Lexis Integrated Into the Curriculum: Key to Enhance Communicative Competence in English

El léxico integrado en el currículo: clave para mejorar la competencia comunicativa en inglés

Keiby Caro

Universidad del Atlántico & Universidad del Norte, Barranquilla, Colombia

Nayibe Rosado-Mendinueta

Universidad del Norte, Barranquilla, Colombia

Teaching and learning lexis is a challenge for EFL teachers and learners. Selecting the lexical items from an extensive corpus can be difficult for teachers. For learners, it can be overwhelming to learn all these lexical items. Curricula that integrate the lexical tenets and provide guidelines on instructing lexis should be more frequent. A curriculum and a syllabus that incorporate and enable this challenging task can be beneficial. This article of reflection discusses the number of word families and some Colombian government educational policies, while advocating for the integration of explicit lexical tenets into the curriculum to aid learners in developing sound lexical competence and thereby enhancing communicative competence.

Keywords: curriculum, English as a foreign language, lexical competence, lexis, teaching

La enseñanza y el aprendizaje del léxico constituyen desafíos para profesores y estudiantes de inglés como lengua extranjera. Seleccionar los ítems lexicales de un corpus extenso puede ser difícil para los profesores. Para los estudiantes, puede ser abrumador aprender estos ítems lexicales. Los currículos que integran principios léxicos y proporcionan lineamientos sobre cómo enseñarlos son poco frecuentes. Un currículo y un programa que incorporen y faciliten esta tarea retadora pueden ser beneficiosos. Este artículo de reflexión discute el número de familias de palabras y algunas políticas educativas gubernamentales al abogar por la integración de principios léxicos en el currículo para ayudar a los estudiantes a desarrollar una competencia léxica sólida y por ende fortalecer su competencia comunicativa.

Palabras clave: aprendizaje, competencia lexical, currículo, enseñanza, léxico

Keiby Caro ⬤ https://orcid.org/0000-0002-4349-2506 • Email: keibycaro@mail.uniatlantico.edu.co
Nayibe Rosado-Mendinueta ⬤ https://orcid.org/0000-0003-1865-2464 • Email: nrosado@uninorte.edu.co

Introduction

Recent scholarship in foreign language lexis has shown that language teachers should incorporate the different aspects of lexical knowledge into a well-balanced curriculum. This incorporation can contribute to developing learners' lexical competence (Kazhan et al., 2020), which in turn can strengthen their general communicative competence (Susanto, 2017). Academic experts recognize that lexis is one of the most essential language components that can pave the way to academic success (Schuth et al., 2017). For Wilkins (1972), "while without grammar little can be expressed, without vocabulary, nothing can be expressed" (p. 25).

Despite the relevance of lexis for effective communication, its curricular integration and teaching are far from what scholarship in the field suggests. In this regard, Asyiah (2017) asserts that unawareness may also be influencing this lack of integration, as well as strategy-oriented teaching. In some cases, integration limits itself to a list of lexical items related to a theme. There needs to be more reflection concerning the role of the curriculum in structuring the learning and teaching of lexis. As stated by Echeverri-Sucerquia and Quinchia Monroy (2016), a curriculum in general must extend beyond the learning of some limiting, prescribed content that may or may not relate to the students' reality.

Echeverri-Sucerquia and Quinchia Monroy (2016) also explain that some curriculum designers have yet to make progress in the area of English as a foreign language (EFL), aside from declaring the intention behind a quality program. The general research-based evidence demonstrates that although EFL learners receive several hours of instruction, many still need to reach the expected proficiency levels. Two examples of this phenomenon are high school *Calendario A*[1] learners in Colombia—where 75% are placed in the lowest English performance levels (Instituto Colombiano para

la Evaluación de la Educación, 2022)—as well as some learners in the Arab world (Elttayef & Hussein, 2017). These figures are a call for educational institutions to review their foreign language educational processes and incorporate lexical instruction explicitly into the curriculum, allowing language teachers to use it systematically and intentionally.

