in better grades).

In more formal presentations and university lectures, multiword expressions are also very common, and their typical functions are to highlight discourse segments or transitions from one section to the next. Among the most frequent are such collocations as *on the one hand*, *on the other hand*, *as a result of*, *it is important to*, *take a look at*, *at the same time*, *for this reason*, *a little bit*, *in the end*, and *the best way* (Simpson-Vlach & Ellis, 2010; Nattinger & DeCarrico, 1992). These multiword expressions are longer and more complex than the ones used in conversations. Learning their forms and functions is more laborious and probably better suited for academic learners.

The most frequent formal spoken multiword expressions are worth the work and effort. They include fewer than a dozen, but for learners, these are very useful simply because they are very frequent, grammatically irregular, and rigid in their forms. Here's the list of a few most common expressions for formal speaking.

FREQUENT EXPRESSIONS FOR SPEAKING

on the one hand / on the other hand

the most important thing / an important point

my point is that ...

my first point/second point/final point the next / second point

for example/for instance

I think (that) / I don't think so

I would like to / would you like to?

the same (as) ... / different from ... the difference between

the relationship between

another thing / the other thing

Many multiword expressions for formal speaking can be useful for intermediate and high intermediate learners, but on the whole, such constructions can be useful at any proficiency level, including beginners.

Teaching Writing

As with conversational discourse, what is appropriate and inappropriate in academic written discourse is highly conventionalized. In practically all language programs, a great deal of attention, time, and resources are devoted to the teaching of academic writing. The reason that academic writing needs to be explicitly and persistently taught is that English-language writing conventions are not necessarily found in other written discourse traditions (Hinkel, 2011, 2013, 2014).

Academic writing is also highly patterned and rigidly structured, and particularly so in the case of student essays and written assignments (Hinkel, 2015, 2020; Nattinger & DeCarrico, 1992). The stereotypical structure of most academic writing usually begins with an opening or an introductory statement, followed by the topic nomination, then moving on to the main points, and some sort of closing statement at the end. Generally speaking, the progression of writing from one rhetorical section to the next is clearly identified by means of flexible and conventionalized multiword expressions, such as *to begin*, *to conclude / in conclusion*, *the purpose of this paper is to / this essay will discuss*, *my main point*, as well as phrasal constructions, such as *in addition*, *as a result*, *for this reason*, *in general*, *for example / for instance*.

Analyses of written formulaic expressions have been carried out for many decades. To date, a great number of frequent multiword expressions typically ubiquitous in academic writing have been identified and included in practically all student guidebooks. Using recurrent phrases in instruction and learning to write is likely to be one of the few available expedient routes to relative L2 accuracy and fluency that leads to effective production and subsequent automatization — over time and with practice.

For language learners, a tremendous advantage of working with multiword expressions lies in expedited learning and reduced work load in the long run. For example, high-frequency word combinations and phrases can be learned as whole units, instead of just their elements that have to be further assembled during the process of language production.

In teaching, multiword expressions can be used with language elements of all shapes and sizes, from single words, e.g. *much / many, a number of / a large number of / a great deal of*, to phrases to whole sentences or even sets of sentences, including the numerous areas of difficulty, such as idioms and metaphors, e.g.

- *take ~ a look at / an opportunity to / ~ part in / ~ into consideration*
- *This paper describes and analyzes ... xxx. / This paper discusses/examines xxx*
- *The main points of my essay are ...*
- *In general, / On the whole, / One can generalize that xxx*
- *The author states / argues / explains / shows that*
- *The article / book describes / discusses / tells a story of / about*

A large number of academic multiword expressions can have transparent meanings. Although some are longer than two or three words, typically, such phrases consist of only one or two content words accompanied by function words, such as articles (*a, an, the*) and highly frequent prepositions (e.g. *of, in, to, for, with, on, at, from*).

Academic phrases and sentence pieces can become an efficient means of expanding L2 writers' language range, particularly when learners are also taught how to substitute discrete elements in practical ways (as illustrated throughout this chapter). Differences and similarities between phrases allow learners to create new constructions in various combinations or to modify those that are already learned and accessible.

When working with frequent academic phrases, it is important to bring learners' attention to fundamental distinctions between conversational and informal language that is unmistakably different from that in formal writing. Pointing out the differences in these two types of construction is of the essence: without explicit teaching, learners may simply miss (and often do) the distinctions between conversational and formal academic language components.

At first glance teaching academic phrases and sentences may seem somewhat overwhelming, but a great advantage lies in the fact that academic text is highly formulaic and conventionalized. With the ground work in pre-patterned expressions and sentences — with practice — producing academic prose in both speech and writing is a learned skill. This is true about both L2 and L1 writers who learn formal speaking and writing in the course of their schooling and education.

A Final Note

As with all language learning, repeated exposures and practice (and practice) lead to long-term memory retention and subsequent production in speaking and writing. In most cases, multiword expressions are difficult to learn and use correctly because, at the very least, their meanings can be opaque, and their structures are grammatically irregular. Many multiword expressions are culture- and language-bound, and cannot be pieced together in the process of communication. They are longer than single words and consist of several component parts.

Most phrasal verbs, for instance, do not have immediately comprehensible and transparent meanings, but the meanings of phrases in conversations and academic writing can be deducible. Short conversational and written phrases are suitable for teaching to learners at any level.

- Two- or three-word multiword expressions are the easiest to understand and learn. The shorter the expression, the fewer components to learn.
- This principle applies to phrases of practically any kind, including those that consist of a function word (an article or a preposition) and a content word or two content words, e.g. *have a drink* but *have lunch/dinner* (no article), *do nothing*, *make trouble*, *make a cake*, *look up a word*, *take a minute* / *a couple of minutes*.
- For teaching and learning, short collocations and multiword units are encountered far more frequently than longer ones, and thus, can be easier to notice, learn, and practice.

A reliable rule of thumb is that the shorter the phrase is, the more likely it is to have a transparent meaning and grammatical structure (Nation, 2013; Nation et al., 2016). Examples of frequent multiword expressions are easy to locate: they are everywhere.

Because two-word phrases are highly common and can be found in both speech and writing, they are also relatively straightforward to come up with online, in dictionaries, and various teaching materials, such as picture books and electronic texts (Hinkel, 2014, 2015, 2018). On the whole, teaching and learning short multiword units is not a very demanding task due to their frequency. According to some computations, for instance, one phrasal verb occurs in every 150 words in English (Gardner & Davis, 2007).

In general terms, ubiquitous multiword expressions can be practiced in conversations or formal academic writing when they are added, omitted, and modified to match different types of contexts, formality levels, teaching and learning goals, and learners' proficiencies, from beginning to advanced. All in all, a great range of concepts, ideas, and functions are expressed by means of multiword expressions, and English language usage is impossible without them.

References

- Biber, D., Johansson, S., Leech, G., Conrad, S., & Finegan, E. (1999). *Longman grammar of spoken and written English*. Harlow, Essex: Pearson.
- Boers, F. (2000). Metaphor awareness and vocabulary retention. *Applied Linguistics*, 21, 553–571.
- Boers, F. (2020). Factors affecting the learning of multiword items. In Webb, S. (Ed.), *The Routledge handbook of vocabulary studies* (pp. 143–157). Oxon: Routledge.
- Boers, F. (2021). *Evaluating second language vocabulary and grammar instruction: A synthesis of the research on teaching words, phrases, and patterns*. Oxon: Routledge.
- Boers, F., Demecheleer, M., Coxhead, A., & Webb, S. (2014). Gauging the effects of exercise on verb-noun collocations. *Language Teaching Research*, 18, 54–74.
- Boers, F. & Lindstromberg, S. (2012). Experimental and intervention studies on formulaic sequences in a second language. *Annual Review of Applied Linguistics*, 32, 83–110.
- Boers, F., Lindstromberg, S., & Eyckmans, J. (2014). Some explanations for the slow acquisition of L2 collocations. *Vigo International Journal of Applied Linguistics*, 11, 41–61.
- Coulmas, F. (1981). *Conversational routines*. The Hague: Mouton.
- Gardner, D. & Davis, M. (2007). Pointing out frequent phrasal verbs: A corpus-based analysis. *TESOL Quarterly*, 4, 339–359.
- Garnier, M. & Schmitt, N. (2015). The PHaVE List: A pedagogical list of phrasal verbs and their most frequent meaning senses. *Language Teaching Research*, 19, 645–666.
- Hill, J. (2000). Revising priorities: From grammatical failure to collocational success. In M. Lewis (Ed.), *Teaching collocation: Further developments in the lexical approach* (pp. 47–69). Hove, England: Language Teaching Publications.
- Hinkel, E. (2002). *Second language writers' text*. New York: Routledge.

Teaching grammar for a purpose in academic writing

Jan Frodesen

Grammar matters in academic writing.

Because this string of words is punctuated as a sentence, most readers would interpret the word *matters* as the third person singular verb of the subject *grammar* and its meaning to indicate something of significance. Had these words appeared in a title, the meaning would be ambiguous; *matters* might have instead been read as a head noun subject with *grammar* as a modifier and its meaning interpreted as a synonym of *concerns*. In the first interpretation, the word string would function as a claim; in the second it would serve as a topic. Readers would also note its position in this text, in which it follows a title that speaks of purposeful grammar, another indication that the first interpretation is correct.

This example points to the essential element of grammar in making meaning through language. Yet, the teaching of grammar in English composition classrooms from elementary through post-secondary levels has, for over a half century, been a contested practice. While the ‘grammar wars’ have been waged most prominently in the United States, educational institutions in other English-speaking countries have also confronted issues about the role of grammar teaching and learning in literacy education (Locke, 2010).

Grammar in writing debates

The objections to grammar-based instruction in writing classes have varied over time and changes in student populations. Its history has been chronicled in both L1 and L2 composition (Christie, 2010; Connors, 2000; Frodesen & Holten, 2003; Hancock & Kolln, 2010; MacDonald, 2007; Myers, 2003). Arguments for limiting, if not entirely excluding, grammar instruction in the writing curriculum have for the most part been grounded in two broad concerns: one related to writing products and the other to students’ linguistic identities. At least in the U.S., the teaching of writing to second language learners in ESL writing classes was heavily influenced by trends in L1 composition during the last half of the 20th century.

A central objection to teaching grammar in writing which gained prominence in the final decades of the 20th century held that learning traditional grammar did not lead to writing improvement for native speakers (Braddock et al., 1963). L2 writing teachers, responding to the L1 composition research findings, began to question the L2 writing classroom’s ‘overfocus on form’ (Zamel, 1983). However, many developing L2 learners, in contrast to native speakers, lacked the intuition about their second language needed for successful academic writing in English (Frodesen & Holten, 2003,

p. 143). Thus most L2 writing classes continued to include some degree of grammar instruction and corrective feedback in their classes.

Other issues related to teaching standard forms of English grammar concern the dynamic, changing nature of grammars and multilingual students' rights to use their individual varieties of English and other languages in academic writing. Casanave (2017) provides a comprehensive overview of the current debates about how and what kinds of academic language should be taught for multilingual English users. Casanave summarizes the objections raised about privileging standard English forms by those who believe that grammars by nature are not stable but rather ever changing and negotiable (Canagarajah, 2015), or that, given the status of English as a *lingua franca*, mutual intelligibility rather than adherence to a norm should be the goal of L2 writers of English (Ammon, 2009, Jenkins, 2014). In contrast are those who believe writing teachers should help students develop the linguistic writing proficiency needed for educational and professional success. Casanave adds that those who hold this pragmatic view, sometimes called 'accommodationist,' "do not necessarily deny that political and ideological issues lurk behind every educational corner" (2017, p. 105). She suggests that it is possible both to create awareness of ideological issues in setting standards and to let teachers decide what is appropriate for their students. Casanave stresses the importance of *awareness* and *choice* in teaching L2 writing, two concepts that are central to the topic of purposeful grammar teaching.

Political and ideological issues aside, most objections to grammar instruction in writing have concerned 'traditional grammar': teaching prescriptive rules along with textbook exercises with little or no regard to context, text, purpose, and/or reader-writer relationships. Teachers and writing handbooks often advise writers to 'use variety' in selecting language structures for stylistic rather than any functional reasons. Myhill et al.'s (2013) investigation of teachers' ability to make meaningful connections between grammar and writing recorded teachers repeatedly telling students to vary sentences ('*make sure you have sentence variety*'; '*sentence variety is key*') without explaining meaning-making differences (p. 86). Variety may be the spice of writing, as of life, but structural variety, such as using a sentence-initial rather than sentence-final adverb clause, also serves discourse functions. As Johns (2003) emphasizes, "the language of texts, whether it be vocabulary, grammar, metadiscourse or other elements, should never be taught separately from rhetorical function" (p. 211).

Negative attitudes about grammar also stem from its association as synonymous with error. In this view, grammar instruction largely involves presentation and diagnosis of error types, editing practice, and corrective feedback. Corrective feedback has tended to dominate grammar-related research and pedagogy discussions in second language writing. Atkinson and Tardy (2018) discuss two major movements in the field of second language writing (SLW) through which they might define the field: one fairly new, translanguaging, and the other, with a longstanding tradition, written corrective feedback (WCF). Atkinson and Tardy seem to concur that teachers should be able to integrate instruction in form, language, identity, and rhetoric; that attention to linguistic skills in writing is essential; and that WCF research, with its emphasis on accuracy, is only a part of what writing teachers need to guide and inspire academic language instruction. As Tardy expresses it: "I wish we had a lot more on actually working with *language* apart from error ... what I really want is more research on how I can effectively help students develop flexible and savvy language repertoires..." Atkinson adds: "...by focusing on accuracy so much you effectively reduce writing to grammar. SLWers know that language is far more than that..." (p. 91). In fact, as the discussion in this chapter maintains, language *apart from error* is also about grammar.

In sum, while informed corrective written feedback can certainly be valued as purposeful grammar instruction, it is also the case that beyond a focus on accuracy, L2 writers need guided instruction and practice in grammar constructions that help them develop their writing fluency and allow them to make effective rhetorical language choices within a socioliterate framework. As Johns (1997) describes this framework, student writers need to develop genre awareness of various kinds of shared knowledge, which in addition to communicative purposes, reader/writer roles, context, and cultural

values, includes formal text features (e.g., syntactic structures in lab reports), register (e.g., use of modal verbs), and intertextuality (which, among many other things, involves language for referencing sources). As mentioned earlier, she stresses that language instruction needs to be embedded in genres and contexts.

During the last several decades, scholars in L1 and L2 writing studies have appealed to their colleagues to restore a focus on language use long neglected in composition classes, at least at the postsecondary levels (Myers, 2003; Micciche, 2004; MacDonald, 2007; Santos, 2005). Micciche (2004, p.716) proposes a shift from associating grammar instruction with 'low skills' to one embracing rhetorical grammar as an essential part of effective communication. Similarly, MacDonald (2007, p. 617) rejects relegating language instruction in writing classes to remedial activities and emphasis on correctness; she advocates broadening language focus to include helping students to develop "a repertoire of language options," to learn metalanguage necessary for selecting from options, and to understand how linguistic constructions vary across registers.

A number of applied linguistics subfields have contributed significantly to identifying lexico-grammatical structures in academic writing across genres and disciplines and to recommending instructional applications. These subfields include English for specific purposes (ESP), English for academic purposes (EAP), corpus linguistics, genre theory, systemic functional linguistics (SFL), and content-based instruction (CBI). While approaches to academic writing based on applications of research in these fields are not without their critics (see Ferris, 2011), they have, as Tardy (2016, p. 65) favorably notes, helped to reverse what has been a decline for decades in attention to features of academic language in composition studies.

Drawing on the rich data on authentic language use from applied linguistics research as well as theoretically informed pedagogical practices promoting academic language development, this chapter considers ways in which teachers and learners can explore how grammar and lexicogrammatical choices achieve functional goals. Far from being remedial or reductive, grammar instruction grounded in academic genres can create awareness of options and the motivations for making choices among those options. Larsen-Freeman (2003) stresses that "grammar is not a linguistic straightjacket" (p. 68) but rather a flexible system with much room for variation in forms, depending on social-interactive and other considerations.

Four central assumptions underly the discussions in the rest of this chapter. These assumptions are grounded in current applied linguistics and writing studies research as well as decades of my own experience teaching academic writing.

The first assumption is that since grammar in discourse continuously interacts with vocabulary in varied and patterned ways, grammar instruction in writing by necessity includes vocabulary, often referred to as lexis. In the lexical approach, Lewis (1997) holds that lexis and grammar are "interrelated, interdependent, and somewhat inseparable" (Jabbour, 2001). Knowing a word entails knowing the grammar of the word (Nation, 2001), or, as Coxhead and Byrd (2007) put it: "Learning a new word includes knowing how to use the word in lexicographically expected ways" (p. 143). So, too, knowing how to use grammar constructions appropriately and effectively in academic writing involves the relationships of these constructions with vocabulary in textual and extratextual contexts. For example, when a writer selects a reporting verb to describe a research finding, they may need to determine if that verb can be passive (that is, its transitivity), whether it can be used with an inanimate subject such as 'Figure 1', and what strength of commitment to express about the validity of the information. A resulting sentence might be something like this: *An ongoing decline in consumer preferences for desktop computers over laptops is indicated in Figure 1.* Here the choice of passive rather than active voice could be triggered by the writer's motivation to put the topic of the finding in a thematic subject position and/or to create cohesion. In fact, language users typically begin with vocabulary and create relationships explicitly and implicitly through grammar. Myers (2003) cites Little's (1994, p. 106) claim that "words inevitably come before structures ... implicit knowledge of grammatical

rules can develop only in association with a developing mental lexicon” and adds that “...a great deal of grammar at the sentence level is determined by the idiosyncrasies of words” (pp. 615–616).

A second assumption of this chapter is that grammatical constructions are often multifunctional in realizing writers’ aims. As an example, a phrase such as *these questionable objections to the current immigrant reform proposals* may serve as a cohesive link referring to a previous stretch of text, while at the same time expressing the writer’s stance, or attitude, toward source information (in this phrase the adjective *questionable*). Indeed, cohesive noun phrases in academic texts frequently mark stance through various grammatical structures comprising them, including adjectives, prepositional phrases, and the head nouns themselves (Jiang & Hyland, 2017).

The third central assumption of this chapter is that academic writing involves significant interactions with texts and that most assignments integrate reading and writing activities. For many L2 learners, readings in courses across the curriculum are challenging to comprehend and to use as source materials in assignments (Charles & Pecorari, 2016; Coxhead & Byrd, 2007; Grabe, 2009; Grabe & Zhang, 2013). Students’ difficulties with writing often result from problems with reading (Hirvela, 2016a). Thus, the functional grammar that structures texts are often presented in the classroom through noticing activities, that is, activities which draw students’ attention to grammatical form in ways that will help them comprehend a text (Ellis, 2006).

The fourth and final central assumption of this chapter concerns the need for writing teachers to be aware of variation in lexicogrammatical patterns across genres and disciplines and to lead students in investigating how language conventions are used in enacting genre features of purpose, social roles, and contexts (Johns, 1997). Critiques of genre analyses of individual written texts and groupings of texts have raised issues citing the fluidity and constant evolution of socially constructed genres as dynamic and not static activities (Tardy, 2009; Canagarajah, 2015). As will be described in the next section, significant changes have occurred over the centuries in the grammatical patterns used to code information in academic texts. However, Casanave (2017, p. 115) reminds us that the change is slow and that, for better or worse, academic genre conventions are resistant to change. While recognizing that genres are dynamic and changing, writing teachers still find it beneficial for students to become aware of academic writing expectations in disciplinary communities through analyzing recurring linguistic patterns in texts.

The remaining sections of this chapter consider ways in which writers employ grammatical and lexicogrammatical constructions in English for various purposes, differences in patterns across disciplines, genres and proficiency of writers, and the challenges of L2 writers in achieving intertextuality in their academic writing assignments. Suggestions offer ways in which classroom activities and instructional materials can assist writers, primarily college-level but also advanced secondary and graduate writers, in gaining awareness of language use within and across genres and disciplines, developing productive linguistic resources in these areas, and thereby expanding their options in achieving communicative goals.

Grammar and information packaging

As one of the major register categories in corpus linguistic analyses (Biber et al., 1999), academic writing is considered a primarily ‘informative’ register as contrasted to the social nature of conversational language (Biber, 1988; Biber & Gray, 2016). This section considers some of the grammar constructions used to package and organize information that deserve attention in academic writing instruction. It first describes what corpus linguistic researchers have identified as a growing trend toward phrasal rather than clausal complexity and elaboration in academic writing. It then notes other grammatical structures that merit a functional treatment in second language writing curricula.

Phrasal complexity vs. clausal complexity

Readers, writers, and teachers of academic prose have long been aware that its grammar, syntax, and vocabulary differ in significant ways from spoken and less formal written registers. Recent large-scale corpus linguistic analyses of academic texts have, however, challenged researchers' claims (e.g., Hughes, 1996) that all academic writing is more elaborated in comparison to speech and that the greater complexity of academic writing in comparison to other registers results from its higher frequency of subordinate clause structures (Biber & Gray, 2010; Biber & Gray, 2016; Staples et al., 2016).

In their analysis of academic research articles, university textbooks, and course syllabi/assignments, Biber and Gray considered two sets of grammatical features: 1) dependent clauses associated with elaboration and 2) words and phrases associated with compression. For comparison to structures in informal speech they used an American English conversation corpus from the Longman Spoken and Written Corpus (Biber et al. 1999).

Biber and Gray found that the syntactic features used to measure elaboration and compression in these corpora did not support the claim that writing is more elaborated than speech. Perhaps more importantly, their analysis of phrasal modifiers indicated that in fact, optional modifiers, such as adjectives or nouns before head nouns and postmodifying prepositional phrases, are the principal means of elaboration in all three types of academic texts they examined.

Similarly, what has been termed 'complexity' in academic prose tends to appear not in clausal subordination but in phrases, particularly in noun phrases. Biber and Gray (2016, p. 169) emphasize that this has not been just a stylistic change. Instead, the grammatical shift to more complex phrasal structures, especially in science writing, was motivated by "an economy of expression" intended "to convey the maximum amount of information in the fewest words possible" (p. 207). Lan et al. (2019, p. 6) report that the shift from clausal complexity to phrasal complexity in advanced academic writing is also a developmental change for student writers, one that starts during the first year of undergraduate study.

The structurally compressed style of much academic writing, with information packaged densely into nominalizations and phrases, makes both reading and writing more difficult for many students (Charles & Pecorari, 2016, p. 98). Lan and Sun (2019) found that first-year L2 students with higher proficiency tended to use more noun modifiers in their writing; they recommended explicit instruction in the more advanced modifiers included in a developmental index of academic writing proposed by Biber et al. (2011).

This heavily nominalized style found so frequently in academic prose has its share of critics, as noted by Casanave (2017, p. 149). She adds that even if writing instructors wish to promote a more simplified style, students will most likely need help in understanding the grammatical complexity in readings used as sources for writing.

The multiple discourse functions of a particular noun phrase type that has received much recent attention in corpus-based studies is a category of abstract head nouns, such as *fact*, *problem*, *way*, and *process*, whose meaning is understood through the surrounding co-text (Benitez-Castro, 2021; Flowerdew, 2006; Jiang & Hyland, 2017; Liu & Deng, 2017). Known variously as *general nouns* (Halliday & Hasan, 1976), *shell nouns* (Hunston & Francis, 1999), *signaling nouns* (Flowerdew, 2003), and, sometimes for writing pedagogy purposes, *classifier nouns* (Frodesen & Wald, 2016), they straddle the boundary between grammar and vocabulary. Benitez-Castro (2021, p. 133) points out that these abstract nouns perform a number of discourse organizing and interactive purposes, some of which will be discussed in the following sections.

The significant shift over time from clausal complexity to phrasal complexity in academic writing, especially in science writing, points to a need to give more instructional attention to the roles of nominal and prepositional phrases in texts in order to help learners better understand how they

organize information in academic texts. Charles and Pecorari (2016, p. 99) believe it is essential that students understand the “multifunctionality of nominalizations” in creating cohesion, contributing to conciseness, expressing stance, and facilitating information flow, and that they get practice in reading and writing such texts.

Researchers and teachers who design curricula in the framework of systemic functional linguistics (SFL) emphasize the need to assist student learners in ‘unpacking information’ in texts through noticing and analysis activities in particular disciplines, such as history, economics, or biology. As an example, Pessoa and Mitchell (2019) explain how linguistic text analysis of student papers responding to a history prompt requiring analysis reveals how two different grammatical patterns signaled rhetorical development and how each pattern unsuccessfully or successfully met the assignment expectations. In one text, a student used prepositional phrases of time chronology to organize paragraph topics, resulting in a descriptive text of *knowledge display* rather than the expected *knowledge transformation* (Scardamalia & Bereiter, 1987) of source materials. A second writer, after gathering source information, created categories expressed as abstract noun phrases. Pessoa and Mitchell (2019) highlight the text’s abstract noun phrases that participated in structuring a successful cause-effect analysis, with primarily verbs coding causes and noun phrases coding effects as in this opening paragraph (p. 163):

*Disease influenced culture in three ways. It shaped **social class formations and relations, religious beliefs, and the overall survival of a culture in the face of foreign evasion.***

As this example illustrates, instructional focus on grammar often starts with how structures may serve writers’ goals and rhetorical decisions in communicative contexts.

Other grammar constructions to consider

The previous discussion of the importance of phrasal structures in academic writing instruction does not mean that other grammatical structures should be omitted from consideration in exploring how grammar codes information. But as L2 language educators have noted (Folse, 2016; Hinkel, 2013), grammar textbooks often cover in detail structures that are not very frequent or useful in academic writing, so teachers need to make selective, informed choices of what to include. For example, Hinkel (2013, p. 13) lists eight forms of passives, including seven tenses and passives with by-agents, that are infrequent and thus of low importance in academic writing.

In order to integrate grammar with other components of writing instruction, teachers need to consider constructions that best meet students’ needs in particular contexts. Using content-based approaches to teaching English for academic purposes (Frodesen, 2017), instructors may proactively make these selections based on their prominence in assigned readings that may pose challenges of interpretation for students or be related to the demands of specific writing assignments (Ferris, 2016).

In addressing the ‘So What?’ in the title of their article researching grammatical complexity, Lan et al. (2019) recommended that teachers should highlight in instruction the qualities of *variation* and *sophistication* in academic prose. They suggest that instructors not only help their students expand their linguistic resources but teach them how to embed diverse features in their writing. Supporting this view, Hinkel’s (2003) comparative study of L1 and L2 essays found that L2 texts, even those by students with U.S. education exhibited a smaller range of grammar and vocabulary. Hinkel (2003) concluded that exposure to academic texts is not sufficient; in addition, L2 writers need instruction not only on how to build language resources but how to use them in writing contexts.

Connecting and focusing across sentences

Surely one of the most studied features of second language writing related to grammar since the mid-1980s has been that of cohesion, the use of grammatical and lexical words and phrases to create ties between ideas across sentence boundaries. M. A. K. Halliday and Ruqaiya Hasan's seminal work *Cohesion in English* (1976) sparked numerous investigations of the relationship between cohesive ties and writing quality in composition studies and applied linguistics. Composition researchers studied the types and frequencies of cohesive ties in written academic texts using Halliday and Hasan's five categories of cohesive ties as a framework for analysis. Four of these ties are considered grammatical relations; the two most frequent in writing are *reference* (e.g., *that response; their argument*) and *conjunction* (e.g., *Businesses were forced to close. As a result, unemployment increased*).

The fifth type identified, and the one that most frequently connects discourse elements and that has characterized higher-rated essays in studies of student texts is *lexical cohesion* (Witte & Faigley, 1981). Lexical cohesion has a number of subcategories, the most important of which, in terms of its functional purposes in academic writing, is *reiteration*. Reiteration includes such relations to other parts of texts as the exact repetition of a word or phrase, a synonym, or a superordinate. Superordinates, in turn, include the kinds of abstract nouns referred to earlier as shell or signal nouns (e.g., *difficulty, reason, result*). Halliday and Hasan state the boundary between lexical reiteration and grammatical reference is "by no means clear cut" and that "the class of general nouns provides a form of cohesion that lies somewhere in between the two and is interpretable as either" (p. 279). Here again we see the need for grammar instruction to consider the interrelatedness of vocabulary and grammar in discourse contexts.

Leki et al.'s (2008) synthesis of research on cohesion (pp. 141–144) reveals that findings differed in whether frequencies of use in cohesive ties correlated with more highly rated compositions. Their synthesis did, however, highlight two types of cohesion which L2 writers experienced difficulty in using successfully.

One of these types was lexical cohesion, which, as mentioned earlier, has the strongest correlation with writing quality. In studies comparing L2 writers with L1 writers, L2 writers used less variety of lexical cohesive ties and more limited vocabulary (Connor, 1984; Maxwell & Falick, 1992; Zhang, 2000) or used incorrect words or collocations (Johns, 1984; Liu & Braine, 2005).

The other cohesion type in which Leki et al.'s synthesis noted differences between L2 writers and L1 writers was conjunction. L2 writers overused and misused conjunctive ties (Johns, 1984; Field & Yip, 1992; Zhang, 2000).

Studies summarized in Larsen-Freeman et al. (2016, p. 563) identified four main problems L2 learners had in using these conjunctions, which they refer to as linking adverbials, appropriately in written English:

- Assigning incorrect meanings to specific linking adverbs
- Inappropriate register (levels of formality)
- Unclear reference
- Overuse.

More specifically, L2 writers experienced difficulty distinguishing some uses of contrastive linking adverbials in English, an important category for academic writing, including *in contrast*, *on the contrary*, and *on the other hand* (Crewe, 1990; Field & Yip, 1992, Granger & Tyson, 1996). Other studies noted the misuse of *therefore* in the absence of any causal relationship or to force a conclusion without adequate evidence (Milton & Tsang, 1993; Chen, 2006). Field and Yip (1992) and Chen (2006) noted inappropriate register use of linking adverbials, mostly informal forms such as *actually*

and *anyway*, in student texts. Other studies identified misuse and overuse of additive conjunctions, such as *besides*, *furthermore*, and *moreover* (Bolton et al., 2002, Ventola, 1994; Yeung, 2009). These misuses and overuses suggest L2 student writers' dependence on 'transition lists' in textbooks and on websites, resources which often do not distinguish the specialized uses in discourse of lexical items within semantic categories such as addition.

As classroom applications of the current research on linking adverbial use by L2 writers, Larsen-Freeman et al. (2016, p. 565) suggest that teachers can help students distinguish meaning and register differences within the broad categories, such as additive and causal connectors. They can assist students in understanding the reasons for specific overuse and why such overuse may hinder rather than promote reader comprehension. They can provide guided activities for checking the appropriateness of connectors used for the logical development in their texts and can engage more advanced students in observing how cohesive conjunctions are used differently across disciplines.

Although linking adverbials are important grammatical devices for connecting text across sentences, and are frequent in some disciplinary writing such as physics (Wette, 2017), instructors should encourage students to expand their options for creating cohesive ties. Just as current writing pedagogy has emphasized the need for students to explore a range of authentic academic genres and to move 'beyond the 5-paragraph essay' (Caplan & Johns, 2019), students need to develop their lexicogrammatical resources that go 'beyond *however* and *therefore*' in developing cohesion.

In transitioning from secondary to postsecondary education, many multilingual students tend to be unfamiliar with the more sophisticated ways that experienced academic writers create cohesion. Sentence-initial cohesive structures often combine several of the types in Halliday and Hasan's taxonomy, as in this example from the *The Corpus of Contemporary American English* (Davis, 2008), which includes a prepositional logical connector, a referential demonstrative pronoun, and a shell/signaling noun.

In light of this significant increase in the percentage of adults living with roommates, the Supreme court should introduce a bright line rule...

This example also illustrates well the phrasal complexity described earlier by Biber and Gray (2010, 2016).

While certainly many novice native-English speaking writers also find this type of cohesion in academic writing difficult to produce, multilingual writers who are less familiar with the dense prose of academic texts may have developed fewer linguistic resources for creating connections across sentence boundaries. The research on cohesion in student texts summarized earlier suggests that many college-level L2 writers have tended to rely on two types of cohesion: 1) one- or two-word conjunctions ('transition words'), such as *however*, *therefore*, *in addition*, or *nevertheless* or 2) simple reference words or phrases, such as demonstrative pronoun *this* or definite article *the* followed by lexical repetition or partial repetition of a previous noun (e.g., A new petition was filed. *The petition...*). As the discussion of phrasal complexity in this chapter showed, academic writers compress a great deal of information into noun phrases and prepositional phrases, and both of these grammatical constructions figure large in creating elaborated connections across sentence boundaries in academic writing.

Corpus-based studies have emphasized the roles that general abstract nouns play in creating cohesion and contributing to overall text coherence. Flowerdew (2003, 2006) defines signaling nouns (e.g., *attitude*, *difficulty*, and *process*) as any abstract noun that is unspecific out of context but made specific in context. He provides this example of a cohesive anaphoric realization of signal noun meaning, with the referent underlined. (2006, p. 348):

However, recent laboratory experiments have demonstrated that they are not only strongly dependent on the carbonate chemistry of the culture medium but that the so-called 'vital

effects' are probably mediated via perturbations of the local carbonate system. These **findings** have an important impact on the interpretation of isotope data.

Flowerdew's (2006) corpus-based study of L1 Cantonese writers' use of signaling nouns in English found that among the most common errors were grammatical relations between these nouns and function words, such as prepositions, which he termed colligation errors, such as *discrimination to smokers (against)*. Flowerdew believes more instructional attention should be paid to lexical cohesion.

Aktas and Cortes (2008), investigating shell noun use in published and student writing, also stress the need for explicit instruction in grammatical patterns and functions involving shell nouns. They maintain that students do not need to learn shell nouns as vocabulary items but instead as cohesive devices in appropriate lexicogrammatical patterns so that they can "more efficiently organize the communicative purposes of their texts" (p. 13). As with other lexicogrammatical constructions, rhetorical functions may vary across disciplines and genres. Benitez-Castro's (2021) study of shell nouns *problem* and *way*, for example, identified usage differences in these nouns across three disciplines in undergraduate writing.

To promote L2 writers' proficiency in producing elaborated cohesive structures, an important step is guiding students in noticing these structures in readings or online concordancers, as in these examples from the *Corpus of Contemporary American English* (Davis, 2008).

In spite of this time of societal upheaval, the Black mother remained ...

As a result of this first phase of data extraction, the research team formulated a list of categories...

In productive practice, writers can transform information in clausal structures into elaborated phrases that combine prepositional logical connectors (e.g., *as a result of, given*), reference forms (e.g., *this, the*), and shell/signaling nouns (e.g., *effect, problem*) that connect to prior discourse as in this example (Frodesen & Wald, 2016. p. 82):

Original: Since cell phone applications have been developing rapidly ...

Transformation: In light of rapid developments in cell phone applications...

Finally, classroom instruction and pedagogical materials for the grammar of cohesion should include the uses of verb tenses in discourse. As Hinkel (2002) explains, through 'grammar discovery tasks,' students can develop explicit as well as implicit knowledge of the conventionalized use of verb tenses within cohesive time frames.

Using sources in academic writing

It is widely acknowledged that incorporating source texts appropriately and effectively is not only one of the most essential abilities in academic writing but also one of the most difficult for L2 writers (Campbell, 1990; Currie, 1998; Hirvela & Du, 2013). This section will consider two important areas that draw on linguistic resources in creating intertextuality. One involves the many lexicogrammatical constructions that express stance, defined in (Biber et al., 1999, p. 996) as "personal feelings, attitudes, value judgements, or assessments." Included in this topic is a brief discussion of reporting verbs since verbs used in referencing sources typically reflect the writer's interpretation of an author's stance (e.g., *Li emphasizes*), the degree of epistemic commitment to information presented (e.g., these results *suggest*), or, in cases of self-reference, the writer's attitude toward the source content (e.g., *I believe*). This section will then turn to the role of grammar instruction in helping L2 writers approach the challenging task of paraphrasing.

Up until a few decades ago, the notion of stance was unfamiliar to many L2 writing teachers. The need for second language writers to develop voice in writing had often been discussed, but as reflected in Stapleton's (2002) critique on voice in L2 composition, expressing voice focused largely on using first person pronouns. With the publication of the *Longman Grammar of Spoken and Written English* (Biber et al., 1999) and studies of linguistic markers of stance (Hyland, 1998, among others), ESL writing textbooks began to include instruction in using 'hedging' grammar to qualify generalizations: modal verbs such as *can* and *may*, verbs such as *appear to* and *tend to*; probability expressions such as *it is likely* and *it is possible*. Hyland's (2005) stance categories of hedges (*possible, might*), boosters (*very, highly*), attitude markers (*it is important/unfortunately*), and self-mention (*in this paper, I argue*) have been increasingly used by L2 writing teachers to help students incorporate epistemic and evaluative positions about source information (pp. 178–181).

Recent scholarship on linguistic stance markers in academic writing has investigated their use within and across disciplines and has compared use by novice and more experienced student writers. Some studies have focused on genre or disciplinary differences or changes over time in published writing, especially in journal articles (Jiang & Hyland, 2017; Hyland & Jiang 2018; Liu & Deng, 2017). Others have investigated stance use by college writers (Aull, 2019; Aull & Lancaster, 2014; Larsson, 2017; Lancaster, 2011; Lancaster, 2016; Lee et al., 2018; Lee & Deakin, 2016; Liardet, 2018). Comparative studies of L1 student writers found that more advanced writers and more successful novice writers tended to use stance markers overall more frequently and to use hedging more frequently than boosting expressions, especially contrastive and concessive stance markers such as *in contrast* and *nevertheless*. Studies of L2 writers found they used hedges subjectively in ways that lessened their authority (Liardet, 2018), adopted non-committal stances (Lee et al., 2018), and underused impersonal stance patterns such as *it*-clefts (Larsson, 2017). Lancaster (2011) suggests that L2 writers, who are often more familiar with grammar than are L1 writers, may be particularly open to and benefit from studying linguistic options for expressing stance and evaluating the success of textual choices.

As for reporting verbs (e.g., *states, argues, explains*) and other citation markers such as *according to*, this type of metadiscourse, called evidentials in Hyland's (2005) model, has received considerable attention in L2 writing instruction in recent years. This increased emphasis is in part due to a shift in first-year composition from assignments based on brief and often inauthentic textbook readings to ones involving authentic texts and requiring synthesis. It is not within the scope of this chapter to review the numerous studies of reporting verbs in academic writing, of which Thompson and Yiyun's (1991) study has been a seminal work. However, in recent research, Kwon et al. (2018) found that first-year L2 writers tended to use the same small group of reporting verbs with high frequency and that many of their reporting verbs were self-mentions, such as *I think* and *I know*. Pedagogical recommendations include helping writers develop more varied reporting verb vocabulary as well as knowledge of their different rhetorical functions. Learning new reporting verbs of course entails learning the grammar of these verbs, including transitivity and complementation structures that follow. The researchers also recommend helping student writers in revision learn how to use alternatives to self-mentions for marking stance, in particular impersonal *it*-clefts (e.g., *it is possible that*).

Regarding the teaching and learning of paraphrase in referencing sources, an extensive body of research has investigated the complex sociocultural, cognitive, metacognitive, and linguistic considerations involved in intertextuality. Paraphrase is regarded as an especially difficult type of referencing, especially for L2 writers (Hirvela, 2016b), one that these writers tend to avoid in incorporating source material, preferring quotation or summary (Cumming et al., 2018). The research on textual borrowing has made us sharply, and somewhat painfully, aware that many of the existing language-based pedagogical materials for source use in general, and paraphrase in particular, are inadequate and simplistic in failing to acknowledge the complex processes required. The multiple perspectives on source-based academic writing emerging from the research literature stand in sharp contrast to

many of the simplified instructional materials on using sources for college-level writers, which typically focus on the mechanics of quotation and citation conventions and advise student writers to avoid plagiarism by ‘putting in your own words’ the information taken from source texts. Samples of ‘good’ and ‘bad’ paraphrases are sometimes presented with few explicit explanations other than pointing out inappropriate use of source text language in ‘bad paraphrases’ leading to ‘patchwork plagiarism.’ In many cases, L2 writers cannot ‘unpack’ the lexical and grammatical strategies skillfully employed in the ‘good paraphrases,’ especially in handbooks and university online resources intended for native speakers. As Yamada (2003, p. 251) has argued, overemphasis on acceptable and unacceptable paraphrases may not only confuse L2 writers but also lead them to believe that the key to acceptable writing consists of avoiding unacceptable paraphrase.

An important finding from Hirvela and Du’s (2013) case studies of international L1 Chinese students writing in English is that when paraphrasing is practiced in the writing classroom as “a decontextualized mechanical process of rewording and grammatical rearrangement” (p. 92), although students may improve linguistic proficiency in paraphrase, they may fail to see its functional value. Their study also highlighted the problem of transferring paraphrase skill in ‘knowledge telling’ classroom exercises to that of ‘knowledge transformation’ involving authorial stance-taking required in research papers, a problem sometimes based on the writer’s attitude toward the value of paraphrase in this context.

Given the complex set of skills involved in comprehending and referencing source texts, we might wonder where in the process grammar instruction matters. Yet, researchers who have helped us better understand what a complex and complicated activity source use is also recognize that L2 writers often lack the linguistic resources for paraphrasing in English (Keck, 2006; Pecorari, 2013; Storch, 2012; Wette, 2017). Student writers’ decisions to paraphrase rather than quote are often influenced by their level of confidence to put the source text in their own words (Shi, 2008).

With so many processes and factors involved in the effective paraphrasing of source material, how can writing teachers use language-based approaches to help their students develop paraphrasing skill? As noted earlier, research tells us that sending L2 students to writing tutorial websites to study ‘good’ and ‘bad’ paraphrase examples often confuses more than helps, and providing decontextualized practice in paraphrase is not effective for authentic paraphrase tasks.

One approach is suggested by many researchers who advocate a change in perspective on novice student writers’ strategy of ‘patchwriting,’ which Howard (1995) defined as “copying from a source text and then deleting some words, altering grammatical structures or plugging in one-for-one synonym-substitutes” (p. 788). While ‘patchwriting’ has generally been regarded as a form of plagiarism, albeit unintentional, and thus to be avoided, it has also long been identified in scholarly discussions as a widespread coping strategy of novice writers and a preliminary, developmental stage (Currie, 1998; Pecorari, 2003). Increasingly, researchers of L2 writers’ processes in incorporating source information have suggested, if not recommended, viewing patchwriting as a positive, desirable, and perhaps necessary stage in the process of crafting a paraphrase (Cumming et al., 2018; Gu & Brooks, 2008; Li & Casanave, 2012). An instructional approach for working with the language of paraphrase could thus begin with ‘patchwork’ writing samples in draft writing, not as examples of plagiarism but rather as one of the first steps in textual borrowing. In their case study of a novice L1 writer’s patchwork writing, whose motivation for copying text reflected her personal identification with source language and context, Hull and Rose (1989) encouraged ‘a freewheeling pedagogy of imitation’ and described how an instructor might take an instance of such imitation and, in conference with the student, collaborate on transforming it into an acceptable paraphrase.

Developing L2 writers can learn and practice strategies for altering words and syntax in source information with the caveat that such changes need to make sense in their contexts. For example, changing an active sentence to a passive one could be a first step in producing a sentence paraphrase, but the appropriateness of that transformation is dependent on meaning in context since

it would change informational focus. Other grammatical transformations, for example, changing verb + adverb patterns to adjective + noun phrases can be practiced within functional academic categories such as expressing increases, e.g., *to expand considerably* → *considerable expansion (of)*; *to add substantially* → *substantial addition (to)* (Frodesen & Wald, 2016, pp. 44–45). These can serve as guided ‘pre-paraphrasing’ activities, building knowledge of word forms relevant to the task of paraphrase, but at the same time becoming part of students’ linguistic repertoire for many other communicative purposes as well. In other words, while writers may need to build vocabulary and learn to manipulate grammar structures for successful paraphrasing, exercises that give practice in changing word classes can be done in the contexts of rhetorical goals other than paraphrasing.

These and other language-building activities for developing proficiency in paraphrasing can also be embedded in other components of source use instruction. For example, Wette (2017), within a developmental sequence of varied tasks in selecting and referencing sources for novice through post-novice L2 writers, proposes practice in transforming source information beyond substitutions.

Summary and future directions

This chapter has made a case for increased attention to grammar in writing instruction, with a focus on its rhetorical roles serving writers’ purposes and those of their discourse communities. Hyland (2018) reminds us that helping students acquire the language patterns of unfamiliar genres is not a remedial activity intended to address deficits but part of the process of literacy development. It has emphasized the need to consider the interdependence and interactions of grammar and vocabulary in written texts; it has pointed out the multiple functional roles that grammatical constructions can serve simultaneously; it has recognized reading as an essential component in academic writing; and it has stressed that functional grammar needs to be taught in the contexts of authentic genres and disciplines, with all that entails.

Incorporating purposeful grammar in writing classes seems especially important in first-year composition in postsecondary institutions, which Johns (1997, 2019) has identified as a ‘gap period’ between the heavy focus in high school on evaluation by exams and upper division university courses that often require significant writing in students’ major disciplines. At the same time, systemic functional linguists have shown that connecting language to content knowledge and text organization is essential for writing development from early ages into adulthood (Christie, 2012; Schleppegrell, 2004).

The research and pedagogical discussion of specialists in genre theory, corpus linguistics, and English for academic purposes have underscored the need for maintaining a focus on language in the L2 writing curriculum as an essential part of meaning-making. Research findings have stressed the need for supporting students in developing their grammatical resources in the contexts of authentic texts and communicative purposes, with attention to learners’ individual needs and motivations in interacting with texts, whether their own or those of others. In the “SLW at the Crossroads” disciplinary dialogue (Atkinson & Tardy, 2018), Tardy highlights the importance, in moving forward, of a continued focus in L2 composition on language, and by extension, the grammar of language, as essential to academic writing: “It’s expression. It’s form. It’s community. It’s identity. It’s persuasion. Communication. Meaning” (p. 92).

While contributions from recent studies and discussions provide valuable insights and directions for the teaching of grammar in writing classes, the findings and conclusions also pose challenges for teachers, who are called on to ground grammar instruction in authentic reading-writing contexts rather than in decontextualized grammar exercises and simplified rules. There is clearly a need for more L2 writing textbooks and online resources that engage students in purposeful grammar for writing and offer strategies and meaningful practice in authentic contexts.

The literature also points to a need for teacher education in meaningful grammar instruction (Coxhead & Byrd, 2007; MacDonald, 2007; Myhill et al., 2013). This includes foundational knowledge in forms, meanings, and uses of grammar, and ways to structure grammar-based lessons so that learners see grammar as a valuable resource for communication. Myhill et al. (2013) conclude from their investigation of teachers' use of grammatical knowledge that pre-service and in-service training needs to involve transforming teachers' declarative knowledge into "powerful pedagogical forms" (p. 90). Schleppegrell and O'Hallaron (2011) extend the call for functional language teacher education provided by applied linguists to mainstream content-area teachers in secondary schools, who they believe are often best situated to help L2 learners connect content with language use in meaningful ways, going beyond the narrow scope of vocabulary instruction.

In sum, functional grammar instruction informed by learners' academic literacy needs can help students gain awareness of common lexicogrammatical patterns within and across genres and build their linguistic resources for successful academic reading and writing. Further, such instruction can assist writers in understanding what discourse factors should be considered in selecting from their options. To paraphrase Casanave (2017), who can argue against the benefits of language awareness and choice?

References

- Aktas, R. N. & Cortes, V. (2008). Shell nouns as cohesive devices in published an ESL student writing. *Journal of English for Academic Purposes*, 7, 3–14. <https://doi.org/10.1016/j.jeap.2008.02.002>
- Ammon, U. (2009). Towards more fairness in international English: Linguistic rights of non-native speakers? In R. Phillipson (Ed.), *Rights to language: Equity, power, and education* (pp. 111–116). Mahwah, NJ: Lawrence Erlbaum.
- Atkinson, D. & Tardy, C. (2018). SLW at the crossroads: Finding a way in the field. *Journal of Second Language Writing*, 86–93. <https://doi.org/10.106/j.jslw.2018.10.011>
- Aull, L. L. (2019). Linguistic markers of stance and genre in upper-level student writing. *Written Communication*. <https://doi.org/10.1177/0741088318819472>
- Aull, L. L. & Lancaster, Z. (2014). Linguistic markers of stance in early an advanced academic writing: A corpus-based comparison. *Written Communication*, 3(2), 151–183. <https://doi.org/10.1177.0741088314527055>
- Benitez-Castro, M.-A. (2021). Shell-noun use in disciplinary student writing: A multifaceted analysis of problem and way in third-year undergraduate writing across three disciplines. *English for Specific Purposes*, 61, 132–149. <https://doi.org/10.1016/j.esp.2020.10.004>
- Biber, D. (1988). *Variation across speech and writing*. Cambridge, England: Cambridge University Press.
- Biber, D. & Gray, B. (2010). Challenging stereotypes about academic writing: Complexity, elaboration, explicitness. *Journal of English for Academic Purposes*, 9, 2–20. <https://doi.org/10.1016/j.jeap/2020/01.001>
- Biber, D. & Gray, B. (2016). *Grammatical complexity in academic English*. Cambridge, England: Cambridge University Press.
- Biber, D., Gray, B., & Poonpon, K. (2011). Should we use characteristics of conversation to measure grammatical complexity in L2 writing development? *TESOL Quarterly*, 45(1), 5–35.
- Biber, D., Johansson, G., Leech, S., Conrad, S., & Finnegan, E. (1999). *The Longman grammar of spoken and written English*. London, England: Longman.
- Bolton, K., Nelson, G., & Hung, J. (2002). A corpus-based study of connectors in students writing. *International Journal of Corpus Linguistics*, 7(2), 165–182.
- Braddock, R., Lloyd-Jones, R., & Schoer, L. A. (1963). *Research in written composition*. Urbana, IL: National Council of Teachers of English.
- Campbell, C. (1990). Writing with others' words: Using background reading text in academic composition. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 211–230). New York: Cambridge University Press.
- Canagarajah, A. S. (2015). Clarifying the relationship between translanguaging practice and L2 writing: Addressing learner identities. *Applied Linguistics Review*, 6(4), 415–440.
- Caplan, N. A. & Johns, A. M. (Eds.) (2019). *Changing practices for the L2 writing classroom: moving beyond the five-paragraph essay*. Ann Arbor, MI: University of Michigan Press.
- Casanave, C. P. (2017). *Controversies in second language writing: Dilemmas and decisions in research and instruction* (2nd ed.). Ann Arbor, MI: University of Michigan Press.