According to the Education First (2023) report, which measures English proficiency worldwide, Colombia is ranked 75th out of 113 countries in the low proficiency category. This suggests the need to foster communicative competence in EFL. As mentioned earlier, lexis development is pivotal for this purpose, and teachers should emphasize its instruction systematically. In line with this, research on lexis teaching has demonstrated a strong link between this component and other aspects of lexis learning (Qian, 2005; Rosado & Caro, 2018). By incorporating this component in the curricular planning, teachers can keep it in mind, and learners can improve their lexical competence and learn to communicate more effectively.

Some scholars attribute the underdevelopment of the lexical component to a technical approach to the curriculum, which focuses on developing observable linguistic skills without considering instructional contexts (Apple, 1993). To break with this technical view, reconceptualist scholars (Pinar et al., 1995) and critical pedagogues (Cummins, 2000) recommend incorporating the context where the instruction occurs: the macro, which includes educational and linguistic policies; the meso, which implies the contexts of language use; and the micro, where learners and teachers interact. Thus, incorporation could transcend towards a more participatory and critical curriculum, making learning more significant because knowledge easily connects to learners' acquisition.

Overlooking lexis within the curriculum replicates itself in many educational contexts worldwide. It happens in the Saudi (Alqahtani, 2015) and Malaysian contexts (Sidek & Rahima, 2015). The tendency is to teach lexis

---

1 These are schools whose academic activities start in February and end in November.

based chiefly on what the coursebook proposes, without modification (Geoff & Humphrey, 2019; McGrath, 2013; Rathert & Cabaroğlu, 2021), even if the coursebook fails to cover the most frequent lexical items necessary for learners to reach optimal levels of lexical competence (Lipinski, 2010).

This article discusses the importance of integrating lexis into the curriculum as a critical factor in strengthening lexical competence and, thus, communicative competence in EFL. It begins with a brief compilation of key facts and figures on the relevance of lexis size to learners' successful communication. It continues with the proposal to integrate some lexical tenets into the curriculum for lexis consolidation. For illustration purposes, we review the current state of the suggested English curriculum for Colombia, focusing on both relevant aspects and areas for improvement in the lexical component.

Quantity Counts for Lexis Learning

Learning a foreign language presupposes not only facing a new linguistic code (grammar, lexis, spelling, pronunciation) but also a cultural one. Such a process represents a cognitively challenging task for learners. Lexis learning is also a complex and progressive process that requires persistence, discipline, and commitment. This ongoing process continues to develop throughout a lifetime and has an idiosyncratic nature. According to lexical researchers, the amount of lexis a learner manages is crucial to succeeding in learning a foreign language and to communicating effectively in that language.

According to estimations from academic studies, English has roughly 114,000 word families (Goulden et al., 1990). A word family[2] corresponds to all the inflected and derivative forms (Bauer & Nation, 1993) that can be achieved with a word and that, therefore,

share a common meaning. A figure of 114,000 word families is daunting. The number of word families significantly exceeds the lexis size of a native speaker with a complete formal education, which is estimated to be between 10,000 and 20,000 word families. The number increases by over 1,000 word families annually until around the age of 20 (Nation, 2006). This figure contrasts with that of an English language learner, who cannot experience the same lexical growth due to the contextual situation (Webb & Chang, 2012). These figures suggest that the lexis learning burden is quite challenging for non-native learners.

Likewise, Schmitt and Schmitt (2020) estimated that with the knowledge of the 2,000–3,000 most frequent word families in English is possible to understand everyday conversation, but if learners want to engage with a wider range of listening contexts or authentic reading texts, they require knowledge of approximately 6,000–9,000 word families. Given these figures, it is crucial for teachers to integrate this information into the curriculum to ensure learners can learn a substantial number of lexical items, enabling them to effectively function in English.