- Charles, M. & Pecorari, D. (2016). *Introducing English for academic purposes*. London and New York: Routledge.
- Chen, C. W. (2006). The use of conjunctive adverbials in the academic papers of advanced Taiwanese learners. *International Journal of Corpus Linguistics*, 11(1), 113–130.
- Christie, F. (2010). The “grammar wars” in Australia. In T. Locke (Ed.), *Beyond the grammar wars: A resource for teachers and student on developing language knowledge in the English/literacy classroom* (pp. 55–72). New York and London, England: Routledge.
- Christie, F. (2012). *Language education throughout the school years: A functional perspective*. Wiley-Blackwell.
- Connor, U. (1984). A study of cohesion and coherence in English as a second language students’ writing. *Research on Language & Social Interaction*, 17(3), 301–316. <https://doi.org/10.1080/08351818409389208>
- Connors, R. J. (2000). The erasure of the sentence. *College Composition and Communication*, 52(1), 96–128.
- Coxhead, A. & Byrd, P. (2007). Preparing writing teachers to teach the vocabulary and grammar of academic prose. *Journal of Second Language Writing*, 16, 129–147. <https://doi.org/10.1016/j.jslw.2007.07.002>
- Crewe, W. J. (1990). The illogic of logical connectives. *ELT Journal*, 44(4), 316–325.
- Cumming, A., Yang, L., Qui, C., Zhang, L., Ji, X., Wang, J., ... Lai, C. (2018). Students’ practices and abilities for writing from sources in English at universities in China. *Journal of Second Language Writing*, 39, 1–15. <https://doi.org/10.1016/j.jslw.2017.11.001>
- Currie, P. (1998). Staying out of trouble: Apparent plagiarism and academic survival. *Journal of Second Language Writing*, 1–18.
- Davis, M. (2008). *The corpus of contemporary American English*. <http://corpus.byu.edu/coca>.
- Ellis, R. (2006). Current issues in the teaching of grammar: An SLA perspective. *TESOL Quarterly*, 40(1), 83–107.
- Ferris, D. (2011). Written discourse analysis and second language teaching. In E. Hinkel (Ed.), *Handbook of research in second language and learning, Volume II* (pp. 645–661). New York and London, England: Routledge.
- Ferris, D. R. (2016). Promoting grammar and language development in the writing class: Why, what, how, and when. In E. Hinkel (Ed.), *Teaching English grammar to speakers of other languages* (pp. 222–245). New York and London, England: Routledge.
- Field, Y. & Yip, L. M. O. (1992). A comparison of internal conjunctive cohesion in the English essay writing of Cantonese speakers and native speakers of English. *RELC Journal*, 23(1), 15–28.
- Flowerdew, J. (2003). Signaling nouns in discourse. *English for Specific Purposes*, 22, 329–346.
- Flowerdew, J. (2006). Use of signaling nouns in a learner corpus. *International Journal of Corpus Linguistics*, 11(3), 345–362.
- Folse, K. (2016). Grammar in student books versus grammar that students need: Which grammar to include, which grammar to omit. In E. Hinkel (Ed.), *Teaching English grammar to speakers of other languages* (pp. 63–83). New York and London, England: Routledge.
- Frodesen, J. (2017). English for academic purposes through content-based instruction. In M. A. Snow & D. M. Brinton (Eds.), *The content-based classroom: New perspectives on integrating language and content* (pp. 253–269). Ann Arbor, MI: University of Michigan Press.
- Frodesen, J. & Holten, C. (2003). Grammar and the ESL writing class. In B. Kroll (Ed.), *Exploring the dynamics of second language writing* (pp. 141–161). New York: Cambridge University Press.
- Frodesen, J. & Wald, M. (2016). *Exploring options in academic writing: Effective vocabulary and grammar use*. Ann Arbor, MI: University of Michigan Press.
- Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. Cambridge, England: Cambridge University Press.
- Grabe, W. & Zhang, C. (2013). Reading and writing together: A critical component of English for academic purposes teaching and learning. *TESOL Journal*, 4(1), 9–24.
- Granger, S. & Tyson, S. (1996). Connector usage in the English essay writing of native and non-native ESL speakers of English. *World Englishes*, 15(1), 17–27.
- Gu, Q. & Brooks, J. (2008). Beyond the accusation of plagiarism. *System*, 36, 337–352.
- Halliday, M. A. K. & Hasan, R. (1976). *Cohesion in English*. London, England: Longman.
- Hancock, C. & Kolln, M. (2010). Blowin’ in the wind: English grammar in United States schools. In T. Locke (Ed.), *Beyond the grammar wars: A resource for teachers and student on developing language knowledge in the English/literacy classroom* (pp. 21–37). New York and London, England: Routledge.
- Hinkel, E. (2002). Teaching grammar in writing classes: Tenses and cohesion. In E. Hinkel & S. Fotos (Eds.), *New perspectives on grammar teaching in second language classrooms* (pp. 181–198). Mahwah, NJ: Lawrence Erlbaum Associates.
- Hinkel, E. (2003). Simplicity without elegance: Features of sentences in L1 and L2 academic texts. *TESOL Quarterly*, 37(2), 275–301.
- Hinkel, E. (2013). Research findings on teaching grammar for academic writing. *English Teaching*, 68(4), 3–21.

- Hirvela, A. (2016a). Academic reading into writing. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 127–138). Oxford, England: Routledge.
- Hirvela, A. (2016b). *Connecting reading & writing in second language writing instruction* (2nd ed.). Arbor, MI: University of Michigan Press.
- Hirvela, A. & Du, Q. (2013). Why am I paraphrasing?: Undergraduate ESL writers' engagement with source-based academic writing and reading. *Journal of English for Academic Purposes*, 12, 87–98. <https://doi.org/10.1016/j.jjeap.2012.11.005>
- Howard, R. M. (1995). Plagiarisms, authorships, and the academic death penalty. *College English*, 57(7), 788–806.
- Hughes, R. (1996). *English in speech and writing: investigating language and literature*. London, England: Routledge.
- Hull, G. & Rose, M. (1989). Rethinking remediation: Toward a social-cognitive understanding of problematic reading and writing. *Written Communication*, 6(2), 139–154.
- Hunston, S. & Francis, G. (1999). *Pattern grammar: A corpus-driven approach to the lexical grammar of English*. Amsterdam: Benjamins.
- Hyland, K. (1998). Boosting, hedging, and the negotiation of academic knowledge. *Text*, 18(3), 349–382.
- Hyland, K. (2005). Stance and engagement: A model of interaction in academic discourse. *Discourse Studies*, 7(2), 173–192.
- Hyland, K. (2018). Sympathy for the devil? A defence of EAP. *Language Teaching*, 51(3), 383–399.
- Hyland, K. & Jiang, F. (2018). “In this paper we suggest”: Changing patterns of disciplinary discourse. *English for Specific Purposes*, 51, 18–30. <https://doi.org/10.1016/j.esp.2018.02.001>
- Jabbour, G. (2001). Lexis and grammar in second language teaching and writing. In D. Belcher & A. Hirvela (Eds.), *Linking literacies* (pp. 291–308). Ann Arbor, MI: University of Michigan Press.
- Jenkins, J. (2014). *English as a lingua franca in the international university: The politics of academic English language policy*. Abingdon, UK: Routledge.
- Jiang, F. & Hyland, K. (2017). Metadiscursive nouns: Interaction and cohesion in abstract moves. *English for Specific Purposes*, 46, 1–14. <https://doi.org/10.1016/j.jjesp.2016.11.001>
- Johns, A. (1984). Textual cohesion and the Chinese speaker of English. *Language Learning and Communication*, 3, 69–73.
- Johns, A. M. (1997). *Text, role and context: Developing academic literacies*. Cambridge, England: Cambridge University Press.
- Johns, A. M. (2003). Genre and ESL/EFL composition instruction. In B. Kroll (Ed.), *Exploring the dynamics of second language writing* (pp. 195–217). Cambridge, England: Cambridge University Press.
- Johns, A. M. (2019). Writing in the interstices: Assisting novice undergraduates in analyzing authentic writing tasks. In N. A. Caplan & A. M. Johns (Eds.), *Changing practices for the L2 writing classroom: Moving beyond the five-paragraph essay* (pp. 133–148). Ann Arbor, MI: University of Michigan Press.
- Keck, C. (2006). The use of paraphrase in summary writing: A comparison of L1 and L2 writers. *Journal of Second Language Writing*, 15(4), 261–278.
- Kwon, M. H., Staples, S., & Partridge, R. S. (2018). Source work in the first-year L2 writing classroom: Undergraduate L2 writers' use of reporting verbs. *Journal of English for Academic Purposes*, 34, 86–96. <https://doi.org/10.1016/j.jjeap.2018.04.001>
- Lan, G., Liu, Q., & Staples, S. (2019). Grammatical complexity: ‘What does it mean?’ and ‘So what’ for L2 writing classrooms? *Journal of Second Language Writing*. <https://doi.org/10.1016/j.jslw.2019.100673>
- Lan, G. & Sun, Y. (2019). A corpus-based investigation of noun phrase complexity in the L2 writings of a first-year composition course. *Journal of English for Academic Purposes*, 38, 14–24. <https://doi.org/10.1016/j.jjeap.2018.12.001>
- Lancaster, Z. (2011). Interpersonal stance in L1 and L2 students' argumentative writing in economics: Implications for faculty development in WAC/WID programs. *Across the Disciplines*, 8(4). Retrieved June 1, 2013, from <http://wac.colostate.edu/atd/ell/lancaster.cfm>
- Lancaster, Z. (2016). Expressing stance in undergraduate writing: Discipline specific and general abilities. *Journal of English for Academic Purposes*, 23, 16–30. <https://doi.org/10.1016/j.jjeap.2016.05.006>
- Larsen-Freeman, D. (2003). *Teaching language from grammar to grammaring*. Boston, MA: Heinle Cengage.
- Larsen-Freeman, D., Celce-Murcia, M., Frodesen, J., White, B., & Williams, H. (2016). *The grammar book: Form, meaning, and use for English language teachers* (3rd ed.). Boston, MA: National Geographic Learning.
- Larsson, T. (2017). A functional classification of the introductory *it* pattern: Investigating academic writing by non-native speaker and native-speaker students. *English for Specific Purposes*, 48, 57–70. <https://doi.org/10.1016/j.jjesp.2017.06.001>
- Lee, J. & Deakin, L. (2016). Interactions in L1 and L2 undergraduate student writing: Interactional meta discourse in successful and less-successful argumentative essays. *Journal of Second Language Writing*, 33, 21–34.

- Lee, J., Hitchcock, C., & Casal, J. E. (2018). Citation practices of L2 university students in first-year writing: Form, function, and stance. *Journal of English for Academic Purposes*, 33, 1–11. <https://doi.org/10.1016/j.jeap.2018.18.01.001>
- Leki, I., Cumming, A. H., & Silva, T. (2008). *A synthesis of research on second language writing in English*. New York, NY and London, England: Routledge.
- Lewis, M. (1997). *Implementation of the lexical approach*. Hove, UK: Language Teaching Publications.
- Li, Y. & Casanave, C. P. (2012). Two first-year students' strategies for writing from sources: Patchwriting or plagiarism. *Journal of Second Language Writing*, 21, 165–180. <https://doi.org/10.1016/j.jslw.2.2012.03.002>
- Liardet, C. L. (2018). 'As we all know': Examining Chinese EFL learners' use of interpersonal grammatical metaphor in academic writing. *English for Specific Purposes*, 50, 64–80. <https://doi.org/10.1016/j.jesp.2017.11.005>
- Liu, M. & Braine, G. (2005). Cohesive features in argumentative writing produced by Chinese undergraduates. *System*, 33, 623–636. <https://doi.org/10.106j.system.2005.02.002>
- Liu, Q. & Deng, L. (2017). A genre-based study of shell-noun use in the N-be-that construction in popular and professional science articles. *English for Specific Purposes*, 48, 32–43. <https://doi.org/10.1016/j.esp.2016.11.002>
- Locke, T. (Ed.) (2010). *Beyond the grammar wars: a resource for teachers and students on developing language knowledge in the English/literacy classroom*. New York and London, England: Routledge.
- MacDonald, S. P. (2007). The erasure of language. *College Composition and Communication*, 58(4), 585–625.
- Maxwell, M. & Falick, T. (1992). Cohesion and quality in deaf and hearing children's written English. *Sign Language Studies*, 345–372.
- Micciche, L. R. (2004). Making a case for rhetorical grammar. *College Composition and Communication*, 55(4), 716–737.
- Milton, J. & Tsang, E. S. C. (1993). A corpus-based study of logical connectors in EFL students' writing: Directions for future research. In R. Pemberton & E. S. C. Tsang (Eds.), *Lexis in studies* (pp. 215–246). Hong Kong: Hong Kong University Press.
- Myers, S. A. (2003). ReMembering the sentence. *College Composition and Communication*, 54(4), 610–628.
- Myhill, D., Jones, S., & Watson, A. (2013). Grammar matters: How teachers' grammatical knowledge impacts on the teaching of writing. *Teaching and Teacher Education*, 36, 77–91. <https://doi.org/10.1016/j.tate.2013.07.005>
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge, England: Cambridge University Press.
- Pecorari, D. (2003). Good and original: Plagiarism and patch writing in academic second-language writing. *Journal of Second Language Writing*, 12, 317–345.
- Pecorari, D. (2013). *Teaching to avoid plagiarism: How to promote good source use*. Maidenhead, UK: Open University Press.
- Pessoa, S. & Mitchell, T. (2019). Preparing student to write in the disciplines. In N. Caplan & A. M. Johns (Eds.), *Changing practices for the L2 writing classroom: Moving beyond the five-paragraph* (pp. 150–177). Ann Arbor, MI: University of Michigan Press.
- Santos, T. (2005). The role of grammar in TESL and composition. In J. Frodesen & C. Holten (Eds.), *The power of context in language teaching and learning* (pp. 153–162). Boston, MA: Heinle.
- Scardamalia, M. & Bereiter, C. (1987). Knowledge telling and knowledge transforming in written composition. In S. Rosenberg (Ed.), *Advances in applied linguistics: Reading, writing and language learning* (pp. 142–175). Cambridge, England: Cambridge University Press.
- Schleppegrell, M. (2004). *The language of schooling: A functional linguistics perspective*. Mahwah, NJ: Lawrence Erlbaum.
- Schleppegrell, M. J. & O'Hallaron, C. L. (2011). Teaching academic language in L2 postsecondary settings. *Annual Review of Applied Linguistics*, 31, 3–18. <https://doi.org/10.1017/S0267190511000067>
- Shi, L. (2008). Textual appropriation and citing behaviors of university undergraduates. *Applied Linguistics*, 31(1), 1–24.
- Staples, S., Egbert, J., Biber, D., & Gray, B. (2016). Academic writing development at the university level: Phrasal and clausal complexity across level of study, discipline and genre. *Written Communication*, 33(2), 149–183. <https://doi.org/10.1177/0741088316631527>
- Stapleton, P. (2002). Critiquing voice as a viable pedagogical tool in L2 writing: Returning the spotlight to ideas. *Journal of Second Language Writing*, 11, 177–190.
- Storch, N. (2012). Incorporation of source material: The effect of instruction. *TESOL in Context*, 22(1), 38–55.
- Tardy, C. (2009). *Building genre knowledge*. West Lafayette, IN: Parlor Press.
- Tardy, C. (2016). Conceptions of EAP. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 56–68). Oxford, England: Routledge.

- Thompson, G. & Yiyun, Y. (1991). Evaluation in the reporting verbs used in academic papers. *Applied Linguistics*, 12(4), 365–382.
- Ventola, E. (1994). From syntax to test: Problems in producing scientific abstracts in L2. In S. Cmejrkova & F. Sticha (Eds.), *The syntax of sentence and text: A Festschrift for Frantisek Danes* (pp. 283–306). Amsterdam, Netherlands: John Benjamins.
- Wette, R. (2017). L2 undergraduate students learning to write using sources: A trajectory of skill development. In J. Bitchener, N. Storch, & R. Wette (Eds.), *Teaching writing for academic purposes to multilingual students* (pp. 99–112). New York: Routledge.
- Witte, S. P. & Faigley, L. (1981). Cohesion, coherence, and writing quality. *College Composition and Communication*, 32(2), 189–204. <https://doi.org/70.185.139.122>
- Yamada, K. (2003). What prevents ESL/EFL plagiarism?: Analyses of 10 North-American college websites. *System*, 3, 247–258.
- Yeung, L. (2009). Use and misses of ‘besides’: A corpus study comparing native speakers’ and learners’ English. *System*, 37, 330–342.
- Zamel, V. (1983). The composing processes of advanced ESL students: Six case studies. *TESOL Quarterly*, 17(2), 165–188.
- Zhang, M. (2000). Cohesive features in the expository writing of undergraduates in two Chinese universities. *Regional English Language Centre Journal*, 31, 61–95.

The Grammar Choices that Matter in Academic Writing

Nigel A. Caplan

Introduction

Grammar is a word that scares away many teachers and students of second languages, perhaps because of its association with charts, drills, memorization, and above all red-inked corrections of errors. Historically, the role of grammar teaching, learning, and corrective feedback has swung between extremes of exclusive focus and rigorous exclusion, at least in theory if not always in practice. However, the pedagogical view of grammar as structures to be learned and reproduced stands in contrast with the reality of grammar as the choices that language users make in order to construe meanings in context. This chapter explores a functional approach to the teaching and learning of grammar, or more precisely, lexicogrammar, the intersection between vocabulary and grammatical form in the service of enacting functions through written and spoken texts. From this perspective, each selection of a word, phrase, verb tense, article, connector, clause, and so on, is meaningful because it is a *choice* within a system, where other choices would have constructed other meanings. To borrow Eggins's (2005) metaphor, a grammatical system works in a similar way to a set of traffic lights, as "sets of meaningful choices or oppositions" (p. 15). Green lights mean go because red and amber lights have different meanings, while purple lights are not a meaningful choice at an intersection. Thus, the modal verb *may* functions as a hedge or stance marker because it is a meaningful choice that is different from using *can*, *will*, or no modal verb at all. Grammar in second-language teaching, from this perspective, is less about rules and correctness than function and meaning.

Functional grammar forms part of a theory of educational linguistics known as Systemic Functional Linguistics, or SFL (Halliday & Matthiessen, 2013). The purpose of linguistic analysis and grammar instruction in SFL is not to reveal and teach the underlying and often unconscious structural rules of a language as used by "native" speakers, as might be seen in the traditional approaches to linguistics that underlie much L2 grammar instruction. Rather, the purpose is to identify ways in which proficient users of the language make choices that allow them to control their meanings in particular contexts. For example, in the literature review section of a research paper, article, or chapter, writers typically choose key technical language from the field, indicate agreement and disagreement or a neutral stance using reporting verbs (*state*, *argue*, *show*, *claim*, etc.), and establish cohesion with connectives (*in contrast*, *more recently*, etc.) and categorizing or enumerative nouns (*an alternative hypothesis*, *the second theory*, etc.). Learning grammar, therefore, not only entails learning new forms and increasing accuracy—although these are important, too—but also expanding the learner's ability to use the target language in a growing range of registers and genres (Schleppegrell, 2004). After all, learning a language is much more than studying the chapters in a grammar textbook: it is developing

the capacities to exchange information, express ideas, persuade others, create new worlds, and participate in new communities.

This chapter focuses on one application of SFL: enabling multilingual students to write effectively in academic contexts, particularly in higher education. As such, this contribution falls within the domain of second-language writing (Matsuda et al., 2006; Silva, 1997; Tardy & Whittig, 2017), a field of inquiry and practice concerned with a wide range of issues that include university writing. However, the “language” part of second-language writing has sometimes been eclipsed, especially when L2 writing intersects with (L1) composition and rhetoric (Polio, 2019). Reinstating language at the heart of L2 writing in higher education does not have to entail heavy use of the red pen: it can also “demystify” writing assignments and broaden access for multilingual writers (Caplan, 2019c).

The Functional Approach to Academic L2 Literacy

At the heart of the functional approach to grammar is Halliday’s (1993) insight that every clause creates three levels of meaning simultaneously. Schleppegrell (2004) provides a clear explanation: “A functional linguistic analysis ... demonstrates how each clause presents experience and enacts a social relationship, at the same time that it links with a previous clause and builds up information that is then carried forward in subsequent clauses” (p. 3).

In an SFL analysis, the three types of meaning are experiential meanings, which constitute the *field* of the text (the content, ideas, or experiences and the logico-semantic relations between them); interpersonal meanings, which constitute its *tenor* (the relationship between the reader and writer); and textual meanings, which constitute the *mode* (the organization of information, cohesiveness, and unfolding of the text). The three levels of meaning are interconnected but can be manipulated independently. For example:

- (1) There are three levels of meaning.
- (2) There may be three levels of meaning.
- (3) Halliday identified three levels of meaning.
- (4) Three levels of meaning have been identified.

At first glance, all four sentences communicate a similar meaning. However, Sentences 3 and 4 differ from Sentences 1 and 2 at the experiential level: Sentence 3 introduces a new participant (Halliday), and both Sentences 3 and 4 indicate that *someone* identified this idea, whereas the first two sentences merely posit its existence. Sentence 2 differs from the others at the interpersonal level by distancing the reader from the claim through the modal verb *may*. Sentence 4 is different at the textual level because it moves *three levels of meaning* into the subject (or, technically Theme) position through the choice of a passive verb, which itself changes the experiential meaning by hiding the agent (Halliday, 1993).

Importantly, all these sentences are grammatically correct from a syntactic perspective, but they are not interchangeable. In addition to learning how to correctly deploy the grammar (linking verbs, modal verbs, passive voice), English learners also need to develop the awareness of when, why, and how to choose among the various options in order to write effectively in different situations. The ways that context influences language are encapsulated in the term *register*, which in SFL refers to a particular combination of field, tenor, and mode. For instance, most readers will recognize the difference in register and use between Sentences 5 and 6 even though they ostensibly describe the same meal:

- (5) I’ll have a burger and fries.
- (6) The juicy gourmet beef patty was served on a lightly toasted brioche bun alongside a generous order of sautéed potatoes.

Sentence 5 is written in the register one might use to order food, while Sentence 6 is more typical of a rather elevated restaurant review. Texts produced in response to a recurring rhetorical situation using language from the same register comprise *genres*, such as newspaper restaurant reviews, fast-food service encounters, shopping lists, and empirical research papers (Martin, 2009). Therefore, learning to write in an unfamiliar genre (or in a familiar genre in a new language) must include a focus on the register choices of field, tenor, and mode that enable texts to meet their goals.

In the context of academic writing, SFL analyses typically begin with the clause (Coffin et al., 2009). The writer's choices are analyzed for the use of the two experiential metafunctions, the ideational (the Participants, Processes, and Circumstances; that is, people/things, actions/states, times/ places) and the logico-semantic (conjunctions and other indications of relationships between concepts such as *the cause of* or *lead to*). Interpersonal functions are considered, such as hedging and boosting, declarative or interrogative sentences, or personal pronouns. At the textual level, the focus is on cohesive devices used to organize information through the text, such as the patterns of old and new information, use of passive voice, or connectors such as *therefore* or *in addition* (Coffin et al., 2009; Egging, 2005). Since "everything has to be described before everything else" (Halliday & Matthiessen, 2013, p. 62), analyses are often intertwined, with different aspects of the text salient at different times.

From this perspective, the purpose of language instruction in academic writing is to expose students to the linguistic resources of field, tenor, and mode that proficient writers use in different academic genres and scaffold them towards independent control of a broadening linguistic repertoire. This knowledge does not develop automatically or unconsciously, particular for English learners (Schleppegrell, 2004). Consequently, language choices are implicated in every stage of learning and cannot be deferred to the editing stage of writing.

Educational linguists working within the SFL framework have developed an approach to genre-based writing instruction in which grammar is embedded as meaning-making potential. Rather than visualizing writing as a process of linear steps from planning to writing to revising, editing, and publishing, with grammar addressed mostly at the editing stage, genre-based writing was presented in the 1980s and 1990s to teachers in New South Wales, Australia through the Teaching/Learning Cycle, or TLC (Veel, 2008). Part of the goal of this "Write It Right" school literacy program was to rehabilitate grammar in the curriculum since its absence was especially harmful to English learners and indigenous students. The curriculum "macro-genre" that was designed through this project was first made widely available outside Australia through Rothery's (1996) work with two second-grade teachers in a "disadvantaged" elementary school in Sydney. The model of the TLC designed by Rothery and colleagues (Derewianka, 1991; Feez, 1998) at the University of Sydney had four components: Building Field, Modeling or Deconstruction, Joint Construction, and Independent Construction (Gibbons, 2015, p. 110). Martin's (2009) well-known revision positions "Building Field" as surrounding all stages of the cycle, such that students are posited to be learning about the content of their writing assignments throughout the process, rather than as a precursor to writing (Veel, 2008).

The controlling principle of the TLC is "guidance through interaction in the context of shared experience" (Martin, 2009, p. 15). In practice, this leads to a highly scaffolded method of teaching writing. The structural and linguistic choices that construe a genre are made explicit to learners through analysis of sample texts (Deconstruction). Then, teachers and students together compose a new text in the target genre (Joint Construction). This step often takes place in a whole-class setting: the teacher invites students to suggest phrases and sentences for a new text in the target genre. Acting as both scribe and guide, the teacher prompts students about the stages of the genre, recasts language in an appropriate register, and invites discussion of competing choices, resulting in an apprenticeship that reveals genre-specific rhetorical and linguistic choices. Only then do students write their own texts (Independent Construction). The TLC has been successfully implemented in elementary

and secondary schools, especially in Australia (Feez, 1998; Humphrey & Macnaught, 2016; Rose & Martin, 2012; Rothery, 1996) but also more recently in North America (Brisk & Zisselberger, 2010; de Oliveira & Iddings, 2014; Gebhard, 2019; Walsh Marr, 2019) and in universities around the world (Dreyfus et al., 2015; Pessoa et al., 2017; Yasuda, 2017).

Genre-based writing instruction is an antidote to a number of ineffective approaches to L2 literacy. It is *explicit* because the ability to write high-stakes genres will not develop “by magic” by allowing students to write using only the linguistic and rhetorical forms with which they are already familiar, as in expressivist theories of composition (Halliday & Hasan, 2006, p. 24). It is *specific* because generalized approaches to writing, such as the five-paragraph essay, fail to teach students how to respond to the context, audience, and purpose of the wide range of writing situations, both conventional and idiosyncratic, that they may encounter (Caplan & Johns, 2019). And it is *language-focused* because writing in a second language cannot be separated from learning the language (Polio, 2019).

Teaching the Choices that Matter in Academic Writing

The genre-based writing pedagogy enacted through the Teaching/Learning Cycle presents a solution to the artificial separation of language and writing sometimes built into ESL textbooks and curricula. There, grammar is often relegated to an appendix, separated into a demarcated “ESL” section, or reduced to lists of connecting phrases, reporting verbs, and hedging devices (Polio, 2019). At the curricular level, grammar is sometimes siloed into a different course from writing or taught as structures that bear little relation to the writing assignments. From a functional perspective, however, the ways that writers develop ideas, create cohesion, structure their texts, adopt a stance, make an argument, explain phenomena, and cite sources require control of different systems of language. In other words, grammar and vocabulary are not aspects of writing alongside content and organization: language is embedded in every decision writers make about a text. Thus, teaching and learning writing means teaching and learning grammar. And learning to write in a new genre means learning the types of language and meaning that fulfil the purpose of that genre (Schleppegrell, 2004).

The question, therefore, is not *whether* to teach grammar in the L2 writing classroom but *which* grammar to teach. As Hinkel (2002) found, the grammar selected for focus in many L2 books and curricula sometimes gives students misleading ideas about academic writing. For instance, while connectors and conjunctions are frequently taught, proficient writers use them sparingly and only when there is a marked change in direction in the text. In other situations, they may choose another cohesive technique such as repetition, substitution, elision, enumerative nouns, or nominalization (Halliday & Hasan, 1976; Hinkel, 2002; Liardét, 2016). Meanwhile, almost all ESL grammar textbooks begin with lengthy treatments of verb tenses, even though academic writers in English will only very rarely need more than three: present simple, present perfect, past simple (Caplan, 2019a). What is often missing is the connection between form and meaning: how language *functions* to create meanings in academic genres.

Is There a General Academic Register?

Certain lexicogrammatical choices appear to be consistently more frequent in academic writing than in other domains of use, such as conversational English, newspaper articles, or fiction. Coxhead’s (2000) well-known Academic Word List (AWL), for example, includes 560 word families that cover around 10% of the words in her original corpus of published writing from the 1990s. AWL words are found across multiple disciplines, and their presence is a fairly reliable indication that the text is aimed at an academic audience. It is less clear, however, whether novice L2 writers benefit from using words that are typical of published academics, especially as undergraduate students in particular are asked to write in very different genres from their professors (Melzer, 2014). Research has also cast

doubt on the return on the learner's investment of time in learning the AWL since the words, while admittedly more common in academic writing than elsewhere, are still infrequent overall and may have very different meanings in different disciplines (Hyland & Tse, 2007). Therefore, the presence or absence of "academic" vocabulary, defined broadly as the AWL or other similar lists, is probably not a strong measure of a student's preparation for university study nor of the effectiveness of their writing.

At the grammatical level, corpus research into student and professional academic writing has revealed patterns that appear to define an academic register. Overall, academic writing uses fewer verbs and more nouns, which themselves tend to be highly modified to form long noun phrases (Biber & Gray, 2016). A related finding is that academic writers use fewer finite clauses, preferring reduced clauses (like this one) and prepositional phrases (Biber, 1992; Staples et al., 2016). Researchers have also noted that L2 students' written language tends to evolve towards academic norms in English. For example, as students become more proficient, they use fewer coordinating conjunctions and more subordinate clauses, which then decrease in favor of more "packed" simple sentences, with the exception of relative clauses, which remain frequent (Biber et al., 2011; Crossley & McNamara, 2014; Lu, 2011).

From this body of research, it is possible to identify a grammatical curriculum for academic writing in English, which would include a focus on:

- reporting verbs, such as *show, claim, state* (Hyland, 1999; Liardét & Black, 2019)
- linking verbs, such as *be, consist, include*
- passive voice (Biber & Gray, 2016)
- relative (adjective) clauses, full and reduced (Lu, 2011)
- modal verbs, adverbs of certainty and doubt, quantifiers, conditionals, comparatives, and other forms of hedging and boosting (Hyland, 1998; Kwon, Staples, et al., 2018)
- nominalization (Liardét, 2016; Walsh Marr, 2019).

Such grammar instruction should, theoretically, provide a solid foundation for a broad range of academic writing. Seen from the perspective of large corpus studies that intentionally cross disciplines or draw on writing from general education courses such as first-year writing, an academic register emerges that is "synoptic" rather than "dynamic" (Biber & Gray, 2016), that is, dominated by nouns and phrases rather than verbs and clauses. A synoptic style makes sense functionally: academic writing tends to create "non-congruent" meanings (Halliday, 1999) in which actions and processes (typically represented by verbs in everyday language) are encoded as nouns (for instance *refract* becomes *refraction*) so that they can become subjects of sentences and objects of study, a phenomenon which appears to have spread from the earliest days of scientific writing in English (Halliday & Martin, 1993).

The SFL approach represents a significant shift in the way that grammar is presented for academic writing. Instead of expecting students to use certain forms—impersonal structures (*it is possible that*), reporting verbs, enumerative nouns (*approach, solution, method*), passive voice, or modal verbs—just because they are typical of academic registers, lexicogrammatical patterns can be presented as effective ways that have evolved to make particular types of meaning that are important in specific genres and disciplines. A good example of this approach is teaching grammatical metaphor (nominalization and other types of noncongruent language) as a strategy for paraphrasing rather than as an end in itself. Walsh Marr (2019) demonstrates how explicit instruction in grammatical metaphors helps L2 undergraduate writers learn how to "pack" and "unpack" source texts in order to fully understand the material and paraphrase it in ways that convey the same meaning and stance but in new syntactic structures.

While the preferences for certain types of vocabulary and grammar seem to hold true when comparing academic writing to conversation or other types of writing, they mask considerable variation among disciplines and even genres within disciplines. For instance, while reporting verbs are indeed frequent in academic writing, social scientists and natural scientists choose different verbs in accordance with the different ways that research is conducted and knowledge is constructed in their fields of study (Hyland, 2004). Biologists and physicists almost never use integral citations (*Hyland found that ...*), and so they have less use for noun clauses (Biber & Gray, 2016; Hyland, 1999). In history, different pedagogical genres (that is, types of writing which are assigned only for the purpose of academic study and demonstrating learning) can be distinguished by the presence or absence of interpersonal linguistic choices which separate an argument from a narrative (Pessoa et al., 2017); for example, do writers explain quotes from their source texts (*this shows that*) and use modal verbs to show that interpretations are contested rather than presenting factual explanations (*may have influenced* versus *influenced*)? Even syntactic forms that are often overlooked in grammar textbooks such as prepositional phrases and adverbs (known collectively as Circumstances in SFL) are used in different ways in different disciplines, genres, and even stages within genres (Walsh Marr & Martin, 2021). In physics and chemistry lab reports, for example, Walsh Marr and Martin found many Circumstances in the procedures section to describe location, extent, manner, role, and condition but much fewer in the observations. Meanwhile, in political science, Circumstances express time (*on February 13, 2008*), place (*in the House of Commons*), means (*with his government's first official act*), and manner (*in guarded language*) as well as more complex meanings such as representation (*on behalf of*) and viewpoint (*from the point of view of an historian*). Making these choices and resources available to L2 learners enables them to understand how writers construct meaning in complex academic texts and to write more effectively.

In other words, it is not enough to choose the types of grammar that are broadly found in academic writing, although this is a good starting point: student writers also need to recognize which lexicogrammatical choices correspond to the actions they are expected to take in particular tasks in order to accomplish the rhetorical purpose of the target genre in its home discipline. Therefore, to be effective, the teaching of grammar and vocabulary should be embedded in genre-based writing instruction and not presented as lists of words to include or structures to attempt.

Analyzing the Language Needs of Academic Genres

One of the myths surrounding academic writing is that its language is needlessly obscure and deliberately obfuscating (Pinker, 2014). Critics delight in sharing supposedly impenetrable sentences from academic journals and monographs, wondering aloud—or at least on social media—how anyone is expected to read such turgid prose. The parody Twitter account Chaucer Doth Tweet responded to a writer and radio presenter who had posted a supposedly unreadable passage of literacy criticism (“I know, academic writing: fish in a barrel,” Andersen, 2021) thus:

Attacks on academique writinge are so often just the fallacye that advauncid researche yn the humanities doth not deserve a specialized vocabularye – as yf discussinge the complexities of societyes, cultures, and historyes ys onlye valid yf writ yn the style of an NYT column.

[Attacks on academic writing are so often just the fallacy than advanced research in the humanities does not deserve a specialized vocabulary – as if discussing the complexities of societies, cultures, and histories is only valid if written in the style of a *New York Times* column.]

(*Chaucer Doth Tweet*, 2021)

The key word here is “specialized.” Each discipline has developed genres and registers that allow users to create and disseminate knowledge in ways that fit the epistemologies of those fields (Halliday & Martin, 1993). Or, to put it more in the “style of an NYT column,” scientists write like scientists in order to do science, while philosophers write like philosophers in order to do philosophy. The challenge for student writers, especially “novice” writers and L2 or multilingual students (Johns, 2019), is to determine the level of specialization that is required for their assigned genres.

One tool that has been developed using SFL to analyze the language of academic genres is the 3×3 matrix, a heuristic that is valuable for designing assignments, creating assessment rubrics, and empowering students to understand the language they need for their academic writing tasks (Humphrey, 2013; Humphrey et al., 2010; Humphrey & Macnaught, 2016). The matrix is “a framework for describing key linguistic resources needed to construct texts across academic disciplines” (Humphrey et al., 2010, p. 186). The rows represent SFL’s metafunctions, the three types of meaning that language creates: the ideational (the field of experience), the interpersonal (the tenor of the text), and the textual (the mode of writing). The columns apply the metafunctions from the global to the local level, that is to the entire text, to the paragraph, and to the sentence.

The 3×3 is a powerful tool because it can be used for two purposes: to deconstruct texts in a given genre in order to recognize the “family resemblances” (Swales, 1990) and the degree of variation or innovation they tolerate (Tardy, 2016); and to understand whether, how, and why a particular student text is effective or not (Humphrey & Macnaught, 2016; Mitchell et al., 2021). In different genres, different cells in the matrix will be highlighted. For example, in much undergraduate writing, the student first needs to understand the purpose of the assignment: are they being asked to argue something, describe something, or demonstrate knowledge of something? These questions pertain to the tenor of the whole text, and a mistake here can cause students to write an argument where an explanation was expected, or a narrative where the professor wanted an argument (Caplan, 2019b; Pessoa et al., 2017). In a library research paper, the student may need to start with the field of the text, asking what major sections they need to write and what types of sources and evidence will be expected and permitted. Finally, in the most common form of undergraduate student writing, the short answer or “ID” question (Melzer, 2014), the focus should be at the paragraph level and on the ideational (specifically logico-semantic) function of choosing the right logical pattern of development (definition, causal explanation, taxonomy, process, etc.).

It is important to stress that grammar in the 3×3 is not relegated to a single column (the sentence), as is often the case on writing rubrics, since lexicogrammar operates both at the clausal and discourse-semantic levels. In other words, grammar is more than sentence structure and accuracy: it encompasses all the resources that build paragraphs and texts. For example, the text-level analysis may reveal that an individual assignment requires phases of description, analysis, and argument (Pessoa & Mitchell, 2019). Therefore, the choice of verbs, hedging, boosting, and even cohesive techniques will vary as the writer moves through these phases. Similarly, genres that create coherence through predicting topics and explicit signposting require the use of synonyms, substitution, repetition, or nominalization to form lexical chains at the sentence level that guide the reader through the text. Meanwhile press releases conventionally follow an “inverted pyramid” organization that does not require as much explicit signposting: headline, main idea, key details (who, what, where, when), quotation, more details, more quotations, link to the study, and contact information. There are few logical connectors in press releases, but a lot of use of definite reference to achieve cohesion (*the technology, the paper, one of the authors*; see Caplan & Johns, 2022, Chapter 4).

An adaptation of the 3×3 matrix is shown in Figure 33.1 in which each cell contains questions that teachers, students, or course designers might ask about the three metafunctions at each level of the text in order to understand how language works throughout the text (Caplan, 2019b). Not all questions are equally pertinent to every genre, so some selection is necessary if using this heuristic with students. For instance, Humphrey and Macnaught (2016) identified 10 “key linguistic patterns”

Function/ Level	1. Whole text	2. Paragraph/Phase	3. Sentence
A. Language used to express and develop ideas (ideational)	(A1) What are the sections of a thorough response? What kind of sources and evidence are used/allowed?	(A2) What patterns of information are typical in paragraphs? How are related topics grouped in the text? How is information developed and expanded?	(A3) How much technical vocabulary is used? What kinds of nouns are used? Are they abstract or concrete? Do they refer to people, things, or ideas? How and why are nouns modified and expanded? Do verbs describe actions, report speech and feelings, and/or connect ideas? What verb tenses are appropriate and why? How are prepositional phrases and adverbs used (e.g. to indicate time, place, manner, or frequency)? What kinds of conjunctions and connectors are used and why?
B. Language for interaction and engagement (interpersonal)	(B1) What is the purpose of the text (to report on, instruct about, argue that, or persuade to, etc.)? Are claims and evidence presented as factual or contested?	(B2) Does each section require an objective or evaluative stance? How are examples and sources used? Does the writer evaluate claims and evidence? Are external sources cited? What function do they serve in the text?	(B3) How do writers express confidence? <ul style="list-style-type: none"> • Modal verbs (<i>can, may, must, should ...</i>) • Adverbs (<i>particularly, somewhat</i>) (How) do writers indicate their commitment to the sources? <ul style="list-style-type: none"> • Neutral attributions (<i>according to ...</i>)

Figure 33.1 The 3 × 3 matrix

Source: Adapted from Caplan (2019a)

	Does the text make an argument or overarching claim?		<ul style="list-style-type: none"> • Reporting verbs (<i>claim, argue, prove, contend</i>) • Integral or nonintegral citations or footnotes <p>How do writers show opinion, evaluation, and judgement?</p> <p>When and why do writers choose first, second, or third person pronouns?</p>
C. Language that organizes and structures (textual)	(C1) How is the organization of the text signaled to readers (e.g. predicting, signposting, subheadings)?	(C2) How are the paragraphs organized and connected to each other? What other cohesive devices are used within and across paragraphs? How are the paragraphs connected to the focus, thesis, or purpose of the text (e.g., topic sentences)?	(C3) Are sentences generally organized in an old-new pattern? Do writers use nominalization to package and connect information? Is the passive voice used to organize and connect information? Are lexical chains used to create cohesion?

Figure 33.1 (Continued)

(p. 800) in middle-school students’ argumentative expositions for a disciplinary English class. These included concessive clauses, evaluative expressions, and abstract nouns to track ideas, and causal and contrastive connectors. At the paragraph level, these language patterns enabled students to expand ideas as logical sequences, support and rebut claims, and create “packed topic sentences” that were unpacked in subsequent sentences. Together, the paragraphs formed texts which developed an analytical framework, persuaded the audience of the validity of the writer’s position, and explicitly signaled their organization. Crucially, the matrix gave teachers in this study a precise metalanguage with which to scaffold their students as they worked through the Teaching/Learning Cycle. The analysis of the matrix was then turned into a genre-specific rubric that made the expectations of the task visible to students and allowed the teacher and the researchers to document students’ writing growth.

Mitchell and Pessoa (2017) demonstrate a similar process of analysis, teaching, and rubric design in their collaboration with a history professor in an English-medium university in the Middle East. By making the linguistic resources needed to fulfil the requirements of the argumentative history essay visible and comprehensible, the researchers were able to better understand students’ difficulties in their assignments and develop workshops that connected specific language resources to genre expectations. For example, in order to write texts that make an overarching claim, students need to use interpersonal resources that endorse certain positions, open up concessions, and counter them in order to align the reader with the writer’s stance. Furthermore, these patterns need to extend

beyond individual sentences and guide the reader “within and across paragraphs” so that the text as a whole presents a coherent but still tentative historical argument. While these are sophisticated rhetorical and linguistic demands, through language-focused instruction, practice, and feedback, novice students in this course were able to make qualitative improvements in their argumentative writing. The 3×3 matrix also informed the ongoing collaboration between the writing specialists and the content specialist that led to a new rubric and teaching materials that made the genre more accessible to novice students.

Another example of this approach by the same research team shows how language can be infused across a task and rubric to make them both genre-specific and overcome a specific problem with the task, a case study assignment in an advanced Information Systems course: “many students tended to mostly just describe the case or reproduce accepted disciplinary knowledge, rather than applying disciplinary knowledge to analyze and evaluate the case” (Mitchell et al., 2021, p. 120). Once more, the SFL lens reveals that the students’ rhetorical difficulty—that is, understanding how to analyze rather than describe a company’s situation—can be in part remedied through contextualized grammar instruction that shows how the language of analysis differs from the language of description (see Humphrey & Economou, 2015, for a more detailed discussion of description, analysis, and evaluation). For example, Mitchell and colleagues directed students to refer to the analytical framework using keywords; to use interpersonal resources to evaluate aspects of the situation negatively; to use modal verbs to argue for recommendations; and to use noun phrases and nominalizations to express abstract concepts about the discipline in order to name parts of the framework. The 3×3 matrix is used in this study to contrast high-graded and low-graded student papers, leading to an explicit and specific rubric that connects form and function.

These examples of successful implementation of the 3×3 matrix put language at the heart of writing, where it belongs. They demonstrate that one size does not quite fit all: there are common patterns of language use in academic writing generally, but the aggregate hides the specific meaning and use of those structures in particular genres and disciplines. Advising students to use more or less of any grammatical form may make a text statistically more academic without rendering it a more effective instantiation of a genre or response to a task (Ryshina-Pankova, 2015). As Achugar and Carpenter (2014) found when they used SFL to teach high-school students summary writing in the discipline of history: “What constitutes evidence of development is not just counting the features, but how these bundles of linguistic choices function in a text” (p. 62).

Conclusions and Future Directions

The approach to grammar in this chapter emphasizes the specificity of academic writing and highlights the danger of making sweeping pronouncements about how students should and should not write. In fact, attempts to write monolithic definitions of academic writing and the grammar with which it is constructed can be easily disproved. Even apparently non-controversial advice turns out to be problematic: countless teachers and textbooks have advised students to avoid the word *thing* as too vague to be useful. However, Granger and Larsson’s (2021) multi-word analysis of a large corpus of academic journals reveals a number of common phrases involving *thing* with clear discourse functions, including “no such thing” or “right thing to do” to express stance and evaluation or “other things being equal” to express concession. Such corpus studies helpfully broaden the lens with which academic writing is viewed by defining language not as vocabulary *or* grammar but as lexicogrammar and by connecting form with function. As Granger and Larsson also note, the drive to identify an academic vocabulary has caused teachers, researchers, and materials writers to overlook the role that “core” or “general” vocabulary plays even in academic registers.

A related question which has only recently been addressed is why student writing should look like professional academic writing in the first place. This is of particular importance to EAP teachers

since they often teach in programs that ostensibly prepare students for the writing demands of university degrees and thus are called upon to evaluate whether writing is suitably “academic.” The presumption that there is a single academic register which can be evaluated through standardized, often five-paragraph, essays devoid of context and genre needs to be challenged. As has been seen, the presence of features of professional academic writing, or the lack thereof, is not necessarily a strong indicator of the effectiveness of the writing. Instead, more needs to be known about the language use of successful *student* writing, without confusing “successful” for “native speaker.” The Corpus and Repository of Writing (CROW) is carrying out promising research in this area (e.g., Kwon, Partridge et al., 2018; Kwon, Staples et al., 2018).

Above all, the focus of teaching and learning in academic writing needs to shift from the general to the specific. As Wardle (2017) argues, “there is no such thing as writing in general. Writing is always in particular” (p. 30). This entails rejecting the uncritical use of “essay” and “research paper” assignments in favor of writing tasks with an identifiable genre, audience, situation, and role for the student writer (Caplan & Johns, 2019). It is through genre that grammar can be analyzed and selected for instruction, practice, and assessment using tools such as the 3 × 3 matrix.

This chapter also raises important implications for teacher preparation and professional development. Not only does the teaching of L2 writing need to be a requirement for all MA TESOL programs and ESL certification programs, but the artificial division between writing and grammar courses, or literacy and structure of English, needs to be dismantled so that future ESL and EAP teachers are trained in analyzing the lexicogrammar of different genres and can scaffold students up to the challenges of academic genres.

Finally, a focus on academic grammar in the context of academic genres necessitates close collaboration between ESL/EAP and disciplinary faculty. As Mitchell et al. (2021) have shown, interdisciplinary collaboration between L2 writing specialists and subject-area faculty is essential for fully understanding the language needs of academic and professional genres. Furthermore, by working with faculty across the university, the EAP practitioner’s expertise is valued rather than confined to a service role (Ding & Bruce, 2017). The results benefit all participants: EAP teachers can develop materials better suited to students’ needs; students can be scaffolded for success in complex novel genres; and disciplinary faculty can revise their assignments and rubrics to make their expectations clearer and promote student success.

References

- Achugar, M. & Carpenter, B. D. (2014). Tracking movement toward academic language in multilingual classrooms. *Journal of English for Academic Purposes*, 14, 60–71. <https://doi.org/10.1016/j.jeap.2013.12.002>
- Andersen, K. [@KBAndersen]. (2021, March 20). *I know, academic writing: fish in a barrel. But imagine a student eagerly signing up for a course on Middlemarch* [Tweet]. Twitter. <https://twitter.com/KBAndersen/status/1373277502735585284>
- Biber, D. (1992). On the complexity of discourse complexity: A multidimensional analysis. *Discourse Processes*, 15(2), 133–163. <https://doi.org/10.1080/01638539209544806>
- Biber, D. & Gray, B. (2016). *Grammatical complexity in academic English: Linguistic change in writing*. Cambridge University Press.
- Biber, D., Gray, B., & Poonpon, K. (2011). Should we use characteristics of conversation to measure grammatical complexity in L2 writing development? *TESOL Quarterly*, 45, 5–35. <https://doi.org/10.5054/tq.2011.244483>
- Brisk, M. E. & Zisselberger, M. (2010). “We’ve let them in on the secret”: Using SFL theory to improve the teaching of writing to bilingual learners. In T. Lucas (Ed.), *Teacher preparation for linguistically diverse classrooms: A resource for teacher educators* (pp. 111–126). Routledge.
- Caplan, N. A. (2019a). *Grammar choices for graduate and professional writers* (2nd ed.). University of Michigan Press.
- Caplan, N. A. (2019b). Asking the right questions: Demystifying writing assignments across the disciplines. *Journal of English for Academic Purposes*, 41, 100776. <https://doi.org/10.1016/j.jeap.2019.100776>

- Caplan, N. A. (2019c). Learning through language: A response to Polio, “Keeping the language in second language writing classes”. *Journal of Second Language Writing*, 46, 100677. <https://doi.org/10.1016/j.jslw.2019.100677>
- Caplan, N. A. & Johns, A. M. (Eds.) (2019). *Changing practices for the L2 writing classroom: Moving beyond the five-paragraph essay*. University of Michigan Press.
- Caplan, N. A. & Johns, A. M. (2022). *Essential actions for academic writing: A genre-based approach*. University of Michigan Press.
- Chaucer Doth Tweet [@LeVostreGC]. (2021, March 21). *Attackes on academie writinge are so often just the fallacye that advauncid recherche yn the humanities doth not deserve* [Tweet]. Twitter. <https://twitter.com/LeVostreGC/status/1373715550552027136>
- Coffin, C., Donohue, J., & North, S. (2009). *Exploring English grammar: From formal to functional*. Routledge.
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34, 213–238.
- Crossley, S. A. & McNamara, D. S. (2014). Does writing development equal writing quality? A computational investigation of syntactic complexity in L2 learners. *Journal of Second Language Writing*, 26, 66–79. <https://doi.org/10.1016/j.jslw.2014.09.006>
- de Oliveira, L. C. & Iddings, J. (Eds.) (2014). *Genre pedagogy across the curriculum: Theory and application in U.S. classrooms and contexts*. Equinox.
- Derewianka, B. (1991). *Exploring how texts work*. Primary English Teaching Association.
- Ding, A. & Bruce, I. (2017). *The English for Academic Purposes practitioner: Operating on the edge of academia*. Palgrave Macmillan.
- Dreyfus, S. J., Humphrey, S., Mahboob, A., & Martin, J. R. (2015). *Genre pedagogy in higher education: The SLATE project*. Palgrave Macmillan.
- Eggins, S. (2005). *Introduction to Systemic Functional Linguistics* (2nd ed.) Bloomsbury Academic.
- Feez, S. (1998). *Text-based syllabus design*. National Centre for English Language Teaching and Research.
- Gebhard, M. (2019). *Teaching and researching ELLs' disciplinary literacies: Systemic Functional Linguistics in action in the context of U.S. school reform*. Routledge.
- Gibbons, P. (2015). *Scaffolding language, scaffolding learning: Teaching English language learners in the mainstream classroom* (2nd ed.). Heinemann.
- Granger, S. & Larsson, T. (2021). Is core vocabulary a friend or foe of academic writing? Single-word vs multi-word uses of thing. *Journal of English for Academic Purposes*, 52, 100999. <https://doi.org/10.1016/j.jeap.2021.100999>
- Halliday, M. A. K. (1993). Towards a language-based theory of learning. *Linguistics and Education*, 5(2), 93–116. [https://doi.org/10.1016/0898-5898\(93\)90026-7](https://doi.org/10.1016/0898-5898(93)90026-7)
- Halliday, M. A. K. (1999). *Construing experience through meaning: A language-based approach to cognition*. Cassell.
- Halliday, M. A. K. & Hasan, R. (1976). *Cohesion in English*. Longman.
- Halliday, M. A. K. & Hasan, R. (2006). Language and literacy. In R. Whittaker, A. McCabe, & M. O'Donnell (Eds.), *Language and literacy: Functional approaches* (pp. 15–44). Continuum.
- Halliday, M. A. K. & Martin, J. R. (1993). *Writing science: Literacy and discursive power*. Taylor & Francis.
- Halliday, M. A. K. & Matthiessen, C. (2013). *Halliday's Introduction to Functional Grammar* (4th ed.). Routledge.
- Hinkel, E. (2002). *Second language writers' text: Linguistic and rhetorical features*. Lawrence Erlbaum.
- Humphrey, S. (2013). And the word became text: A 4 x 4 toolkit for scaffolding writing in secondary English. *English in Australia*, 48(1), 46–55.
- Humphrey, S. & Economou, D. (2015). Peeling the onion – A textual model of critical analysis. *Journal of English for Academic Purposes*, 17, 37–50. <https://doi.org/10.1016/j.jeap.2015.01.004>
- Humphrey, S. & Macnaught, L. (2016). Functional language instruction and the writing growth of English language learners in the middle years. *TESOL Quarterly*, 50, 792–816. <https://doi.org/10.1002/tesq.247>
- Humphrey, S., Martin, J. R., Dreyfus, S. J., & Mahboob, A. (2010). The 3x3: Setting up a linguistic toolbox for teaching and assessing academic writing. In A. Mahboob & N. Knight (Eds.), *Applicable linguistics* (pp. 185–199). Continuum.
- Hyland, K. (1998). *Hedging in scientific research articles*. John Benjamins Publishing.
- Hyland, K. (1999). Academic attribution: Citation and the construction of disciplinary knowledge. *Applied Linguistics*, 20, 341–367. <https://doi.org/10.1093/applin/20.3.341>
- Hyland, K. (2004). *Disciplinary discourses: Social interactions in academic writing*. University of Michigan Press.
- Hyland, K. & Tse, P. (2007). Is there an “academic vocabulary”? *TESOL Quarterly*, 41, 235–253. <https://doi.org/10.2307/40264352>
- Johns, A. M. (2019). Writing in the interstices: Assisting novice undergraduates in analyzing authentic writing tasks. In N. A. Caplan & A. M. Johns (Eds.), *Changing practices for the L2 writing classroom: Moving beyond the five-paragraph essay* (pp. 133–149). University of Michigan Press.