In native English teaching contexts, teachers can typically teach 300–500 words per year, which translates to an average of 8–10 words per week (Chall, 1996). In the case of foreign language contexts, the average teaching of words can reach 50 per week, provided the instruction is between 3 and 5 hours per week. Language teachers should not only consider the teaching of lexis but also ensure that the conditions for spaced recycling are in place so that the target lexis is remembered (Freed & Karpicke, 2016). This way, the cognitive processes of learning, retention, and recovery can occur, contributing to the flattening of the forgetting curve. In this respect, Schmitt (2010) states, "it seems that, when learning new information, most forgetting occurs shortly after the end of the learning session" (p. 34). This author highlights the importance of recycling for effective lexis learning as an integral tenet of any EFL course.

---

2   For instance, the word family of "happy" includes (a) three inflected forms—happier, happiest, and unhappy—and (b) two derived forms—happily and happiness.

Experts recommend spaced recycling, as lexis learning is a cumulative process whereby learners deepen their lexical knowledge by encountering the learned lexical items in different instances.

It is worth stressing that lexis size is an indicator of success in reading comprehension. Lexis is so pivotal that some studies in reading comprehension and vocabulary have evidenced the reading difficulties many learners experience due to lexis limitations (Rosado & Caro, 2018). Bearing this in mind, educational systems in some countries have adjusted their methods to teach reading comprehension more effectively, with relevant actions focusing on lexis. For instance, in the National Curriculum for Primary Education in England (Department for Education, 2013), the board of directors made some fundamental changes, such as placing greater emphasis on lexical development. Likewise, the National Reading Panel (2000) conducted studies in eight main areas, including lexis, and concluded that teachers should instruct it systematically.

In brief, lexis is essential for learning a language, whether native or foreign, and learning lexis connotes a demanding cognitive load due to the number of word families that learners should acquire. Despite the awareness of the importance of lexis learning, many language teachers do not work on it systematically (En-nda & Koumachi, 2022) and rely primarily on what the coursebook offers (Dang & Webb, 2020). For this reason, when designing curricula, teachers should include lexis to instruct it systematically and intentionally, thus guaranteeing its learning and contributing to the development of a sound communicative competence.

Lexis as an Integral Part of a Curriculum and Syllabus

In this article, we favor using the term lexis over vocabulary. We made this choice because lexis encompasses more elements than vocabulary. While vocabulary refers to the group of words that a person recognizes or uses, lexis is the entire inventory of words in a language and includes elements such as idioms, phrasal verbs, collocations, lexical bundles, and phrasal expressions (Kolanchery, 2014; Moudraia, 2001).

Likewise, it is essential to differentiate between curriculum and syllabus. In some cases, language teachers use them interchangeably, distorting the connotation of each one. Núñez París (2008) differentiates these two terms: As long as the curriculum covers the entirety of the program, that is, the "what" is going to be taught, the syllabus seeks the process; that is, the "how" and "who" (p. 3). This terminological confusion and the lack of knowledge about theory and curriculum development evince that some EFL or English for speakers of other languages programs do not define their curriculum but only describe a program, a subject plan, objectives, and goals (Cullinan, 2016). In these programs, curriculum designers do not provide brief details or descriptions of the lexical view, lexis selection, and guidelines for teaching it.

The distinction between curriculum and syllabus reduces confusion and facilitates the integration of the lexical component in each of them. This integration is necessary to achieve a systematized work on lexis learning and teaching, which contributes to developing learners' general communicative competence. It is essential to include the selected research-based theories related to recycling, mental processing activities, techniques and methods, management of formulaic language, lexis learning strategies, aspects of lexical knowledge, handling extensive reading and extensive listening activities, assessment, and testing. The syllabus should reflect how each of these lexical tenets will be implemented through informed decision-making. Specifically, each unit or lesson should embody the four-strands approach (Nation & Yamamoto, 2012) with activities for each target list, assessment activities, and at least one test at the end of each unit or lesson. These decisions can be either core to the language program or just a complement within it.

Next, we provide an overview of the frameworks that shape English teaching in Colombia, the Colombian EFL suggested curriculum, and the suggested tenets for lexis integration within a curriculum.

What Frames the Teaching of English in Colombia?

The 1991 Political Constitution of Colombia laid the foundations of a new legal and educational order. Articles 67, 68, and 69 constitutionalize the curricular processes for the first time. In 1994, the Colombian Congress enacted the General Education Act, which regulates the curricular process. Five years later, the Ministry of National Education (MEN, for its acronym in Spanish) published the curricular guidelines in foreign languages (MEN, 1999), which guided the pedagogical component within the curricular design for basic education (primary and secondary) and high school. In 2006, the MEN published the EFL basic competence standards, which guided the development of the English curriculum for basic education (primary and secondary) and high school. These standards are a local adaptation of the guidelines published by the Common European Framework of Reference for Languages (CEFR).

Coherently, the MEN incorporates the levels of linguistic competence proposed by the CEFR into the National Bilingualism Program 2015–2025 (MEN, n.d.). This program introduced strategies and actions aimed at improving the levels of communicative competence in the English language. According to the MEN, high school students should achieve Level B1; higher education students, Level B2; and those completing foreign language teaching degrees, Level C1. These advocated levels presuppose systematized work where teachers should integrate a robust lexical component that contributes to this requirement. Similarly, the MEN suggests that educational institutions in the country should consider the minimum exposure of teaching hours so that learners can reach the different levels of communicative competence proposed by the national standards.

To address the aforementioned situation, it is necessary to consider both data-driven and theory-driven perspectives on lexis. The data-driven approach relies on empirical data collected from real-world language use, involving the analysis of actual language input—such as corpora or learner data—to identify patterns and trends in lexis usage. In contrast, the theory-driven perspective is based on established linguistic theories and principles, utilizing theoretical frameworks to guide lexical instruction and curriculum design.

Some studies have explored the intersection of data-driven and theory-driven perspectives in lexis research. Cusen and Buja (2009) stress the impact of these perspectives on the research process, while Moody et al. (2018) identify a combination of theories that guide lexis instruction strategies. Shaw (2011) illustrates a practical application of data-driven learning methods in lexis teaching, mainly through corpora. Data-driven planning entails identifying goals and needs through diagnostic tests and surveys, as well as selecting lexical type and frequency. From a theory-driven perspective, teachers could implement a lexical approach to support the process. For instance, we favor the four-strands approach (Nation & Yamamoto, 2012), which emphasizes the importance of incorporating meaning-focused input and output, language-focused learning, and fluency development to foster the two primary conditions for lexis learning: the quantity of repetition and the quality of mental processing.

Additionally, teachers should assess and test the learners' lexical progress. From a theory-driven perspective, this implies that teachers have developed language assessment literacy, which encompasses the knowledge, skills, and principles necessary for contextualized language assessment (Giraldo, 2018; Giraldo et al., 2023; Gutiérrez-Rojas & Rosado-Mendinueta, 2024).

Lexis in the Suggested English Curriculum

The curriculum construction process requires considering the context's needs and problems to design an effective and coherent curricular project. The MEN has been doing this to improve the processes. Recognizing the importance of English in the global context, the MEN took a significant step forward within the National Development Plan 2014–2018 (Departamento Nacional de Planeación, 2015).

Through the "Colombia Bilingüe" program, the MEN designed the suggested English curriculum (SEC) and accompanying pedagogical guidelines and principles (MEN, 2016) for public schools targeted at secondary (Grades 6 to 9) and high school (Grades 10 to 11) education. In the SEC, the expectation is for it "to ensure equitable access to education, promoting meaningful learning opportunities that strengthen the holistic development of students, adapting to their diverse contexts and needs" (Bailey et al., 2018, p. 91).