- Kwon, M. H., Partridge, R. S., & Staples, S. (2018). Building a local learner corpus: Construction of a first-year ESL writing corpus for research, teaching, mentoring, and collaboration. *International Journal of Learner Corpus Research*, 4, 112–127. <https://doi.org/10.1075/ijlcr.16017.kwo>
- Kwon, M. H., Staples, S., & Partridge, R. S. (2018). Source work in the first-year L2 writing classroom: Undergraduate L2 writers' use of reporting verbs. *Journal of English for Academic Purposes*, 34, 86–96. <https://doi.org/10.1016/j.jeap.2018.04.001>
- Liardét, C. L. (2016). Nominalization and grammatical metaphor: Elaborating the theory. *English for Specific Purposes*, 44, 16–29. <https://doi.org/10.1016/j.esp.2016.04.004>
- Liardét, C. L. & Black, S. (2019). “So and so” says, states and argues: A corpus-assisted engagement analysis of reporting verbs. *Journal of Second Language Writing*, 44, 37–50. <https://doi.org/10.1016/j.jslw.2019.02.001>
- Lu, X. (2011). A corpus-based evaluation of syntactic complexity measures as indices of college-level ESL writers' language development. *TESOL Quarterly*, 45, 36–62. <https://doi.org/10.5054/tq.2011.240859>
- Martin, J. R. (2009). Genre and language learning: A social semiotic perspective. *Linguistics and Education*, 20(1), 10–21. <https://doi.org/10.1016/j.linged.2009.01.003>
- Matsuda, P. K., Cox, M., Jordan, J., & Ortmeier-Hooper, C. (Eds.) (2006). *Second language writing in the composition classroom: A critical sourcebook*. Bedford/St. Martins.
- Melzer, D. (2014). *Assignments across the curriculum: A national study of college writing*. Utah State University Press.
- Mitchell, T. D. & Pessoa, S. (2017). Scaffolding the writing development of the Argument genre in history: The case of two novice writers. *Journal of English for Academic Purposes*, 30, 26–37. <https://doi.org/10.1016/j.jeap.2017.10.002>
- Mitchell, T. D., Pessoa, S., & Gómez-Laich, M. P. (2021). Know your roles: Alleviating the academic-professional tension in the case analysis genre. *English for Specific Purposes*, 61, 117–131. <https://doi.org/10.1016/j.esp.2020.10.002>
- Pessoa, S. & Mitchell, T. D. (2019). Preparing students to write in the disciplines. In N. A. Caplan & A. M. Johns (Eds.), *Changing practices for the L2 writing classroom: Moving beyond the five-paragraph essay* (pp. 150–177). University of Michigan Press.
- Pessoa, S., Mitchell, T. D., & Miller, R. T. (2017). Emergent arguments: A functional approach to analyzing student challenges with the argument genre. *Journal of Second Language Writing*, 38, 42–55. <https://doi.org/10.1016/j.jslw.2017.10.013>
- Pinker, S. (2014, September 26). Why academics stink at writing. *The Chronicle of Higher Education*. www.chronicle.com/article/Why-Academics-Writing/148989
- Polio, C. (2019). Keeping the language in second language writing classes. *Journal of Second Language Writing*, 46, 100675. <https://doi.org/10.1016/j.jslw.2019.100675>
- Rose, D. & Martin, J. R. (2012). *Learning to write, reading to learn: Genre, knowledge and pedagogy in the Sydney School*. Equinox.
- Rothery, J. (1996). Making changes: Developing an educational linguistics. In R. Hasan & G. Williams (Eds.), *Literacy in society* (pp. 86–123). Longman.
- Ryshina-Pankova, M. (2015). A meaning-based approach to the study of complexity in L2 writing: The case of grammatical metaphor. *Journal of Second Language Writing*, 29, 51–63. <https://doi.org/10.1016/j.jslw.2015.06.005>
- Schleppegrell, M. J. (2004). *The language of schooling: A functional linguistics perspective*. Lawrence Erlbaum.
- Silva, T. (1997). On the ethical treatment of ESL writers. *TESOL Quarterly*, 31, 359–363. <http://dx.doi.org/10.2307/3588052>
- Staples, S., Egbert, J., Biber, D., & Gray, B. (2016). Academic writing development at the university level: Phrasal and clausal complexity across level of study, discipline, and genre. *Written Communication*, 33, 149–183. <https://doi.org/10.1177/0741088316631527>
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press.
- Tardy, C. M. (2016). *Beyond convention: Genre innovation in academic writing*. University of Michigan Press.
- Tardy, C. M. & Whittig, E. (2017). On the ethical treatment of EAL writers: An update. *TESOL Quarterly*, 51, 920–930. <https://doi.org/10.1002/tesq.405>
- Veel, R. (2008). The Write it Right project: Linguistic modelling of secondary school and the workplace. In R. Whittaker, M. O'Donnell, & A. McCabe (Eds.), *Language and literacy: Functional approaches* (pp. 66–92). Continuum.
- Walsh Marr, J. M. (2019). Making the mechanics of paraphrasing more explicit through Grammatical Metaphor. *Journal of English for Academic Purposes*, 42, 100783. <https://doi.org/10.1016/j.jeap.2019.100783>
- Walsh Marr, J. M. & Martin, J. L. (2021). Pomp and circumstances: From research, in practice, for students. *Íkala*, 26, 227–242. <https://doi.org/10.17533/udea.ikala.v26n01a03>

- Wardle, E. (2017). You can learn to write in general. In C. E. Ball & D. M. Loewe (Eds.), *Bad ideas about writing* (pp. 30–33). West Virginia University Libraries. <http://textbooks.lib.wvu.edu>
- Yasuda, S. (2017). Toward a framework for linking linguistic knowledge and writing expertise: Interplay between SFL-based genre pedagogy and task-based language teaching. *TESOL Quarterly*, *51*, 576–606. <https://doi.org/10.1002/tesq.383>



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Part VI

Intercultural communication and pragmatics



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Principles of teaching intercultural communication in TESOL

Lixian Jin and Martin Cortazzi

Introduction

This chapter outlines reasons why intercultural communication is important in a global Teaching of English to Speakers of Other Languages (TESOL) and develops the application of principles for teaching intercultural communication (IC). These principles come from two sources. First, from the literature in the field of IC we elaborate one set of principles which contributes to effective outcomes. As listed, these are perhaps unfamiliar to TESOL practitioners although they are widely recognized within IC and they do resonate with some strands of TESOL. In the concept of intercultural competences, we link them to educational values, which are important for longer-term TESOL developments. Second, we elaborate another set of principles derived from within TESOL which we apply to teach intercultural communication. These are similar to principles identified within TESOL literature but they are listed here from our teacher training experience. All principles depend on contexts of application and we emphasize that these will be localized. They will be tailored to local circumstances, institutions, teachers and students. They will be contextualized within cultures: ‘cultures’ here refer to practices and values in international, national, regional and local communities. For illustration, we include example activities for developing intercultural skills and communication in English. These illustrate heuristic principles and problem-solving approaches in which students observe interaction, and engage in the local environment with diverse communities.

To briefly define IC, language skills are used for communication between members of different cultural groups and diverse communities. This communication is intended to be meaningful to achieve mutual understanding in a wide range of professional, academic, business and other contexts. Educationally, intercultural communication is a core element of developing intercultural competence; its overall aim is to improve human relationships across differences in such contexts. Developing IC can thus be seen as part of fundamental human learning. While there are certainly technical-linguistic aspects of learning IC, a long-term approach includes relationship values. In some approaches to TESOL these humane values have a long-standing role, but attending to IC in TESOL gives them a central position.

Language proficiency and IC skills are major means to construct ‘the four pillars of learning’, promoted by UNESCO world-wide: ‘learning to live together, learning to know, learning to do, and learning to be’ (Delors, 1996; UNESCO, 2006). In principle, and over the long-term, IC in

TESOL has these worthwhile learning goals. For ‘living together’, IC contributes to develop respect and mutual trust through intercultural dialogue; it creates space for interactions and experiences. For ‘knowing’, it furthers students’ knowledge of cultural others through interaction with them. For ‘doing’, students interpret information about others, apply knowledge gained through activities and acquire more knowledge and skills; and for to ‘be’, IC leads students to reflect on their social selves and their own cultural identities (UNESCO, 2013).

Most countries are now recognizably multi-cultural, multi-lingual and multi-ethnic. In many communities, IC is a practical reality of everyday living. Thus, for many ESOL learners (those developing English as a second or other language), familiar with such communities, IC relates to their everyday experiences and needs. But globally or locally this situation is usually complex. Members of different cultural communities may be speaking what is superficially the same language (e.g. English as a medium) but commonly they use different ways of expression, linguistically and culturally. This may be apparent if there is a substantial cultural distance involved but participants may overlook how unnoticed nuances and variations can cause communication difficulty. Developing IC promotes mindful attention and focussed reflection. It enhances awareness and deepens knowledge and insights for communication in different contexts (Carbaugh, 2010; McConachy, 2018; Abrams, 2020). IC competencies are an advantage for many professions; they seem a necessity for TESOL professionals.

Intercultural communication and global TESOL

The global spread of the uses and variations in English, with ever-increasing numbers of speakers, is one reason for including IC in a TESOL programme. World-wide, a majority of these English users employ the language as their second or other language. Naturally, they use a wide variety of cultural communication resources. Recognizing this marks an evolution of classical ideas about the pedagogic connections between language and culture to go beyond selected English-speaking nations with ‘target cultures’ towards a global TESOL, with specific attention to diverse cultural ways of expression in English. The concepts of global ‘Englishes’ (Kirkpatrick, 2012; Jenkins, 2015) and ‘English as a lingua franca’ (Jenkins et al., 2018) highlight the dynamic varieties and multiple uses of English. For example, some TESOL contexts of schools and universities show international varieties among academics, teachers and students when English is used as a medium of instruction. Contexts within local communities often show diverse roles of English adopted by residents and visitors, workforces and participants in given institutions and neighbourhoods. These situations can be investigated by ESOL students through active engagement (Sorrels, 2021). Global English is not simply for distant international or virtual communication; it is immediate interpersonal communication within a local environment, between international students and staff in education, or in workplaces among minority ethnic communities and migrant workers.

A second reason for including IC is an imperative for developing awareness of oneself and others. This has a counterpart of developing mutual respect for linguistic and cultural identities, which is a priority in intercultural education (Huber, 2012; UNESCO, 2006). ESOL learners are implicitly familiar with some other languages and cultures, but are not necessarily explicitly knowledgeable about either their own culture or those of the diversity of English-using communities. Embracing IC extends intercultural learning to support the development of asking questions and extending thinking about relations between language, culture and identity (Baker, 2017). Reflexively, this is designed to overcome ethnocentrism. It can lead to multiple cultural knowledge, insights and reflections about other cultures *and* one’s own cultures and identities (Martin & Nakayama, 2017; Piller, 2017; Abrams, 2020; Byram, 2020; Klyukanov, 2021). Thus, IC in TESOL is intercultural reflexive learning.

A third reason is an educational one: applying intercultural principles in TESOL consolidates good education aimed at developing desirable humane values. This stance views TESOL as more

than language training for immediate utilitarian benefits. It extends this towards a long-term vision of ESOL learners as intercultural learners (Byram, 2008, 2020; Corbett, 2022). IC engages the development of particular qualities, characteristics and dispositions. These are part of 'good' education in personal, social and moral terms. They are not exclusive to IC, and some resonate with much TESOL, but we list them (see Figure 34.1) as commonly mentioned, though scattered, in the IC literature (e.g. Deardorff, 2009; Spencer-Oatey & Franklin, 2009; UNESCO, 2013; Byram, 2020; Jackson, 2020a, b; Sorrels, 2021; Ting-Toomey & Chung, 2021) and we connect them here explicitly to TESOL. These qualities and characteristics are worthwhile for individuals, institutions and ultimately for sustainable human development.

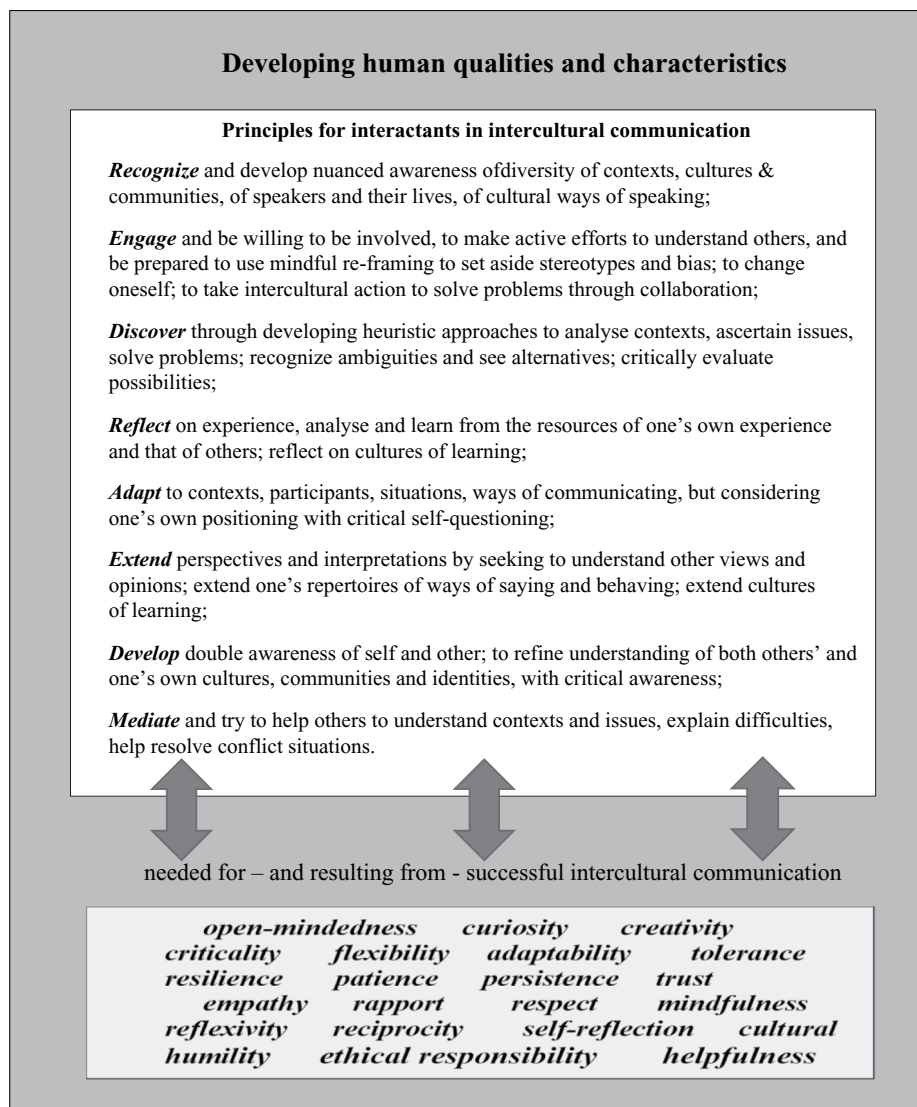


Figure 34.1 Principles for interactants in intercultural communication related to needed human qualities and characteristics

Source: Jin & Cortazzi, for this publication

Teaching IC aims at developing and enhancing appropriate and satisfying communication. Linguistic skills, on their own, are unlikely to be sufficient. Knowledge and understanding of relevant cultures and of the values of their communities is important, together with attitudes like curiosity to ascertain information and open-mindedness to solve problems as a basis for action (Liddicoat & Scarino, 2013; Byram, 2020; Sorrels, 2021). These features of developing IC are not confined to IC, but in IC they emerge as crucially significant. They are combined in the idea of ‘intercultural competencies’. These bring together and coordinate cognitive, affective and behavioural skills and personal characteristics for successful intercultural interaction and collaborative action in different challenging contexts (UNESCO, 2006, 2013; Dearsorff, 2009). This is complicated because these humane qualities like mindfulness, flexibility, adaptability and reflective thinking are among the targets of IC development and the means to achieve improved IC. They are part of human relationships, which in IC are managed across cultures (Spencer-Oatey & Kádár, 2021). For teachers, professionally and personally, no individual knows enough to be expert in all competencies or areas of IC, nor in all relevant cultures and communities. Hence all TESOL professionals are themselves developing and learning IC through applying principles. Over time teachers become models of this learning with principled application to relevant contexts.

Principles of intercultural communication

In TESOL, any principles need to be adapted to varying contexts of practice. This is also a principle of IC: effective and efficient communication is satisfactorily adapted to the context, people and situation in hand. Teaching IC within TESOL has the double adaptation of adjusting the content teaching of relevant knowledge, skills and attitudes in a specific pedagogic context while engaging and preparing learners to adapt communicatively in intercultural contexts. This means encouraging students to be open-minded. Given the variety of TESOL contexts world-wide, it means that there are many ways to develop IC. This variety of IC teaching approaches also stems from the interdisciplinary nature of IC as a field, which can be seen in psychology, sociolinguistics, business and communication studies (e.g. Spencer-Oatey & Franklin, 2009; Jin & Cortazzi, 2017).

ESOL students may use English not only with mother-tongue speakers but also with those using English as a second language, or as a lingua franca. Some interlocutors with students will have highly proficient levels of English skills, but they may not have highly developed intercultural competencies. IC learners need to be prepared to be adaptive and resilient. They need not only to become more highly aware of ‘the other’, as interlocutor; they may also need to learn to solve communication problems, to clear up their own or others’ misunderstandings. They may need to be mediators (Byram, 2008; Ting-Toomey & Dorjee, 2019) to help others develop IC. Students’ IC skills thus include clarifying, simplifying, re-phrasing and interpreting both their own and others’ communication. These are characteristics of helping others to express themselves in English (normally enacted as meta-communication by teachers). This means that teaching IC develops learners’ awareness of diversity and their ability to respond appropriately in different contexts and to help others to respond (Baker, 2017; Rose & Syrbe, 2020).

Many participants in TESOL classes represent linguistic, cultural and social features of diversity, among themselves or in relation to nearby communities. Their intercultural experiences are resources for learning IC. Some levels of IC are implicitly involved in classroom interaction or out-of-class activities related to a neighbourhood. Features of this IC interaction can be brought out by encouraging a critical awareness of classroom communication from an IC standpoint (Zhu, 2019). Students can examine their own classroom contexts and immediate localities in mini-projects using ethnographic ideas to investigate who uses English (and other languages) to whom, when, where, how and why (Saville-Troike, 2003 Kaplan-Weinger & Ullman, 2015). Social and mass media provide many opportunities for students to investigate further diversity, face-to-face or virtually in

electronically-mediated communication (Martin & Nakayama, 2017; Sorrels, 2021; Toomey & Chung, 2021). Other resources of literature, drama, film and video conferencing further extend contexts vicariously. These can be exploited by organizing IC projects and visits designed to support a sense of community in which ESOL learners join others for common activities. Such projects likely include student presentations and reports using observation, interviews, questionnaires and group discussions, related critically to published resources (Byram & Fleming, 1998; Byram et al., 2001; Aldred et al., 2003; Wagner et al., 2018). These activities develop heuristic principles of intercultural discovery and problem-solving. They include: to observe, to be curious and inquire, to become analysts and critical participants of contexts around them and to learn culturally (Carbaugh, 2010; Liddicoat & Scarino, 2013; Piller, 2017; Byram, 2020; Sorrels, 2021).

Using experiences as resources implies the IC principle that participants are willing to learn and to engage in a shared commitment to exchange meaningful communication for reciprocal benefits (Martin & Nakayama, 2017; Ting-Toomey & Chung, 2021). Since IC involves diversity and sometimes misunderstanding, this means such willingness to apply IC knowledge and skills is coupled with patience and tolerance. It involves developing an ethical sense of responsibility for mutual understanding and social action (Sorrels, 2021). Since these are long-term commitments, this implies persistence with enough resilience and dedication to keep going despite difficulties.

Pedagogic approaches in TESOL are usually framed by an educational institution or commercial organization, and by classroom cultures or local cultures of learning. In a reflexive approach, teachers can focus learners' attention on their expectations of how they learn IC. These ways likely include some previously socialized ways of learning which might be dissonant with those of other participants or of teachers (Jin & Cortazzi, 2011, 2013; Cortazzi & Jin, 2013). For example, 'I will learn from studying the textbook and listening to the teacher, but not from talking to classmates because they are at my level and the teacher knows best.' Some previously developed ways of learning can unconsciously filter or impede IC learning activities. TESOL practitioners consider what cultural kinds of learning are valued by students, and how pedagogic approaches for IC may challenge, match or extend these. Introducing a new way of learning may start from ascertaining students' own cultures of learning. When students consciously widen their repertoires of cultural ways of learning, this is intercultural learning.

Developing IC includes appreciating how diverse communities express themselves and understand others. This includes the full range of linguistic means used in different ways of speaking and parallel patterns in writing, sometimes with different meanings: stress and intonation patterns, tone of voice, discourse patterns and intercultural uses of pragmatics (McConachy, 2018; Abrams, 2020). Ultimately, this requires not only making efforts to understand what people say but trying to understand what they are like, how they think and what their cultural beliefs and human values are. This includes coming to see how interlocutors understand us and what we are saying. Reflexively, this means that developing IC implies coming to understand one's self, one's own cultural behaviour and one's own cultural repertoire of ways of speaking and thinking. This is the twofold effort to understand others and one's self. This entails the ability to observe, analyze and reflect on both the messages and those who communicate, including oneself.

There are barriers regarding making this effort to understand. These include interpreting situations through an ethnocentric lens, which essentially means interpreting what is said (and the person saying it) through a mono-cultural framework which is imposed in unwarranted ways, often invoking stereotypes and bias. Overcoming ethnocentric views usually takes time: it can be greatly helped through active listening and mindful reframing. This reframing avoids the too-swift interpretations and suspends judgements while struggling to understand; it notices and considers alternative perspectives (Ting-Toomey & Dorjee, 2019; Ting-Toomey & Chung, 2021). A measure of cultural humility is needed to recognize how a different interpretation from another cultural viewpoint may be more appropriate.

Figure 34.1 summarizes these IC principles and relates them to human qualities and characteristics in an educational view of IC in TESOL. Applying these principles inevitably depends on the context and aims of a given TESOL programme: is IC a major goal, a subsidiary target, an assessed element of a course or a theme now and then, an occasional added-on element? Does IC have the status of a key competence, alongside traditional oral and literacy skills? How far does a TESOL programme envisage IC for students as a future social/occupational goal or to develop humane values through re-considering their own cultures, languages and communication patterns, and identities? Is the TESOL in a programme *including* IC; *integrating* IC; developing TESOL *through* IC; or variously combining these?

Principles of TESOL practice for teaching IC

These IC principles (Figure 34.1) can be linked to TESOL principles (see Figure 34.2). We have used these in teacher training to help teachers design classroom lessons and to adapt, develop and use materials. Our working contexts are those of teaching English as a foreign language, as a second language, for academic purposes, as a medium of instruction and as an additional language (giving migrant children language-supported access to school curricula). These principles are consonant with published TESOL principles (e.g. Paton & Wilkins, 2009; Matsuda, 2012; Brown & Lee, 2015; Helman et al., 2018). However, they differ in that they consist of *continua* or *polarities* in which both poles of a scale are necessary though they will be enacted in different ways at different times in different contexts. In these principles of the concept of ‘context’ are central to both the starting points and outcomes, and to the intervening pedagogic processes: ‘contexts’ embrace linguistic, educational, social and cultural situations of learning and using English.

Sense-making: Meaning – Relevance

In lesson planning, overall significance is given to extend learners’ ability to access and express meaning-making. The search for making sense and communicating meaning drives language learning. However, meaning is generally interpreted in frameworks of relevant contexts, so teachers strive to make meaning relevant to what students already know. In IC, however, a tendency to use what is culturally familiar can lead to wrong interpretations by imposing presumed meanings which may not be the interlocutor’s intended meaning. Therefore, teachers need to extend learners’ frames of relevance. Meaning and relevance complement each other in increasing nuances of extending knowledge, skills and attitudes. To make IC concepts relevant to known or imagined contexts of language use, teachers use strategies for localization.

Notions of relevance in communication may be different in cultural orientations to contexts. An accessible example is ‘high’ and ‘low’ contexts. In a high context, shared knowledge is assumed and much meaning is gathered through clues in a situation so communication can be indirect, and relatively less information is made verbally explicit. In a low context, relatively more information is made verbally explicit, communication is more direct, specific and literal, with less attention placed on gathering meaning from the context since meanings are mainly in the words (Zhu, 2019; Sorrels, 2021; Ting-Toomey & Chung, 2021). To help ESOL learners, these tendencies are easily visualized in diagrams (Lewis, 2008, 2018). These are tendencies which can also be seen within a single culture and not every individual conforms. When speakers depend on different scripts, following high or low contexts in their interaction, misunderstandings can occur: suggestions and hints made on a high context assumption may not be perceived, communication seems vague and ambiguous, while direct messages from a low context perspective may be misinterpreted as impolite, pushy or aggressive. The high–low distinction may be helpful as part of IC repertoires of principles, or critically evaluated. Overall, TESOL teaching strives to balance making meanings relevant and relating what is relevant to new meanings.