The curriculum document comprises a detailed study plan by grade level, an outlined table with the scope and sequence, along with pedagogical and evaluative recommendations and directives for different stakeholders, such as educators, local educational entities, and parents (Pérez et al., 2019). It also contains a set of basic learning rights, which refer to the primary knowledge learners need to learn in each grade. It is a flexible and adaptable curriculum.

However, upon closer examination of the lexical component within the SEC and the pedagogical guidelines and principles, we found that they need to detail the role of lexis, that is, how it contributes to forming learners' communicative competence. Within the SEC's curricular grids or syllabi, there is a list of lexical items corresponding to the subject to teach overall.

Moreover, these curricular documents do not refer to word families or suggest procedures to assess lexical competence. They do not include lexis learning strategies, which allow learners to become autonomous.

There is no didactic sequence, procedure, or model to guide teachers in instructing lexis. The documents leave a significant gap in guiding teachers on how to foster lexical competence among learners.

Therefore, it is imperative that teachers prioritize the development of lexical competence in their instruction. This preparation is a pivotal element when targeting lexis. Lexical competence comprises three aspects: lexical skills, lexical awareness, and lexical knowledge, the latter being fundamental to achieving higher levels of mastery. Caro and Rosado-Mendinueta (2017) define "lexical competence as an accumulation of knowledge (forms, meaning, and use), abilities, and skills that a person develops and displays in different communication contexts" (p. 207). By integrating these elements into the curriculum, teachers can ensure a balanced development of communicative skills.

Considerations for the Integration of Lexis Into the Curriculum

Curriculum theory presents three perspectives on curriculum design: technical, practical, and critical. Initially, the technical view positions teachers as implementers of externally developed theories, bringing preformulated educational concepts into the classroom. Transitioning from theory to practice, the practical perspective shifts the focus, advocating for teachers to engage directly with curriculum theorizing. This approach champions education as an emancipatory process, empowering subjects with the autonomy to make choices.

Evolving further, the critical view expands the circle of curriculum development to include teachers and experts and encourages a collaborative effort among all stakeholders. This collective approach to curriculum design promises enhanced outcomes in both learning and teaching lexis, emphasizing the value of a shared vision.

In this vein, the Curricular Expedition document by the Secretaría de Educación de Medellín (2014) under-

scores the need to develop a foreign language curriculum that fosters communicative competence. The document articulates a vision of English language learning that transcends mere linguistic proficiency, advocating for its use as a tool for cultural exchange and expression. The authors stress that EFL should be seen as a means to exchange knowledge, express opinions, and identify or not with the foreign language and with the linguistic and cultural behavior of the places where it is used as a means of communication (Secretaría de Educación de Medellín, 2014). To realize such ambitious objectives, it is essential to incorporate a framework that supports learners' autonomy and awareness of their learning journey. This framework offers a holistic view of language learning that appreciates both the linguistic component and the cultural nuances inherent in language use.

Building on this foundation, we propose a dynamic, processual approach to curriculum design. This methodology encompasses planning, design, implementation, and evaluation, considering principles, needs, environment, and objectives.

Furthermore, Nation and Macalister (2010) propose integrating 20 principles into language and lexis learning, which should permeate every aspect of the curriculum. These principles are categorized into content and sequence, format and presentation, and monitoring and evaluation. The content and sequence focus on systematically introducing lexis based on frequency, strategies, spaced recovery, and teachability. The format and presentation emphasize engaging methods such as motivation, comprehensible input, meaningful output, and fluency development. Monitoring and evaluation stress continuous needs analysis and feedback to ensure effective instruction (Table 1).

A critical curriculum for foreign languages "is an attempt to communicate the essential principles of an educational proposal in such a way that it is open to critical scrutiny and can be effectively translated into practice" (Stenhouse, 1986, p. 29). Such a curriculum is functional when it includes the design of systematic and continuous activities. Also, it helps to improve processes and involves the participation of all actors in the educational process.

Table 1. Principles for Teaching and Learning Languages and Lexis

Content and sequence	Format and presentation	Monitoring and evaluation
1. Frequency	1. Motivation	1. Analysis of continuous needs and the environment
2. Strategies and autonomy	2. Four strands: - Input focused on meaning - Output focused on meaning - Language-focused learning - Fluency development	2. Feedback
3. Spaced recovery	3. Understandable input	
4. Language system	4. Fluency	
5. Progressive coverage	5. Output	
6. Teachability	6. Deliberate learning	
7. Load of learning	7. Time on task	
8. Interference	8. Depth of processing	
	9. Integrative motivation	
	10. Learning style	

Note. Adapted from *Language Curriculum Design*, by P. Nation & J. Macalister, 2010, pp. 38–39 (https://doi.org/10.4324/9780203870730). Copyright 2010 by Taylor & Francis.

In this sense, a curriculum for EFL should consider the following tenets: the philosophical component (development of cognitive processes, appropriate experiences according to age, social importance of learning, academic rationalism, and the use of technologies); the conceptualization of the objectives, contents, instruction, and evaluation; and the systematic development of the curriculum, its implementation in situ, and its evaluation (Bailey et al., 2018). By considering a curricular process, stakeholders should frame it within "a planned action with certain goals and means to achieve them" (Stern, 1983, p. 501).

Below are the tenets that should be an integral part of a curriculum promoting the learning and teaching of lexis to boost lexical competence. These tenets align with the views expressed by Siyanova-Chanturia and Webb (2016), who assert that although learning in an EFL setting can present some deficiencies, course planning and delivery should be regarded as vital aspects. As observed, there exists a gap, and we aim to bridge it by integrating lexical tenets stemming from relevant literature reviews on lexis, as well as the experience gained in various educational contexts:

1. The training of lexis learning strategies in class. Nie and Zhou (2017) define this type of strategy of using lexis learning strategies as "the methods and techniques used by students for the purpose of learning vocabulary effectively" (p. 102). There are different taxonomies to identify lexical strategies for learning and teaching this language component, and the most widely used in foreign language courses is that of Schmitt (1997). Schmitt's taxonomy consists of two major strategies: discovery and consolidation. Discovery strategies refer to the strategies learners implement to learn the meaning of the lexical units in their first encounter, which entail determination and social strategies. Consolidation strategies strengthen the knowledge of target lexical units in successive encounters, encompassing social, cognitive, memory, and metacognitive strategies.

Incorporating lexis learning strategies can help learners become more aware of the importance of learning lexical units autonomously and reduce their dependence on a teacher or a dictionary.

2. The 3,000 most frequent word families. According to Al Quasmi (2020), lexical items are classified into four categories: high frequency, academic, specialized, and low frequency. In research focused on the frequency of occurrence, lexical profiling[3] researchers have proved that learning the most frequent lexical items is essential, as they account for 90% of lexical coverage[4] in written texts (Schmitt et al., 2011) and 95% in spoken discourse (Dang & Webb, 2014). Other studies show that learners acquire high-frequency lexical units more easily than low-frequency ones. Achieving the goal of 3,000 lexical items requires more than just the use of instructional materials. Teachers should systematically review the list of lexical items and integrate any that are missing to effectively consolidate their students' learning. Therefore, this represents a significant lexical tenet that should be prioritized within the curricular component. The Oxford 3000 comprises the essential 3,000 lexical items that every English language learner should know (https://www.oxfordlearnersdictionaries.com/wordlists/oxford3000-5000). These have been selected based on their frequency in the Oxford English Corpus and their significance to EFL learners. Each word is mapped to the CEFR, providing learners with guidance on lexis suitable for levels A1 to B2.

3. The 570 families of academic lexical items most common to all disciplines. Coxhead (2000) released the Academic Word List (https://www.wgtn.ac.nz/lals/resources/academicwordlist/sublist), which represents 10% coverage in texts of academic origin and is divided

---

3 Lexical profiling is a method used in linguistics to analyze the lexis used within a text or a collection of texts. It involves examining the frequency, distribution, and variety of words to gain insights into language use, style, and complexity.