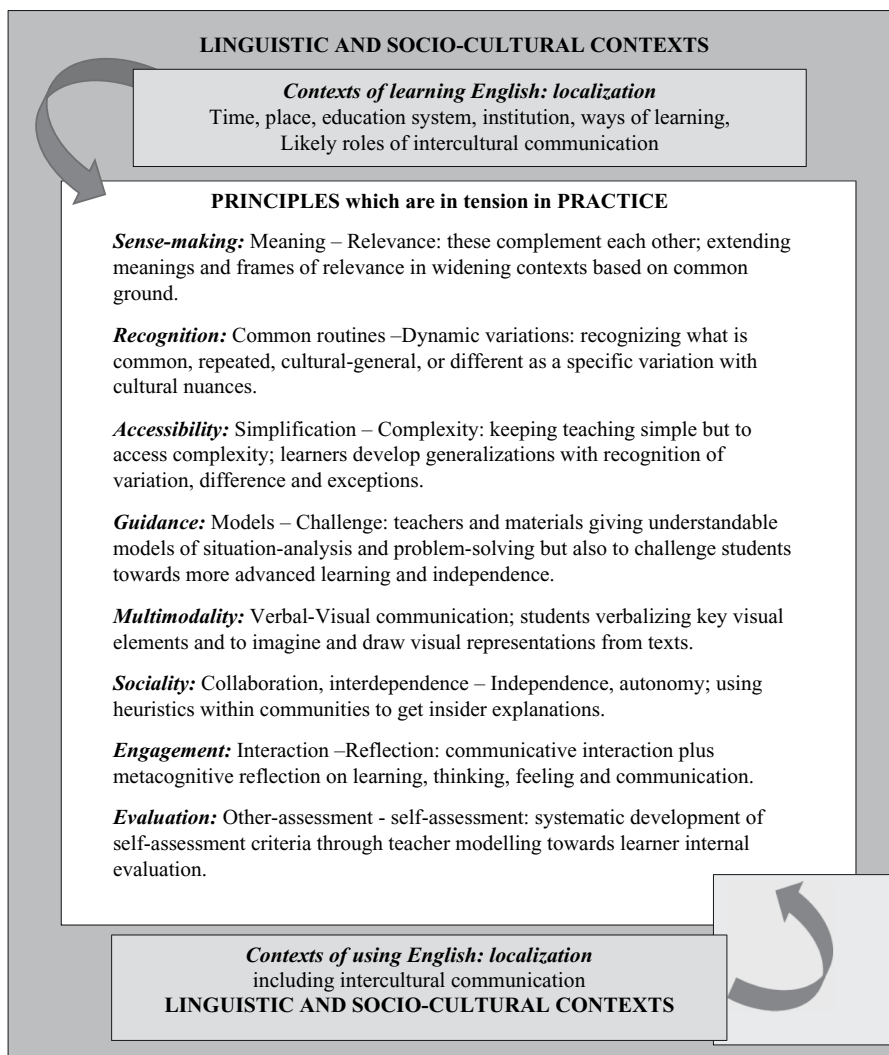


Figure 34.2 Some principles of TESOL activity design related to teaching intercultural communication

Source: Jin & Cortazzi, for this publication

Recognition: *Stable routine – Dynamic variation*

A basic issue for ESOL learners is to recognize, culturally, what is the same (or common) and what is different (or a variation). Sameness in education is evident in familiar routines which meet a learner's need for repetition to consolidate knowledge. Examples in TESOL are formulaic phrases or expected communicative sequences. However, without some variation or extension through new elements learners lose involvement and interest. Variety keeps language learning flexible, but too much variation can cause confusion. Some language variations in the same context have recognizably similar functions but may have different nuances of cultural values.

Accessible examples can be observed in greetings and farewells. This topic arouses curiosity: ESOL students can draw on their own languages and cultures besides interacting with other cultural

communities to discover more details. Students quickly observe the variation of greetings in English, often associated with formality, the setting and how well interactants know each other ('Hi', 'How are you?' 'How's everything?'). These may be associated with body language (hand-shakes, hand waves, nods, eyebrow flashes). One issue for learners is when and where to conform to English-using cultures or how to maintain their identity through using their own ways of greeting. If students are familiar with greetings using a cheek-kiss (France, Latin America), a bow (Japan) or prayer gesture (a 'wai' in Thailand, 'namaste' in India), can they use these in greetings in English? Does this depend on being a host or guest, or on features of age and gender? Then what topics of general conversation follow a greeting? Is it OK to ask about a person's family, religion, occupation or salary?

Translating greetings from different languages into literal English reveals variations of inquiry, exclamation or invocation, with nuances of social functions or cultural values. Thus, students can inquire among international students or local communities, or conduct internet searches about greetings formulae: 'Peace be upon you!' (Arabic), 'Rejoice!' (Greek), 'What's the news?' (Malay), 'Where are you going?' (Fijian), 'How's your family?' (Ibo), 'Have you eaten?' (Chinese), 'May you not die this morning!' (Yoruba) and 'Don't steal, don't be lazy, don't tell lies!' (Quechua). This is complemented by farewells. Some languages for leave-taking share a translation equivalent of the English 'See you again!' (Chinese, French, German, Italian, Russian); others refer to God ('To God, go with God' (Spanish); 'God protect you' (Persian) and 'Goodbye' abbreviates an older English form, 'God be with ye'). Some languages have different phrases said by the person staying or the person leaving (Turkish staying, 'Go smiling, go happily' + leaving, 'Stay safe'; Malay staying, 'Have a good road' + leaving, 'Have a safe life'). The Hawaiian 'Aloha' for both a greeting and farewell is used by many Americans in English; it means 'the presence of the divine breath'; it shows warmth, care, affection, co-ordinating mind and heart in human relationships. Such examples alert ESOL learners to discover heuristically about English-using behaviour and to reflect on underlying values, maintaining respect towards cultural diversity.

Of course, greetings are usually starting points: these examples could be extended to plan IC-related activities in themes that greetings are meeting people in locations and spaces for living, while leisure and landscapes are cultural features of living which exemplify diverse cultural values (see Figure 34.3). Each theme has IC strands related to thinking, feeling and acting or behaving. Activities include a heuristic approach to engage ESOL students in communication out-of-class through visits to the local environment, observing and interacting with communities of local residents and visitors, culminating in group presentations. Some communication could be online or using social media.

Accessibility: *Simplification – Complexity*

All teaching simplifies. As a pedagogical principle, TESOL practitioners simplify IC content to make material accessible and learnable. A problem in lesson planning is how to keep the language at an appropriately simplified level while including cognitively appropriate content that is engaging. Simplification needs to be balanced not only with actually increasing the learning complexity but with learner awareness that what is presented simply is really more complex. In IC, simplification may be associated with stereotypes of cultural communities and their ways of speaking: the simple becomes simplistic and distorts. A general social trend can be mis-interpreted as a stereotype which is damagingly imposed on individuals. IC teaching respects cultural others to recognize their dignity and the complexity of identities. This principle helps to avoid false perceptions of 'the other' by recognizing that generalizations are balanced by learner awareness of complexity and that such complexity by definition embraces individual and in-group differences.

An example of this principle is for students to analyze an apparently simple term which is frequent in general communication, such as 'fair' or 'fairness' (in Figure 34.4). This can be complex in

	GREETING	USES OF SPACE	LIVING SPACE	LEISURE SPACE	LIVING ENVIRONMENT	
THINKING	ways of greeting + gestures	uses of personal space	living space in residences	restaurants coffee bars fast food	city architecture green spaces	culture + landscape
FEELING	emotions displayed in gestures in cultures	interpreting feelings – proxemics in cultures	housing dreams ideal / real across cultures	formulaic service language in counter exchanges	responses to local heritage architecture + parks	feelings within worldviews
ACTING	role play initial meetings in cultural contexts	observe different local groups + video clips	analyse adverts about living + interview residents	observe counter exchanges + creative role play	analyse photos + interview tourists + visitors	investigate intercultural case studies

critical reflection on interpretations through journals and group presentations

LANGUAGE AND SPACE

Figure 34.3 A possible sequence of topics and activities to develop intercultural learning spread within a TESOL programme

Source: Cortazzi & Jin, teaching materials

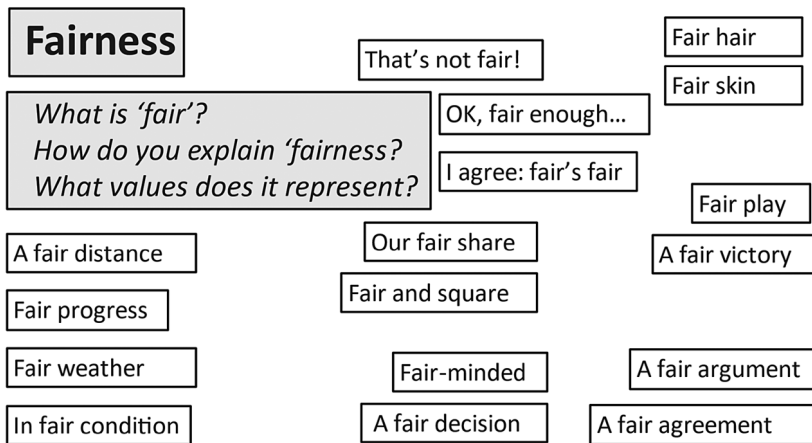


Figure 34.4 Examples of expressions with uses of ‘fair’ for student exploration of a complex cultural concept

Source: Cortazzi & Jin, teaching materials

English-using cultures and may have resonances which are not always evident in dictionaries. The main idea is that learners investigate meanings in different contexts to gain insights into the complexity of a term, while advancing their knowledge of English use and cultures. ‘Fairness’ is perceived as essential in British and some other culture communities because it conceptualizes ideas about impartiality, consideration and honesty, judgement and evaluation, equity and justice, in such contexts as sports conduct, commercial deals, argument and academic discourse, and legal agreements.

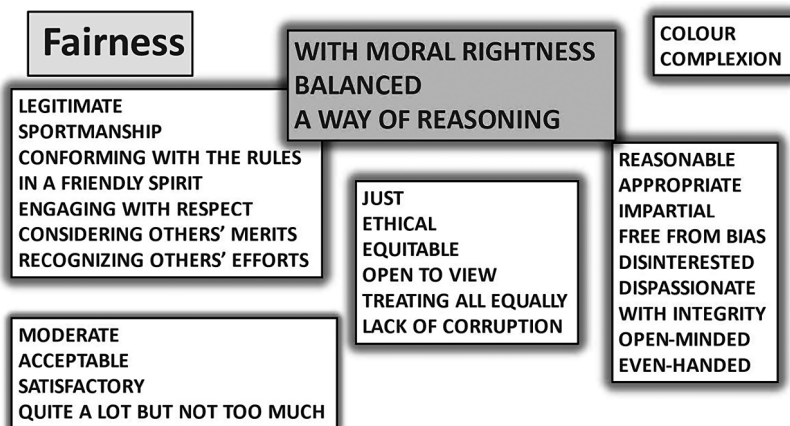


Figure 34.5 Examples of analyzing ‘fair’ to cluster meanings through heuristic activities to show complexity

Source: Cortazzi & Jin teaching materials

As an activity, the ‘Fairness’ example (Figure 34.4) was given to experienced ESOL teachers and some students. In discussion, groups of participants imagined contexts for the examples and analyzed major clusters of meanings of ‘fair’. They considered contexts of use, such as refereeing sports, academic argumentation and children’s stories in English. They were given further challenges. They attempted translating ‘fair’ into other languages, and to see which elements seem similar in other cultures. They interviewed English speakers to ask them what ‘fair’ means, and comment on how significant ‘fairness’ is in English-using cultures. A final challenge was to formulate simple but empathetic explanations of ‘fair’ and ‘fairness’ for different audiences (children, teenagers, parents and professionals). Further development could use corpora resources to explore varieties of English and ‘fairness’ in different genres (Figure 34.5).

Guidance: *Models – Challenge*

Models and challenges are significant in all teaching. Models directly exemplify principles, give manageable overviews abstracted from details of content and demonstrate how to solve problems. Indirectly, they show students ways to learn (and show teachers ways to teach). However, learners cannot merely copy and apply models: applications vary in different contexts and are less relevant in some situations. Students need to internalize but go beyond models. They need to learn independence in application and thinking, developed through meeting appropriately matched challenges. Too much challenge can be overwhelming; too little challenge can restrict achievement. These ideas need to be balanced.

In teaching IC, some models take the form of simple rules of behaviour (‘dos and don’ts’). While an isolated list can be misleading, this is useful as a summary to apply points of a contextualized discussion (e.g. Jackson, 2020a). Other models present large-scale dimensions of IC by analyzing national or regional trends with a limited number of categories of cultural values which are used to derive national profiles to serve as a framework to predict or explain IC situations based on widely researched trends (see Jin & Cortazzi, 2017). Examples of well-known models derived from research (e.g. by Hofstede, Trompenaars and GLOBE teams) are introduced in most IC textbooks, with application and critical discussion (e.g. Spencer-Oatey & Franklin, 2009; Lewis, 2018; Sorrels, 2021; Ting-Toomey & Chung, 2021). A challenge for students is to understand how identified national

After-class group task:

Collect two types of visuals (e.g. photos, videos, adverts, etc.): one type with two people gazing into each other's eyes; and another type with two people avoiding looking at each other's eyes.

Your group should interview 30 participants in total with these two visuals to ask:

- In each visual display, what does gazing into, or not looking at, each other's eyes mean?
- What do participants think the people in the visuals would believe when the other person is, or is not, looking into their eyes?

Your in-class presentation slides should be made by using nonverbal communication methods. Try not to display sentences, but use signs or symbols. You can explain your findings orally.

Figure 34.6 A group task for a class presentation later about interpreting non-verbal communication

Source: Jin & Cortazzi, teaching materials

trends or profiles apply without stereotyping to more personal or face-to-face professional situations: without a principle of variation and localization some will find it difficult to challenge the model.

A well-tried approach to present challenge is to give learners case study examples of critical incidents to analyze. Often these are scenarios based on observed intercultural uses of language and behaviour. Learners may be given options from which to choose solutions, followed by provision of feedback. In a heuristic approach, students ask questions to elicit further information from the teacher, before suggesting a solution. An example (Figure 34.8) is about forms of address: a problem of how students address their teachers in English in university. While many English medium universities world-wide maintain a traditional way of addressing teachers by their titles and family/last name (TLN, e.g. 'Professor Smith'), it is common in 'Western' universities for students to use only teachers' personal/first names (FN, e.g. 'John'). This informality is sometimes considered disrespectful by some students within their own cultural practices; many would rather maintain the more traditional address terms. Students can simply follow institutional practices. There are cultural alternatives. Some students, for example from Malaysia, use a title plus first name (TFN, e.g. 'Professor John') or just a respectful title without a name ('Teacher', 'Miss', 'Professor'). The example incident (Figure 34.8) shows that conforming to the expected practice of a host community can go against other cultural preferences. The teacher may not have all the information students ask for (e.g. the university location); but students, through asking the teacher questions, can get enough information and consult in groups, formulate an analysis and suggest solutions and ways to mediate. Further investigations examine naming practices (e.g. in some Asian languages the order is family name + personal name). In fact, in global English various name orders are available (to follow the widespread English practices or keep those of another culture in English use) and, in fact, there are mixed practices. Further factors implied in this scenario (Figure 34.8) are the age, gender, seniority and rank of the teachers, and their individual personality and experiences.

Multimodality: Verbal – Visual

Verbal elements are salient in TESOL communication, but non-verbal and visual elements are significant in multi-modal ways of learning. The pedagogic principle here is to use the complementarity of visual elements (including gestures and non-verbal communication) and verbal expression. One approach is to use learner competences in interpreting visual representations (commonly seen in flow charts, tables or diagrams) alongside understanding related content in a written text. Simple

Through intercultural communication learners can develop:

- ✓ **Interest** and open-mindedness about communication, communities and cultures
- ✓ **Confidence** to engage in, explore, and critically analyse intercultural situations
- ✓ **Awareness** of diverse communication styles, cultural ways of interaction
- ✓ **Flexibility** to use English in a wide range of contexts with diverse interactants
- ✓ **Imagination** to consider differing viewpoints, visions and values with understanding and empathy
- ✓ **Skills** to make explicit language difficulties and explain cultural practices
- ✓ **Ability** to negotiate misunderstandings and mediate in conflict situations
- ✓ **Identities** which include intercultural features with self-esteem regarding their own cultures

Figure 34.7 Some aims for ESOL learners regarding intercultural communication

Source: Jin & Cortazzi, 2018, p. 33

visuals can represent IC text structures or portray conversational moves. An example is a diagram which helps students understand the discourse moves of Situation, Problem, Solution, Evaluation (see Figure 34.8). Working with these orally before tackling an accompanying text can be a useful pre-reading activity. Correspondingly, a text may be tackled with a post-reading activity of completing a chart or table to represent essential text information. So, key visuals can help with student understanding and verbal expression. Some IC materials notably use extensive drawings and diagrams to illustrate IC concepts and models (Uttley, 2004; Lewis, 2008, 2018; Murdoch-Kitt & Emans, 2020). These can be used directly in IC teaching in developing these verbal–visual correspondences.

Students can investigate problems with out-of-class participants, including seeking interpretations from participants, to raise their own awareness of intercultural learning. The requirement of a task (see the example in Figure 34.7) can inspire students to be creative in how they present data and findings.

Sociality: *Collaboration – Autonomy*

In TESOL classrooms, collaboration and teamwork is always significant in pair and groupwork. However, a balance is needed: ESOL learners need to develop independence. Ultimately, they need access to heuristics as ways to ascertain communication patterns for themselves in new contexts. Revealing profound sociality, IC inherently requires collaboration. ESOL students need to learn appropriate ways to ask for interlocutor co-operation in the forms of repetitions, clarifications and explanations to help them understand what is going on. More challengingly, ESOL students, as individuals, need to elicit explanations from the ‘other’ to get insider interpretations of linguistic and cultural events and formulate guidance about how to participate (see Figure 34.6). So, while some IC development is collaborative, e.g. through project investigations, autonomy remains necessary.

Engagement: *Interaction – Reflection*

While student–teacher and peer–peer interactions are mainstays in TESOL practices, there is a recognized need for students to reflect regularly on their own communication and learning. Engagement thus refers to both social interaction and to mental engagement through reflection. This is a meta-cognitive perspective: students are led to explicitly monitor their own learning to enhance their own learning strategies, e.g. through discussion and reflective journal writing. For IC, developing reflective awareness is vital and this can be mirrored in TESOL activities. For example, in three steps

students can 1) verbalize beforehand how they will approach a particular IC task (e.g. establishing the focus of questioning in the scenario in Figure 34.8), 2) note how they are actually doing it and learning (in the Figure 34.8 scenario, to identify the IC principles involved) with participants' feedback; and 3) after completing it, note what they achieved and how they did so (e.g. to make a group presentation or write a concise report), with further reflections on improvement (e.g. follow up with a further group/investigation with local and international students). For IC, such reflective engagement (e.g. in groups, after the follow-up investigation) includes thinking about participants' interaction and learning (thinking, feeling, doing in Figure 34.3), together with what they thought others perceived and understood about a communication process and its outcomes (e.g. in Figure 34.8). This process has been implemented in IC teaching with effective outcomes [source: Jin, teaching materials].

<i>Discourse categories</i>	<i>Information for teachers; ESOL participants should seek information via questions to their teachers</i>	<i>Likely questions from students to ascertain available details</i>
SITUATION	<p><i>Teacher 1 (T1) is a junior ethnic minority north American; Teacher 2 (T2) is a senior and older Chinese.</i></p> <p>In many English medium universities, many students call teachers by their personal/ first names; some do not, instead, they use title + family name. Other language and cultures have different naming practices to address teachers.</p>	<p><i>Who are the participants?</i></p> <p><i>Should we address everyone in the same way to show respect?</i></p> <p><i>Can we address individuals differently?</i></p>
PROBLEM	<p><i>A Chinese postgraduate student orally and in writing addressed T1 by her first name only and addressed T2 by her title and family name. T1 became offended and questioned the student for having a bad attitude and of not showing proper respect to T1. The student became upset, feeling that this was unfair as he has respect to both teachers. He thought he had conformed to the way of addressing T1 according to western expectations, but felt it was difficult to address T2 by the first name as Chinese students would never address a much older and senior person by the first name. He feels T1's interpretation will affect his academic progress.</i></p> <p><i>T1 felt that she had previously experienced racism in a university context. Thus, she might believe this issue of addressing could be caused by a racist attitude. T2 is a more senior, more experienced Chinese academic, who is used to being addressed by either her first name or title + last name.</i></p>	<p><i>What happened?</i></p> <p><i>Who said what?</i></p> <p><i>What is the problem?</i></p> <p><i>How are teachers' identities implicated if I address them in the same or different ways?</i></p> <p><i>What are the likely contributing factors?</i></p> <p><i>What are the different perspectives?</i></p> <p><i>What are the feelings involved?</i></p>

Figure 34.8 A heuristic approach to investigate an intercultural scenario to ascertain likely issues and possible solutions

(Continued)

<i>Discourse categories</i>	<i>Information for teachers; ESOL participants should seek information via questions to their teachers</i>	<i>Likely questions from students to ascertain available details</i>
SOLUTION	T2 tried to arrange a meeting to discuss intercultural naming practices before they both met the student. But this meeting did not happen. It would be helpful to discuss this matter openly so that an acceptable practice for addressing teachers is found. Students may learn to treat individuals differently rather than to assume everyone in one community conforms. Both teachers and students can investigate naming practices in different cultures. Both consider respecting individuals' preference of naming and addressing and tell others explicitly what they prefer.	<i>How can we find out from individuals how they prefer being addressed? What shall we do in a similar situation? How can we mediate? What is a good mediation strategy here? How can we help explain different practices and reasons for different forms of address?</i>
EVALUATION	T1 needs to know more about intercultural naming practices for Chinese contexts. The student remains worried and upset. T1 remains offended and feels unhappy.	<i>What do participants feel after this incident? What are the various possible interpretations? How can we help different parties to express their feelings explicitly?</i>

Source: Jin & Cortazzi, teaching materials

Figure 34.8 A heuristic approach to investigate an intercultural scenario to ascertain likely issues and possible solutions

Evaluation: *Other-assessment – Self-assessment*

This principle attends to using criteria for assessment and diagnosing future learning, and how such criteria may initially be external (from teachers, in textbooks and materials, and in marking assessments) but should develop to include self-assessment by learners themselves. through the internalization of criteria. This develops the uses of criteria towards autonomy.

In IC, this self-assessment is ultimately bound up with developing relevant human values and competencies, which in the end are self-generated. There are several classroom stages (Jin & Cortazzi, 2017, 2018). At first, in advance, the teacher gives explicit criteria related to an IC activity. Outcomes and communication processes are then evaluated using the criteria as assessment for further learning. The teacher demonstrates how different criteria work (a model: 'Here, I evaluate like this'). Over time, criteria become progressively more demanding and more sophisticated. ESOL students explicitly reflect on the criteria as they become more complex. Later, the teacher and learners together make other criteria and apply them for varying activities, introducing explicit principles of IC (a transitional collaboration: 'Together, we evaluate like this'). Ultimately, the students formulate their own criteria and use them for self-assessment (agreed but independently operated: 'We agree to evaluate like this'). Criteria include drawing on principles of IC and critically evaluated ideas about cultures and communities. Criteria include how others perceive and feel about interaction, what cultural beliefs and values are involved and how others might interpret some given communication. Over time, as ESOL learners engage in these principles they can achieve a range of benefits, including those summarized in Figure 34.7 as aims.

Conclusions

Ideally, IC would be appropriately engaged in most TESOL, modestly integrated in classroom activities. It would relate to pronunciation matters, vocabulary, grammar use, discourse skills, intercultural pragmatics and appropriate behaviour. It would be an expected strand of textbooks. It would be a key element of teacher training. If IC is not explicitly part of available materials, teachers can use existing materials so that learners interrogate them with critical awareness and supplement them with IC activities (Cortazzi & Jin, 1999, 2018; Liddicoat & Scarino, 2013; McConachy, 2018; Jin & Cortazzi, 2018).

Here, we have outlined two sets of principles. Classroom teachers mediate these principles to learners, as professional and personal models. Some current ESOL learners become leaders in their fields later, to enact realizations of these principles in society. Some educationally oriented TESOL programmes already give attention to the human values emphasized in these IC principles. These principles can become more central to help orient TESOL practices towards global English for students with personal, community and international benefits. In the big picture of life on this planet, IC is not a luxury extra. It is vital. IC is located within ‘imperatives’ for developing economies, technologies, peace and ethical relations (Martin & Nakayama, 2017). An interculturally aligned TESOL helps towards world-wide intercultural competences (UNESCO, 2013) which themselves fully support the educational strand of the 17 goals of the 2030 Agenda for Sustainable Development (United Nations, 2015). Language, especially global English, is the medium for the achievement of these goals. IC helps to locate TESOL within this international picture of collaboration to sustain humanity.

References

- Abrams, Z. I. (2020). *Intercultural communication and language pedagogy: From theory to practice*. Cambridge: Cambridge University Press.
- Aldred, G., Byram, M., & Fleming, M. (Eds.) (2003). *Intercultural experience and education*. Clevedon: Multilingual Matters.
- Baker, W. (2017). *Culture and identity through English as a lingua franca: Rethinking concepts and goals in intercultural communication*. Berlin: De Gruyter Mouton.
- Brown, H. D. & Lee, H. (2015). *Teaching by principles: An interactive approach*. New York: Pearson.
- Byram, M. (2008). *From foreign language education to education for intercultural citizenship*. Bristol: Multilingual Matters.
- Byram, M. (2020). *Teaching and assessing intercultural communication competence, revisited* (2nd ed.). Bristol: Multilingual Matters.
- Byram, M. & Fleming, M. (Eds.) (1998). *Language learning in intercultural perspective; Approaches through drama and ethnography*. Cambridge: Cambridge University Press.
- Byram, M., Nichols, A., & Stevens, D. (Eds.) (2001). *Developing intercultural competence in practice*. Clevedon: Multilingual Matters.
- Carbaugh, D. (2010). *Cultures in conversation*. New York: Routledge.
- Corbett, J. (2022). *An intercultural approach to English language teaching* (2nd ed.). Clevedon: Multilingual Matters.
- Cortazzi, M. & Jin, L. (1999). Cultural mirrors: Materials and methods in the EFL classroom. In E. Hinkel (Ed.), *Culture in second language teaching*. Cambridge: Cambridge University Press, pp. 196–219.
- Cortazzi, M. & Jin, L. (Eds.) (2013). *Researching cultures of learning: International perspectives on language learning and education*. Basingstoke: Palgrave Macmillan.
- Cortazzi, M. & Jin, L. (2018). Socio-cultural perspectives on coursebook evaluation. In M. Azarnoosh, M. Zeraatpishe, A. Faravani, & H. R. Kargozari (Eds.), *Issues in coursebook evaluation*. Leiden: Brill.
- Deardorff, D. K. (Ed.) (2009). *The SAGE handbook of intercultural competence*. Thousand Oaks, CA: SAGE Publications.
- Delors, J. (1996). *Learning: The treasure within – Report to UNESCO of the International Commission on Education for the Twenty-first Century*. Paris: UNESCO.
- Helman, A. B., Harris, K., & Wilber, A. (2018). *The 6 principles for exemplary teaching of English learners’ adult education and workforce development*. Alexandria, VA: TESOL International Association.
- Huber, J. (Ed.) (2012). *Intercultural competence for all, preparation for living in a heterogenous world. Pestalozzi series 2*. Strasbourg: Council of Europe.

- Jackson, J. (2020a). *Introducing language and intercultural communication* (2nd ed.). New York: Routledge.
- Jackson, J. (Ed.) (2020b). *The Routledge handbook of language and intercultural communication* (2nd ed.). London: Routledge.
- Jenkins, J. (2015). *Global Englishes: A resource book for students* (3rd ed.). London: Routledge.
- Jenkins, J., Baker, W., & Dewey, M. (Eds.) (2018). *The Routledge handbook of English as a lingua franca*. New York: Routledge.
- Jin, L. & Cortazzi, M. (Eds.) (2011). *Researching Chinese learners; skills, perceptions and intercultural adaptations*. Basingstoke: Palgrave Macmillan.
- Jin, L. & Cortazzi, M. (Eds.) (2013). *Researching intercultural learning; investigations in Language and Education*. Basingstoke: Palgrave Macmillan.
- Jin, L. & Cortazzi, M. (2017). Teaching and learning intercultural communication: Research in six approaches. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning, Vol. III* (pp. 399–415). New York: Routledge.
- Jin, L. & Cortazzi, M. (2018). Developing speaking for intercultural communication: textbooks with critical and creative approaches. In H. P. Widodo, A. S. Wood, D. Gupta, & W. Cheng (Eds.), *Asian English classrooms: Where theory and practice meet* (pp. 30–48). New York: Routledge.
- Kaplan-Weinger, J. & Ullman, C. (2015). *Methods for the ethnography of communication, language use in schools and communities*. New York: Routledge.
- Kirkpatrick, A. (Ed.) (2012). *The Routledge handbook of world Englishes*. London: Routledge.
- Klyukanov, I. E. (2021). *Principles of intercultural communication* (2nd ed.). New York: Routledge.
- Lewis, R. D. (2008). *Cross-cultural communication, a visual approach* (2nd ed.). London: Transcreen Publications.
- Lewis, R. D. (2018). *When cultures collide: Leading across cultures* (4th ed.). London: Nicholas Brealey Publishing.
- Liddicoat, A. J. & Scarino, A. (2013). *Intercultural language teaching and learning*. Chichester: Wiley-Blackwell.
- Martin, J. N. & Nakayama, T. K. (2017). *Intercultural communication, a contextual approach* (7th ed.). New York: McGraw Hill Education.
- Matsuda, A. (Ed.) (2012). *Principles and practices of teaching English as an international language*. Bristol: Multilingual Matters.
- McConachy, T. (2018). *Developing intercultural perspectives on language use, exploring pragmatics and culture in foreign language learning*. Bristol: Multilingual Matters.
- Murdoch-Kitt, K. & Emans, D. J. (2020). *Intercultural collaboration by design: Drawing from differences, distances and disciplines through visual thinking*. Abingdon: Routledge.
- Paton, A. & Wilkins, M. (2009). *Teaching adult ESOL: Principles and practice*. Maidenhead: Open University Press.
- Piller, I. (2017). *Intercultural communication: A critical introduction* (2nd ed.). Edinburgh: Edinburgh University Press.
- Rose, H. & Syrbe, M. (2020). *Global TESOL for the 21st century; teaching English in a changing world*. Bristol: Multilingual Matters.
- Saville-Troike, M. (2003). *The ethnography of communication* (3rd ed.). Oxford: Blackwell.
- Sorrels, K. (2021). *Intercultural communication – Globalization and social justice* (3rd ed.). Thousand Oaks: Sage Publications.
- Spencer-Oatey, H. & Franklin, P. (2009). *Intercultural interaction, a multidisciplinary approach to intercultural communication*. Basingstoke: Palgrave Macmillan.
- Spencer-Oatey, H. & Kádár, D. (2021). *Intercultural politeness: Managing relations across cultures*. Cambridge: Cambridge University Press.
- Ting-Toomey, S. & Chung, L. C. (2021). *Understanding intercultural communication*. (3rd ed.) Oxford: Oxford University Press.
- Ting-Toomey, S. & Dorjee, T. (2019). *Communicating across cultures* (2nd ed.). New York: The Guilford Press.
- UNESCO. (2006). *Guidelines on intercultural education*. Paris: UNESCO.
- UNESCO. (2013). *Intercultural competencies: Conceptual and operational framework*. Paris: UNESCO.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. United Nations. www.sustainabledevelopment.un.org
- Utley, D. (2004). *Intercultural resource pack: Intercultural communication resources for language teachers*. Cambridge: Cambridge University Press.
- Wagner, M., Perugini, D. C., & Byram, M. (Eds.) (2018). *Teaching intercultural competence across the age range: From theory to practice*. Bristol: Multilingual Matters.
- Zhu, H. (2019). *Exploring intercultural communication – language in action* (2nd ed.). London: Routledge.

Teaching and learning pragmatics

Naoko Taguchi

Introduction

Pragmatics involves a complex relationship among linguistic forms, their functional possibilities, and contextual elements that determine the form–function relationship. For second language (L2) learners, learning pragmatics means developing abilities to perform a variety of communicative functions effectively and appropriately in diverse social contexts. Given the complexity involved in pragmatics, L2 learners inevitably face many challenges in their pathway toward a full competency of target language pragmatics. One challenge involves overcoming first language (L1) influence (or influence from any additional languages). Adult learners typically come with their own L1-based pragmatic knowledge that is not always congruent with that of L2. Knowledge of how to express formality, politeness, and social distance in L1 does not automatically transfer to L2 because social conventions and rules of speaking vary across languages and cultures. Moreover, social norms of speaking are often covert, making it difficult for learners to discern what linguistic means are used to express formality and solidarity, or how meaning is communicated via linguistic and para-linguistic cues.

Considering the challenges involved in pragmatics learning, it is reasonable to believe that direct, focused instruction can facilitate L2 pragmatic development. In fact, existing research has established a consensus that instruction is effective; instructed learners usually outperform non-instructed counterparts in the amount and quality of pragmatic knowledge (Kasper & Rose, 1999, 2002). Currently, instructional intervention studies are underway in various learning contexts (e.g., technology-mediated environments study abroad programs, and formal classrooms) to identify the most effective instructional approach by comparing different teaching methods for learning outcomes (for a review, see Taguchi, 2015, 2019; Taguchi & Roever, 2017). Parallel to the growth of instructional research, resource books and teaching guidelines have appeared in the field to help teachers with materials design and lesson planning (e.g., Bardovi-Harlig & Mahan-Taylor, 2003; Ishihara & Cohen, 2010; Tatsuki & Houck, 2010). Activities and tasks presented in those resource books are exemplary in promoting learners' awareness of and engagement in pragmatics-related language use.

This chapter presents a state-of-the-art overview of current trends and developments in L2 pragmatics instruction. The overview is organized according to two foci: *what to teach* and *how to teach*. The first part of the chapter focuses on *what to teach* and presents the current understanding and definition of pragmatic competence. Since the inception of the field in the 1980s, the concept of pragmatic competence has evolved greatly; the purpose of this section is to synthesize existing views of pragmatic competence in order to illustrate what knowledge, skill, and capacity need to be considered when teaching pragmatics. The second half of the chapter shifts focus to *how to teach*. Typical

instructional methods, materials, and tasks are surveyed vis-à-vis various dimensions of pragmatic competence discussed in the first section. The chapter concludes with a summary of the current trends and future directions.

What to teach: Definitions of pragmatic competence

The original concept of pragmatic competence dates back to Hymes's (1972) framework of communicative competence. Hymes proposed that language knowledge entails grammatical and sociocultural knowledge, which together help us understand how to speak appropriately in a social context. Since Hymes's work, the definition of pragmatic competence has evolved into multiple directions. Currently pragmatic competence is viewed as a multi-dimensional construct involving different knowledge and skill areas. Specifically, three areas have been emphasized in the literature: (1) linguistic and sociocultural knowledge of what forms to use in what context; (2) interactional ability to use the knowledge flexibly corresponding to changing context; and (3) agency to make an informed decision on whether or not to implement the knowledge in the community (Taguchi, 2019, p. 4). The following section explains each area.

Knowledge of form-function-context mappings

Pragmatic knowledge involves understanding what forms to use to achieve a communicative goal in context. Taking the speech act of 'greeting' as an example, we know a range of linguistic forms to use when greeting someone. Among these forms, we select a specific form based on our understanding of context—who we are greeting, in what setting, and for what purpose(s). For example, when we greet a friend in passing, a brief expression like "Hi" is conventional. But when we greet a friend we haven't seen for a while, a sincere question like "How have you been?" might be more appropriate. Hence, pragmatic knowledge entails a repertoire of linguistic forms and sociocultural knowledge of how those forms work in context.

The concept of form-function-context mappings was introduced by Thomas (1983) in her classic definition of pragmatic knowledge. Thomas claimed that pragmatic knowledge involves two distinct yet complementary dimensions—*pragmalinguistics* and *sociopragmatics*. The former refers to the knowledge of linguistic forms for performing a communicative function, while the latter involves the knowledge of social conventions and norms of behavior in the society. These dimensions largely parallel to *functional* and *sociolinguistic knowledge* in the models of communicative competence (Bachman & Palmer, 1996; Canale & Swain, 1980). Functional knowledge involves the knowledge of form-function mappings, while sociolinguistic knowledge extends the form-function mappings to contexts of use (selecting appropriate forms to use in a specific context).

Interactional ability

The knowledge of form-function-mappings has long been considered as the core of pragmatic competence. However, with the rise of discursive pragmatics (Kasper, 2006) and interactional competence (Young, 2011), pragmatic competence is no longer viewed simply as fixed knowledge of form, function, and context of use. Rather, it is understood to involve interactional abilities to use this knowledge in a flexible manner, adapting to the changing course of interaction. For example, when we meet someone for the first time, we might use a formal expression like "Nice to meet you". But as we get to know the person more during a conversation, we might adopt more informal ways of speaking to be friendly. What is critical is the understanding that the context is never stable; it changes moment-by-moment depending on how a conversation unfolds. Hence, an essential

aspect of pragmatic competence is interactional ability—the skill to navigate the dynamic course of interaction by adapting our interactional resources to changing realities. According to Young (2011), interactional resources involve knowledge of form-function-context mappings like register-specific linguistic forms and speech acts, but also fundamental interactional skills of topic management, turn-taking skills, and repair.

Learner agency

While the linguistic-sociocultural knowledge and adaptive use of this knowledge in interaction give us the capacity to communicate appropriately in a variety of social settings, our manner of speaking is also shaped by our agency. LoCastro (2003) defines agency as a self-reliant capacity that works with volition to bring about an effect on one's behavior. Our linguistic choice is influenced by our own beliefs and values—how we want to be perceived by others and what social positions we want to create for ourselves. For example, using a formal greeting to a stranger in a professional meeting might be a social norm in many communities. But we might intentionally deviate from the norm and use a casual greeting because we want to sound approachable and friendly. When applied to L2 learning, we need to understand that learners are active agents who make their own linguistic choices. Ishihara and Tarone's (2009) study showed that college students learning Japanese were taught to use formal speech styles when speaking to someone in higher social status. But, following their own belief of egalitarianism, they decided not to use formal styles to seniors in order to cultivate solidarity and friendship with them.

In summary, pragmatic competence is a multi-dimensional construct involving multiple knowledge and skill areas. L2 learners need to have the knowledge of form-function-context mappings and be able to adapt their knowledge to interaction-in-progress. At the same time, they must have the agentic capacity to decide whether or not to actually use the knowledge in a situation. Ideally, teaching pragmatics should address each of these three areas. The next section presents common instructional methods and materials available for teaching these areas. To be sure, although what I present in the following sections is representative for each area, these methods and materials are not mutually exclusive from one another. One method used to teach one area can be extended to teach another area, and several methods can be combined to teach multiple areas.

How to teach: Methods and materials

Teaching the knowledge of form-function-context mappings

Explicit and implicit teaching

Explicit and implicit teaching methods have been adopted widely to teach pragmatic knowledge (for a review, see Taguchi, 2015; Taguchi & Roever, 2017; Takahashi, 2010; Plonsky & Zhuang, 2019). Following Kasper's (2001) original definition, the explicit method typically involves a direct metapragmatic explanation (e.g., information about which forms to use when greeting a boss vs. a family member). The implicit method holds back metapragmatic explanation, but tries to develop learners' understanding of pragmatic features indirectly through input exposure, consciousness-raising tasks, and implicit feedback. For example, teachers can prepare two dialogues illustrating different greeting scenes (e.g., greeting at workplace vs. at home). They can have students compare contextual factors between the dialogues (e.g., social distance and power difference between the speakers) so they can discover the connection between the context and greeting expressions appearing in each dialogue.

Explicit and implicit methods are motivated by Schmidt's (1993) noticing hypothesis that capitalizes on the role of consciousness and attention in learning. Schmidt contends that learning occurs when learners attend to linguistic forms, their functions, and relevant contextual factors. When the focal form-function-context mapping is noticed and processed, it is internalized and stored in long-term memory. Existing studies have revealed that the explicit method leads to greater gains in pragmatic knowledge than the implicit method. In fact, Plonsky and Zhuang's (2019) meta-analysis of 50 studies found that studies using the explicit method had a larger effect size ($d = 1.68$) than those using the implicit method ($d = 1.27$). Taguchi's (2015) narrative review, on the other hand, showed that the implicit method can be as effective as the explicit method if instructors can strategically guide learners to notice focal pragmatic features and process them at a deeper level.

Skill acquisition: Declarative and procedural knowledge

While the noticing hypothesis focuses on the initial detection of form-function-context mappings, skill acquisition theories focus on the transition from the initial stage of conscious rule learning to the end stage where learners can use rules unconsciously and fluently. Anderson and his colleagues (1993, 2004) distinguish two types of knowledge: declarative and procedural. Declarative knowledge refers to the knowledge of 'what' (e.g., knowing which greeting expressions to use in what contexts), while procedural knowledge is concerned with 'how', or automatic and fluent use of the rules (e.g., performing greetings in a variety of settings without thinking). The transition from declarative to procedural knowledge occurs through intensive practice. The knowledge of form-function-mappings becomes stronger and transforms into more stable and robust procedural knowledge by consistent, repeated activation of the mappings via practice (the process called proceduralization).

Skill acquisition theories provide implications for the design of instruction, specifically how to sequence instruction so learners can transition from the declarative to the procedural knowledge stage (DeKeyser, 2007). First, teachers can develop learners' declarative knowledge by providing explicit information about the target form-function-context mapping. Then, they can provide systematic, repeated practice so learners can use the declarative knowledge in a series of communicative tasks. Focused, systematic feedback can be incorporated into the practice to ensure the correct use of the declarative knowledge.

Li's (2012, 2013) studies applied skill acquisition theories to develop L2 Chinese learners' knowledge of request-making forms in Chinese. After receiving metapragmatic information (which request forms to use in which contexts), participants practiced the forms in different modalities. One group practiced the forms in the receptive skill (reading dialogues and choosing appropriate request-making utterances), while the other group practiced forms in the productive skill using a discourse completion task (DCT) (reading a scenario and typing up an appropriate request utterance). Results showed that, regardless of practice modality, four instances of practice were sufficient to ensure learners' accurate use of the forms, but more than eight instances were needed to develop fluency, indicating that accuracy and fluency develop separately as a function of practice. The results also suggest that procedural knowledge requires a greater amount of practice to develop than declarative knowledge.

In this section, I have discussed the role of attention and practice in learning to illustrate how knowledge of form-function-mappings can be taught in a classroom. Under the noticing hypothesis and skill acquisition paradigm, learning objects tend to be small, discrete components of pragmatolinguistic forms associated with contextual factors. It is questionable whether knowing these lower-level components actually leads to higher-level performance where learners can use the knowledge in real-time interaction. The next section presents methods for promoting learners' interaction abilities while using learned pragmatic knowledge.

Teaching pragmatics in interaction

Role plays and simulations

In the explicit teaching method described in the previous section, teachers/researchers often provide production practice of the target pragmalinguistic forms after giving metapragmatic explanation about the forms. Types of production practice range in a continuum, extending from structured, mechanical exercises (e.g., DCT), to more creative, open-ended tasks. On the more creative end, role play and simulations are often used. In fact, Nguyen's (2019) review of L2 pragmatics studies showed that, among 246 studies published since the 1970s, role plays are the second most popular production task (after DCT), used by 83 studies.

In a typical role play, learners read a situational scenario and act out the scenario with an assigned interlocutor (e.g., a peer student). The scenarios are written in a way that they elicit the targeted pragmatic language use (e.g., speech acts) while interacting with another person. Kasper and Dahl (1991) distinguished two types of role play: closed and open. In closed role plays learners act out a situation to achieve pre-defined outcomes. Open role plays do not specify any outcomes of interaction in a scenario. Hence, they are more reflective of learners' interaction abilities because learners have to navigate through unpredictable sequences of interaction and negotiate interactional outcomes with their interlocutors. Johnson and deHaan (2013) used open role plays (called Strategic Interaction, adapted from DiPietro, 1987) to teach request and apology to Japanese learners of English. Learners were paired and received different role play instruction cards involving complications and conflicting goals in the scenarios. While performing assigned roles, learners had to negotiate with each other to come to a consensus.

Recently, virtual reality (VR) technology has significantly advanced the role play format in terms of contextualization of L2 use (for a review see Lan, 2020). In the area of L2 pragmatics, Vilar-Beltrán and Melchor-Couto (2013) used *Second Life* to implement virtual role plays. They created a virtual village consisting of six huts, each featuring a refusal scenario (e.g., refusing a friend's invitation to a party). Kaplan-Rakowski and Wojdyski (2018) created a series of simulations (e.g., riding a taxi) in the virtual space where L2 English learners interacted with people in various roles via multiple-choice responses. In another study, Brick et al. (2019) created a virtual health care training for L2 Italian speakers. Participants had a conversation with a virtual patient via multiple-choice questions. The patient's emotional state and reactions changed corresponding to the participants' responses. After the conversation, participants reflected on their choices using a reply system viewed from the perspective of the virtual character. Taguchi (2022a, b) compared L2 English speakers' performance between a computer-based oral DCT and a VR-based interactive task. In the VR task, participants produced speech acts (requests, refusals, and complaints) to their interlocutor who appeared in 360-degree videos. In the VR-based task, participants spoke more slowly and used more supportive moves and hesitation markers (e.g., hedging) in their speech acts. They also used more level tones (as opposed to rising or falling tones) in the VR-based task. Interview data showed that the participants paid attention to various audio-visual cues in the VR scenes.

Several studies developed VR games for pragmatics teaching. Sykes (2013) created a three-dimensional interactive game called *Croquelandia* where L2 Spanish learners interacted with built-in characters and performed speech acts of request and apology. Holden and Sykes (2013) developed an augmented reality mobile game called *Mentira* in which learners of Spanish had to adapt their speaking styles to built-in characters' preferred styles (formal or informal) to get clues to solve a murder mystery. In another study, Tang and Taguchi (2020, 2021) developed a scenario-based digital game called *Questaurant* to teach Chinese formulaic expressions. In the game, learners took the role of a robot who works in a restaurant in China and runs quests by interacting with built-in characters using formulaic expressions.

Given the nature of pragmatics that capitalizes on language use in a social context, VR can serve as a useful platform for pragmatics learning. Learners can transport themselves to a realistic situation and engage in a simulation with real-life-like people. The sensory-rich VR environment can offer an immersive space where learners can interact in diverse roles and social settings. Despite these advantages, VR-based role play and simulations still remain at the level of ‘real-life-like’ and thus are never ‘real’. Learners are instructed to take up assigned roles rather than playing real roles. In addition, the form of interaction in the VR space is typically a short exchange involving one or two turns rather than an extended conversation. As a way of compensating for these shortcomings, the next section discusses opportunities for authentic and extended person-to-person interaction created in computer-mediated communication.

Computer-mediated communication

Computer-mediated communication (CMC) can offer opportunities to perform a variety of pragmatic functions while directly interacting with members of the target culture. Two types of CMC have been applied to pragmatics teaching: asynchronous (e.g., e-mail, blogs, and discussion forms) and synchronous (e.g., text and voice-based chats and teleconferencing). Existing research has revealed a connection between participation in CMC and pragmatic development in a variety of areas, including pragmalinguistic forms (e.g., address forms, sentence-final particles), speech acts (e.g., requests, advice-giving), speech styles, expressions of emotions, and interaction management (e.g., conversation openings and closings) (for a review, see Cunningham, 2019; González-Lloret, 2019a).

Synchronous CMC is a promising venue for developing learners’ interactional abilities in pragmatics. Some studies showed how pragmatics learning occurred naturally while participating in CMC to achieve real-life goals (e.g., Gonzales, 2013; Maa & Taguchi, 2022; Tsai & Kinginger, 2015; Zhang, 2014). Other studies combined CMC with explicit instruction so learners could put their learned pragmatic knowledge into immediate practice (e.g., Cunningham, 2016; Eslami et al., 2015). In those studies, use of CMC was purposeful. Learners received instruction on focal pragmatic features and interacted with target language speakers via CMC while using the learned features. Then, teacher and researchers traced learners’ use of the target features during interaction. Hence, CMC served as a place where learners can experiment with the target pragmatic features in real-life interaction. This type of instruction is often called data-driven instruction (Belz & Vyatkina, 2005). Under this method, researchers compile a corpus of CMC exchanges between L2 learners and their interlocutors and use the corpus data to create instructional materials. The materials are inherently authentic because they come from real-life language samples. Because learners are familiar with the context where language samples occur, teachers can easily direct their attention to how focal pragmatic features are used in real-life interaction.

Li’s (2019) study is a recent example of data-driven instruction. L2 Chinese learners in a U.S. university were paired with native Chinese speakers in China and interacted via Skype over 12 weeks, during which time they received instruction on how to use the sentence-final particle *ne* to express pragmatic meanings (e.g., softening the tone, expressing emotions). Li extracted samples of *ne* from the participants’ chat texts and created a variety of instructional materials. For example, she had learners reflect on why *ne* occurred in the samples. She also adapted a chat text and created an instructional dialogue by removing *ne*. She asked learners to explain whether and why *ne* was necessary in a particular sentence. Over time, Li’s participants became able to use *ne* frequently in diverse functions while interacting with their Chinese peers.

This section has illustrated how role play, simulations, and CMC can be used to develop L2 learners’ pragmatic competence in interaction. Although pragmatics-learning opportunities can emerge naturally in interaction without instruction, explicit focus on form-function-context mappings up

front can make interaction more pedagogical. When interactional tasks are designed to promote the use of specific pragmatic features, the tasks can help orient learners to their learning goals, contributing to their maximum use of interactional opportunities. Compared with role play, CMC can produce more authentic interactional opportunities because the direction of interaction is unpredictable, evolving turn-by-turn. Hence, CMC can serve as a useful venue for developing learners' interactional competence—the ability to adapt linguistic resources to shifting interaction and achieve communicative goals collaboratively with others. Role play and simulation tasks can also improve learners' interactional competence if teachers can introduce the sense of unpredictability and complication in tasks to promote extended discourse and negotiation among learners.

Promoting learner agency in pragmatics instruction

So far, I have presented approaches for developing knowledge of form-function-context mappings and ability to use that knowledge in interaction. The methods and tasks presented in the previous sections are inevitably teacher-driven, as they are designed according to teachers' goals rather than learners' goals. In the final section of this paper, I will present a more emic, learner-centered approach to teaching pragmatics, specifically how teachers can promote learner agency and choice-making capacity when learning pragmatics.

Learner agency in making pragmatic choices in context

Agency refers to L2 learners' "volition and power in a given context to bring about an effect, change, or decision" (LoCastro, 2003, as cited in Ishihara & Tarone, 2009, p. 116). Learners bring their own unique beliefs, goals, and perceptions of the world to their learning, which, in turn, affect the choices they make in their own language use. Learners do not always blindly adopt target pragmatic norms like using honorifics or formal terms to address someone older and superior (for empirical support, see Brown, 2013; Ishihara & Tarone, 2009). When the norms contradict their desired social identity, learners may decide not to conform to the norms, and instead create their own social positions in relation to others (for a review, see Ishihara, 2019). Hence, knowledge of the normative form-function-context mapping is one thing; deciding whether or not to actually use the knowledge in the community is a different matter. The teacher's job is to balance these two, helping learners to acquire pragmatic knowledge while promoting learners' self-reliance in making decisions about their linguistic behaviors. Similar to interactional competence, the concept of agency helps us conceptualize what it means to teach pragmatics. Pragmatics teaching is not all about passing on static target language norms for learners to emulate; it is about developing the understanding that pragmatics is a dynamically negotiated construct that is subject to change according to context, individual choice, and action.

Several instructional models have advocated how we can address learners' agency and choice-making capacity in teaching. One model is incorporating needs analysis up front. Teachers can assess what needs (and desires) students have for their language study and tailor their instruction accordingly. Ishihara (2010) describes how learner goals and intentions can be incorporated into classroom assessment of pragmatic knowledge. In her teacher-student collaborative assessment task, students are presented with a situational scenario and asked to write down what they would say in the situation (e.g., asking a roommate to turn down TV volume). Students are then prompted to select their intention behind their linguistic choice (e.g., whether they want to make a request in a way most preferred in the community or they want to sound more/less direct than the norm). They are also prompted to reflect on the consequence of their linguistic choice by indicating how their interlocutor might perceive and respond to their behavior. In this way, teachers can stay away from imposing on local norms while still raising students' awareness of normative behaviors in the local

community. Combined with this, teachers can facilitate students' understanding of the local norms from the emic (insider) perspective, teaching cultural meaning, history, and tradition behind the norms (Ishihara, 2019).

Another instructional model that honors learner agency is found in van Compernelle's (2014) study. Under the Vygotskian (1978) sociocultural theory, van Compernelle implemented a pedagogical intervention called concept-based instruction to teach French address forms (*tu/vous*). L2 French learners were introduced to the sociopragmatic concepts of power, social distance, and self-presentation using pictures illustrating two people's relationship and stance to each other. The concepts were mapped onto the pragmalinguistic forms of *tu* and *vous* (e.g., a picture of two people wearing casual outfits talking to each other using *tu*). Then, learners were prompted to verbalize their understanding of the French pronoun distinction (e.g., when they use *tu* and why). A conventional rule-of-thumb is that *tu* is used to express solidarity for someone in a close and equal relationship, while *vous* signals formality and is directed to someone superior and distant. After the instruction, however, the learners developed a more nuanced understanding of the address forms, going beyond the simple, conventional *tu/vous* distinction. The driving force behind this development was the concept of self-presentation, which helped promote learner agency. The learners increasingly verbalized this concept guiding their *tu/vous* choices—how they want to present themselves in the situation. Hence, the learners became aware that *tu/vous* choices are not merely a response to expected social norms. They realized that they can use the address forms strategically as a tool to project certain social meanings (e.g., close or distant, formal or informal).

The exemplary efforts described here illustrate a systematic application of a learner-centered, agency-based approach to pragmatics teaching. These studies suggest that, rather than providing metapragmatic explanations top-down, teachers can develop learners' agency so that they can exercise their choice-making capacity and reflect on their choices. Through this approach, learners understand that different intentions are associated with people's linguistic behaviors and that individuals' intentions are important to consider when learning pragmatics. The self-reliant and reflective nature of this approach can cultivate autonomous learning so that learners can take initiative in their own learning process. The next section presents another example of autonomous, self-regulated learning coming from the literature of learning strategies.

Learner agency in maximizing pragmatics-learning opportunities

Rubin (1975) defined learning strategies as (semi)conscious behaviors that learners deploy to enhance their knowledge and abilities. Since this seminal work, researchers have developed taxonomies of learning strategies in different knowledge and skill domains (e.g., vocabulary learning strategies, reading strategies) (O'Malley & Chamot, 1990; Oxford, 1990, 2011; for a review, see Cohen & Macaro, 2007). Correspondingly, a number of studies have implemented strategy instruction to teach learners how to use learning strategies efficiently, helping them gain autonomy and control over their learning process. Plonsky's (2011) meta-analysis revealed the medium-size effect of 61 strategy instruction studies in the field, indicating that direct teaching of strategies can indeed contribute to language learning. Yet Plonsky's review did not include even a single instructional study on pragmatics learning strategies.

Strategy instruction can help learners apply cognitive and metacognitive strategies to identify, analyze, and reflect on pragmatic phenomena in real-life situations. Cohen (2005) was the first to develop self-directed learning strategies for pragmatics. He presented a set of strategies for learning speech acts (e.g., using a memory aid to remember speech act expressions). Following this, Cohen and Shively (2007) examined the effect of strategy instruction in learning French and Spanish speech acts in study abroad settings. Participants received strategy instruction at pre-departure stage and then went abroad to study the respective language. Cohen and Shively found that students improved their

request and apology strategies after the study abroad period, indicating effects of strategy instruction, along with effects coming from study abroad experience.

More recently, Taguchi et al. (2019) designed and implemented strategy instruction in L2 Chinese and Japanese in a U.S. university. Adopting Oxford's (2011) strategic self-regulation model and Taguchi's (2018) taxonomy, the authors taught learners cognitive and metacognitive strategies for learning pragmatics (e.g., how to pay attention to target pragmatic features and how to monitor their attention and noticing). To illustrate, L2 Chinese learners were taught how to attend to and interpret conversation opening and closing expressions in Chinese. After brainstorming different ways to open and close a conversation, the learners role played scenarios involving different participant relationships (e.g., friends and strangers) and contexts of interaction (e.g., on/off campus). They video-recorded their role plays and analyzed their language use (opening and closing expressions) along with contextual factors. They conducted the same analysis using video clips taken from a Chinese TV show. Finally, they brainstormed Chinese-language resources available in their everyday lives (e.g., media and online resources) and discussed how they could pay attention to openings and closings using these sources. The strategy instruction was followed by a two-week period in which the learners kept a daily journal online recording their everyday experience with conversation opening and closing. Journal entries and follow-up interviews revealed that the learners were able to notice and interpret focal pragmatic features in their everyday resources (e.g., conversations via WeChat, TV shows).

Strategy instruction can help direct learners' attention to pragmatics phenomena in everyday communicative situations and assist their understanding of the phenomena—what contextual elements surround the phenomena and how the phenomena impact interpersonal relationships. By keeping track of their own noticing and observations in journals, learners can monitor and evaluate their own learning process. Cognitive strategies help develop knowledge of form-function-context mappings, while metacognitive strategies promote learner agency—capacity to implement their own choice in terms of what to learn and how to learn so they can cultivate learning opportunities on their own. Self-directed learning strategies can help remedy the problem, often discussed in the literature, of restricted opportunities for pragmatics learning in a formal classroom (for a review, see Tateyama, 2019). Strategy instruction can help bridge the gap between the classroom and real-life context.

Summary and future directions

This chapter surveyed current trends and developments of L2 pragmatics teaching along two foci: *what to teach* and *how to teach*. As I illustrated in the first part of this chapter, the concept of pragmatic competence has expanded greatly over the last three decades. The knowledge of relationship among forms, functions, and contexts of use (pragmalinguistics and sociopragmatics) is the core of pragmatic knowledge, but equally important is the ability to adapt one's linguistics resources to changing interactional contexts to accomplish a communicative act. Another extension of pragmatic competence is that of learner agency. Even if learners possess pragmatic knowledge that underlies community norms, actual implementation of the knowledge reflects learners' subjective decisions. Depending on how they want to present themselves in the community, learners conform to or resist the norms, potentially opting not to use the pragmatic knowledge they possess. These multiple dimensions in the construct inherently add to the complexity of pragmatics teaching. An ideal approach is to incorporate all of these dimensions into instruction.

The second part of the chapter highlighted common instructional methods and materials developed to address each dimension. Knowledge of form-function-context mappings has mainly been taught using explicit and implicit teaching methods that intend to promote learners' noticing and understanding of the mappings. Studies under the skill acquisition paradigm have shown how to

design activities that can convert the initial detection of the mappings to more sustainable knowledge available for fluent performance. Ability to use the knowledge in interaction has been promoted through role play and simulations, which improved greatly with recent technology applications. Virtual reality (VR) technologies, digital games, and CMC environments have provided authentic and contextualized space for pragmatics language use. Finally, scholars have advocated for the importance of assessing learners' needs as well as encouraging them to reflect on their linguistic choices based on their goals and intentions associated with their linguistic choices (i.e., how they want to sound in front of others). In addition, self-directed learning strategies have been taught in several studies to promote learner-centered, agency-based pragmatics learning.

Although these methods and materials are presented separately section by section, it is important to consider how they can be integrated and synthesized in order to maximize learning opportunities across different dimensions of pragmatic competence. To further illustrate an integration of multiple methods and tasks, in the following, I will present two future directions: curriculum-based pragmatics teaching and task-based language teaching for pragmatics.

Curriculum-based pragmatics instruction

One area for further growth is to develop curriculum-based pragmatics teaching. In the majority of existing studies, pragmatics has been taught in isolated units such as speech acts (e.g., request and apology), address terms, formulaic expressions, and discourse markers. This tendency inevitably reinforces a view of pragmatic competence as a constellation of bits of isolated pragmatic features that have to be taught separately from one another. Future researchers can be more creative in identifying an appropriate sequence of pragmatic features to cover in instruction. Such research can help us make connections among pragmatic constructs and envision a more comprehensive curriculum of pragmatics instruction (see Roever, 2022, for an exemplary effort).

There have been a few attempts to produce pragmatics-focused textbooks (for a review, see Tatsuki, 2019). One such example is the coursebook *Heart to Heart: Overcoming Barriers in Cross-Cultural Communication*, authored by Yoshida et al. (2000). This textbook is designed to serve Japanese learners of English who intend to study abroad in the U.S. Textbook chapters focus on raising learners' awareness about potential misunderstandings coming from different speech act strategies between Japanese and English. Another example is *Workplace Talk in Action: An ESOL Resource* (Riddiford & Newton, 2010). This course book is designed for workplace communication training in New Zealand. Chapters present information about small talk and critical speech acts in the workplace, along with communication tips and role-play activities. Recently, a textbook series called *Wide Angles* (2019) has incorporated pragmatics into English teaching. The series has six books corresponding to proficiency levels specified in the Common European Framework of Reference (Council of Europe, 2001). Each textbook chapter is theme-based and aims to develop four skill areas. For example, under the theme of 'interaction', students read a text about facial expressions, practice speaking to show interest to others' talk, and write informal e-mails. The last section of the unit, 'functional language skill', is dedicated to pragmatics. Students learn and practice how to start and end a conversation using a variety of formal and informal expressions. In this textbook series, pragmatics is situated as part of the overall theme, cutting across four skill areas and introduced systematically according to proficiency levels.

Although a few examples like these exist, an attempt to teach pragmatics systematically at the curriculum-level is still extremely limited and calls for future effort. To develop pragmatics-focused curricula, teachers can follow material development principles and practices in language pedagogy in general (Tatsuki, 2019). They can assess learners' pragmatics needs (e.g., what kinds of pragmatic knowledge and abilities are important), identify target features to teach by analyzing samples of authentic language use, and plan learning components and phases accordingly (e.g., what kind of

input and interaction opportunities to provide). Critically, these phases can be sequenced along a progression according to learners' proficiency levels.

Task-based language teaching applied to teaching pragmatics

Another approach for the curriculum-level pragmatics teaching is found in task-based language teaching (TBLT). TBLT is a pedagogical approach that uses tasks as a unit of instruction. Nunan (2014) laid out five principles of TBLT: (1) documenting learner needs for course development; (2) setting goals for developing learners' communication ability; (3) connecting learners' personal experiences with learning; (4) focusing on learning processes and strategies; and (5) developing authentic tasks that reflect real-world language use. A primary component of TBLT is designing pedagogical tasks. Ellis and Shintani (2014) present four criteria for task design (p. 135):

- (1) The primary focus should be on meaning.
- (2) There should be some kind of gap (i.e., a need to convey information to express an opinion or to infer meaning).
- (3) Learners should largely rely on their own linguistic and non-linguistic resources to complete the activity, with some help from the task input.
- (4) There should be a clearly defined outcome other than the use of language.

In TBLT, tasks have served as design units of a curriculum and as resources for learning. Because tasks are meant to promote learners' engagement with meaningful language use (Ellis & Shintani, 2014), needs analysis is considered the critical starting point when designing task-based curricula. After identifying target tasks based on learners' needs, teachers can categorize tasks according to their types and sequence them to develop a syllabus. They can also evaluate learners' task performance as learning outcomes (Norris, 2009).

TBLT can serve as a useful approach to teaching pragmatics. Tasks are central for pragmatics learning because they provoke socially situated language use with real-world communicative needs. In order to achieve real-life goals (e.g., refusing someone's invitation while saving his/her face), learners need to use their pragmatic knowledge and interaction abilities, which are congruent with the basic tenets of TBLT (e.g., meaningful interactions, non-linguistic task outcomes). However, existing instructional studies in L2 pragmatics are hardly task-based (Taguchi & Kim, 2018). Many studies have designed instructional activities without needs analysis or relevance to real-world language use. Those instructional activities often do not meet the requirements of a task established in the TBLT literature as they do not involve authentic, goal-oriented outcomes.

Recently some effort has been made to bring pragmatics more closely into the TBLT paradigm (e.g., Kim & Taguchi, 2015; Tang, 2020; for a review, see González-Lloret, 2019b; Taguchi & Kim, 2018). Empirical studies in Taguchi and Kim's (2018) volume adapted various TBLT-oriented perspectives to pragmatics teaching and assessment. Some studies documented interaction-driven learning opportunities arising from pedagogical tasks. Other studies examined how pragmatics learning is affected by various factors such as task modality, task sequencing, and individual learner characteristics. Critically, these studies defined and operationalized their tasks based on the characteristics of a task coming from the TBLT literature.

Certainly, more effort is to be seen in this direction (see Kim & Taguchi, 2022). The TBLT principles could help teachers design authentic tasks (and eventually a syllabus) that promote the use of language in meaningful social contexts. Because pragmatic knowledge has the potential for great interpersonal consequences, the authentic community has to be configured into task design in instruction. Needs-based tasks that simulate real-life communication can help develop not only the

knowledge of form–function–context mappings, but also interaction abilities and learner agency in using the knowledge for real-life consequences.

References

- Anderson, J. R. (1993). *Rules of the mind*. Hillsdale, NJ: Lawrence Erlbaum Associations.
- Anderson, J. R., Bothell, D., Byrne, M. D., Douglass, S., Lebiere, C., & Qin, Y. (2004). An integrated theory of the mind, *Psychological Review*, 111, 1036–1060.
- Bachman, L. F. & Palmer, A. S. (1996). *Language testing in practice: Designing and developing useful language tests*. Oxford: Oxford University Press.
- Bardovi-Harlig, K. & Mahan-Taylor, R. (2003). *Teaching pragmatics*. Washington, DC: Office of English Programs, U.S. Department of State.
- Belz, J. A. & Vyatkina, N. (2005). Learner corpus analysis and the development of L2 pragmatic competence in networked intercultural language study: The case of German modal particles. *The Canadian Modern Language Review*, 62, 17–48.
- Brick, B., Cevi-Wilson, T., Graham, S., Tsankov, T., Louizou, M., Godson, N., & Ryan, K. (2019). Multilingual immersive communication technology: Repurposing virtual reality for Italian teaching. In A. Plutino, K. Borthwick, & E. Corradini (Eds.), *New educational landscapes: Innovative Perspectives in language learning and technology* (pp. 5–10). Research-publishing.net.
- Brown, L. (2013). Identity and honorifics use in Korean study abroad. In C. Kinginger (Ed.), *Social and cultural aspects of language learning in study abroad* (pp. 269–298). Amsterdam/New York: John Benjamins.
- Canale, M. & Swain, M. (1980). Theoretical aspects of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1, 1–47.
- Cohen, A. & Shively, R. (2007). Acquisition of requests and apologies in Spanish and French: Impact of study abroad and strategy-building intervention. *The Modern Language Journal*, 91, 189–212.
- Cohen, A. D. (2005). Strategies for learning and performing L2 speech acts. *Intercultural Pragmatics*, 2, 275–301.
- Cohen, A. D. & Macaro, E. (2007). *Language learner strategies: Thirty years of research and practice*. Oxford: Oxford University Press.
- Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment*. Cambridge: Cambridge University Press.
- Cunningham, D. J. (2019). *L2 pragmatics learning in computer-mediated communication*. In N. Taguchi (Ed.), *The Routledge handbook of second language acquisition and pragmatics* (pp. 372–386). New York: Routledge.
- Cunningham, J. (2016). Request modification in synchronous computer-mediated communication: The role of focused instruction. *Modern Language Journal*, 100, 484–507.
- DeKeyser, R. (2007). *Practice in a second language: Perspectives from applied linguistics and cognitive psychology*. Cambridge: Cambridge University Press.
- DiPietro, R. J. (1987). *Strategic interaction: Learning languages through scenarios*. New York: Cambridge University Press.
- Ellis, R. & Shintani, N. (2014). *Exploring language pedagogy through second language acquisition research*. London: Routledge.
- Eslami, Z. R., Mirzaei, A., & Dini, S. (2015). The role of asynchronous computer mediated communication in the instruction and development of EFL learners' pragmatic competence. *System*, 48, 99–111.
- Gonzales, A. (2013). Development of politeness strategies in participatory online environments. In N. Taguchi & J. Sykes (Eds.), *Technology in interlanguage pragmatics research and teaching* (pp. 101–120). Amsterdam/Philadelphia: John Benjamins.
- González-Lloret, M. (2019a). Technology and L2 pragmatics learning. *Annual Review of Applied Linguistics*, 39, 113–127.
- González-Lloret, M. (2019b). Task-based language teaching and L2 pragmatics. In N. Taguchi (Ed.), *Routledge handbook of SLA and pragmatics* (pp. 338–352). New York: Routledge.
- Harlig, J. C. Felix-Brasdefer, & A. S. Omar (Eds.), (n.d.) *Pragmatics and language learning, Vol. 11* (pp. 281–314). Honolulu, HI: University of Hawai'i at Manoa National Foreign Language Resource Center.
- Holden, C. & Sykes, J. M. (2013). Complex L2 pragmatic feedback via place-based mobile games. In N. Taguchi & J. M. Sykes (Eds.), *Technology in interlanguage pragmatics research and teaching* (pp. 155–184). Amsterdam/Philadelphia: John Benjamins.
- Hymes, D. H. (1972). On communicative competence. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269–293). Baltimore, USA: Penguin Books Ltd.

- Ishihara, N. (2010). Assessing learners' pragmatic ability in the classroom. In D. Tatsuki & N. Houck (Eds.), *Pragmatics: Teaching speech acts* (pp. 209–227). Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Ishihara, N. (2019). Identity and agency in L2 pragmatics. In N. Taguchi (Ed.), *Routledge handbook of SLA and pragmatics* (pp. 161–175). New York: Routledge.
- Ishihara, N. & Cohen, A. (2010). *Teaching and learning pragmatics: Where language and culture meet*. Harlow, UK: Pearson Longman.
- Ishihara, N. & Tarone, E. (2009). Subjectivity and pragmatic choice in L2 Japanese: Emulating and resisting pragmatic norms. In N. Taguchi (Ed.), *Pragmatic competence in Japanese as a second language* (pp. 101–128). Berlin: Mouton de Gruyter.
- Johnson, N. & deHaan, J. (2013). Strategic Interaction 2.0: Instructed intercultural pragmatics in and EFL context. *International Journal of Strategies Information Technology and Application*, 4, 49–62.
- Kaplan-Rakowski, R. & Wojdyski, T. (2018). Students' attitudes toward high-immersion virtual reality assisted language learning. In P. Taalas, J. Jalkanen, L. Bradley, & S. Thoučenský (Eds.), *Future-proof CALL: language learning as exploration and encounters* (pp. 124–129). Research-publishing.net.
- Kasper, G. (2001). Classroom research on interlanguage pragmatics. In K. Rose & G. Kasper (Eds.), *Pragmatics in language teaching* (pp. 33–62). Cambridge: Cambridge University Press.
- Kasper, G. (2006). Speech acts in interaction: Towards discursive pragmatics. In K. Bardovi
- Kasper, G. & Dahl, M. (1991). Research methods in interlanguage pragmatics. *Studies in Second Language Acquisition*, 13, 215–247.
- Kasper, G. & Rose, K. (1999). Pragmatics and SLA. *Annual Review of Applied Linguistics*, 19, 81–104.
- Kasper, G. & Rose, K. (2002). *Pragmatic development in a second language*. Oxford: Blackwell.
- Kim, Y. & Taguchi, N. (2015). Promoting task-based pragmatics instruction in EFL classroom context: The role of task complexity. *Modern Language Journal*, 99, 656–677.
- Kim, Y. & Taguchi, N. (2022). Task-based interaction and learning in L2 pragmatics. Invited colloquium. International Conference on Task-based Language Teaching. Innsbruck, Austria. August, 2022.
- Lan, Y. J. (2020). Immersion, interaction, and experience-oriented learning: Bringing virtual reality into FL learning. *Language Learning & Technology*, 24, 1–5.
- Li, Q. (2019). L2 Chinese learners' pragmatic developmental patterns in data-driven instruction and computer-mediated communication (CMC): A case of Chinese sentence final particle *ne*. *Applied Pragmatics*, 1, 154–183.
- Li, S. (2012). The effects of input-based practice on pragmatic development of requests in L2 Chinese. *Language Learning*, 62, 403–438.
- Li, S. (2013). Amount of practice in pragmatic development of request-making in L2 Chinese. In N. Taguchi & J. M. Sykes (Eds.), *Technology in interlanguage pragmatics research and teaching* (pp. 43–70). Amsterdam/Philadelphia: John Benjamins.
- LoCastro, V. (2003). *An introduction to pragmatics: Social action for language teachers*. Ann Arbor, MI: University of Michigan Press.
- Maa, J. & Taguchi, N. (2022). Using L2 interactional-pragmatic resources in CMC: A case of Japanese emoji and orthography. *Language Teaching Research*.
- Nguyen, T. T. M. (2019). Data collection methods in L2 pragmatics research: An overview. In N. Taguchi (Ed.), *The Routledge handbook of SLA and pragmatics* (pp. 195–211). New York: Routledge.
- Norris, J. M. (2009). Task-based teaching and testing. In M. H. Long & C. J. Doughty (Eds.), *The handbook of language teaching* (pp. 578–594). Malden, MA: Wiley-Blackwell.
- Nunan, D. (2014). Task-based teaching and learning. In C. Murcia, D. M. Brinton, & A. M. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 455–470). Boston: National Geographic Learning.
- O'Malley, M. & Chamot, A. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- Oxford, R. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle and Heinle.
- Oxford, R. (2011). *Teaching and researching language learning strategies*. Harlow, England: Person Education.
- Plonsky, L. (2011). The effectiveness of second language strategy instruction: A meta-analysis. *Language Learning*, 61, 993–1038.
- Plonsky, L. & Zhuang, J. (2019). A meta-analysis of second language pragmatics instruction. In N. Taguchi (Ed.), *Routledge handbook of SLA and pragmatics* (pp. 287–307). New York: Routledge.
- Riddiford, N. & Newton, J. (2010). *Workplace talk in action: An ESOL resource*. Wellington: Wellington School of Linguistics and Applied Language Studies, Victoria University of Wellington.
- Roever, C. (2022). *Teaching and assessing second language pragmatics and interaction*. Routledge.
- Rubin, J. (1975). What the “good language learner” can teach us. *TESOL Quarterly*, 9, 41–51.

- Schmidt, R. (1993). Consciousness, learning and interlanguage pragmatics. In G. Kasper & S. Blum-Kulka (Eds.), *Interlanguage pragmatics* (pp. 21–42). New York: Oxford University Press.
- Sykes, J. M. (2013). Multiuser virtual environments: Apologies in Spanish. In N. Taguchi & J. M. Sykes (Eds.), *Technology in interlanguage pragmatics research and teaching* (pp. 71–100). Amsterdam/Philadelphia, John Benjamins.
- Taguchi, N. (2015). Instructed pragmatics at a glance: Where instructional studies were, are, and should be going. State-of-the-art article. *Language Teaching*, 48, 1–50.
- Taguchi, N. (2018). Pragmatic competence in foreign language education: Cultivating learner autonomy and strategic learning of pragmatics. In C. Bourguignon, D. Chan, M. Nagami, & I. Walker (Eds.), *Knowledge, skills and competencies in foreign language education*. Singapore: National University of Singapore Center for Language Studies.
- Taguchi, N. (2019). *The Routledge handbook of second language acquisition and pragmatics*. New York: Routledge.
- Taguchi, N. (2022a). Immersive virtual reality for pragmatics task development. *TESOL Quarterly*, 56(1), 308–335.
- Taguchi, N. (2022b). Dispreferred speech acts in virtual reality: Analysis of tone choices and hesitations. *System*, 106.
- Taguchi, N. & Kim, Y. (2018). *Task-based approaches to teaching and assessing pragmatics*. Amsterdam/Philadelphia: John Benjamins.
- Taguchi, N. & Roever, C. (2017). *Second language pragmatics*. New York: Oxford University Press.
- Taguchi, N., Tang, X., & Maa, J. (2019). Learning how to learn pragmatics: Application of self-directed strategies to pragmatics learning in L2 Chinese and Japanese. *East Asian Pragmatics*, 4, 11–36.
- Takahashi, S. (2010). Assessing learnability in second language pragmatics. In A. Trosborg (Ed.), *Handbook of pragmatics vol. 7* (pp. 391–421). Berlin: Mouton de Gruyter.
- Tang, X. (2020). Task-based interactional sequences in different modalities: A comparison between computer-mediated written chat and face-to-face oral chat. *Applied Pragmatics*, 2.
- Tang, X. & Taguchi, N. (2020). Designing and using a scenario-based digital game to teach Chinese formulaic expressions. *CALICO Journal*, 37, 1–22.
- Tang, X. & Taguchi, N. (2021). Digital game-based learning of formulaic expressions in L2 Chinese. *Modern Language Journal*, 105, 740–759.
- Tateyama, Y. (2019). Pragmatics in a language classroom. In N. Taguchi (Ed.), *The Routledge handbook of SLA and pragmatics* (pp. 400–412). New York: Routledge.
- Tatsuki, D. (2019). Instructional material development in L2 pragmatics. In N. Taguchi (Ed.), *Routledge handbook of SLA and pragmatics* (pp. 322–377). New York: Routledge.
- Tatsuki, D. & Houck, N. (2010). *Speech acts and beyond: New directions in pragmatics*. Alexandria, VA: TESOL.
- Thomas, J. (1983). Cross-cultural pragmatic failure. *Applied Linguistics*, 4, 91–111.
- Tsai, M. H. & Kinginger, C. (2015). Giving and receiving advice in computer-mediated peer response activities. *CALICO Journal*, 32, 82–112.
- van Compernelle, R. A. (2014). *Sociocultural theory and instructed L2 pragmatics*. Bristol/New York: Multilingual Matters.
- Vilar-Beltrán, E. & Melchor-Couto, S. (2013). Refusing in second life. *Utrecht studies in language and communication*, 25, 23–40.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wide Angle: English for the real world (2019). Oxford: Oxford University Press.
- Yoshida, K., Kamiya, M., Kondo, S., & Tokiwa, R. (2000). *Heart to heart: Overcoming barriers in cross-cultural communication*. Tokyo: Macmillan Language House.
- Young, R. (2011). Interactional competence in language learning, teaching, and testing. In H. Hinkel (Ed.), *Handbook of research in language learning and teaching* (pp. 426–443). New York: Routledge.
- Zhang, D. (2014). More than “hello” and “bye-bye”: Opening and closing the online chats in Mandarin Chinese. *Computer Assisted Language Learning*, 27, 528–544.

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