4 Lexical coverage refers to the proportion of words in a text or corpus that can be understood or recognized based on a given lexis set.

into 10 sub-lists, ranging from the most frequent 60 words in Sub-list 1 to the least frequent words in Sub-list 10. It is of paramount importance to include them as an essential part of a curriculum. We highly recommend reviewing this list and distributing it according to the number of levels or courses offered in an institution. Learning this list can aid learners in expanding their lexis size and focusing on the most useful lexis for their academic studies.

4. The use of various techniques and methods for lexis instruction. Due to the burden involved in learning lexis, teachers should implement various techniques and methodologies to promote academic success (Anis & Khan, 2023). Incorporating these techniques and methods can contribute to easing the problems emerging from intralexical factors such as pronounceability, word length, inflectional and derivational complexity, abstractness, idiomaticity, and multiple meanings (Laufer, 1997). Learning a foreign language is an incremental process that involves both deliberate and incidental learning, yielding significant benefits for learners (Barclay & Schmitt, 2019). Both forms of learning contribute to personal growth and development, with intentional learning offering more control and direction, while incidental learning provides opportunities for spontaneous discovery.

5. The incorporation of different aspects of lexical knowledge. Mastering a lexical item involves understanding its form, meaning, and use, each of which is subdivided into three components, totaling nine distinct aspects of lexical knowledge. The depth and fluency of these aspects can vary in strength and detail, and they are gradually learned over time (Nation, 2013). Based on our experience gained from classroom applications, teachers should emphasize these aspects of lexical knowledge and strike a balance among them to provide a variety of exercises based on the target list, which can help learners enhance their knowledge and improve retention. All these aspects can also strengthen the development of the two dimensions of lexical knowledge: breadth (lexis size) and depth (Henriksen, 1999). It is worth remembering that lexis learning is a cumulative process. Table 2 shows the nine aspects of lexical knowledge according to Nation (2013).

6. The teaching of the most frequent formulaic language. Sirkel (2017) defines formulaic language as "lexical units that allow the user to transmit understandable and self-sufficient messages and that are longer than simple words" (p. 35). Formulaic language comprises idioms, proverbs, lexical bundles, phrasal verbs, and collocations. Some research has estimated that between one-third and half of the

Table 2. Different Aspects of Lexical Knowledge

Form	Spoken (how a word is pronounced)
	Written (how a word is spelled)
	Word parts (the morphological components of a word, such as prefixes, roots, and suffixes)
	Form and meaning
Meaning	Concepts and referents (core and extra meanings)
	Association (antonyms and synonyms)
	Grammatical functions
Use	Collocations (common word pairings or combinations, e.g., "make a decision")
	Constraint on use (formal vs. informal settings)

Note. Adapted from Learning Vocabulary in Another Language (2nd ed.), by P. Nation, 2013 (https://doi.org/10.1017/CBO9781139858656). Copyright 2013 by Cambridge University Press.

typical written and spoken discourse has to do with formulaic language. People often use formulaic language in everyday communication. Idiomatic expressions, collocations, fixed phrases, prefabricated expressions, and idioms corresponding to formulaic language take up little space in working memory and are easy to reproduce and retrieve. However, lexis teaching primarily focuses on individual words because they are easier to teach than formulaic language. It is worth highlighting that formulaic language comprises single words. If learners do not understand the meaning of individual words, they may find it more challenging to learn multiword expressions. We must reformulate this practice and include formulaic language in everyday lexis instruction.

7. The inclusion of extensive reading and listening activities. Extensive reading "aims at developing good reading habits, developing vocabulary teaching knowledge, and fostering an attachment to reading" (Richards & Schmidt, 2002, pp. 193–194). This type of reading promotes repetitive encounters with previously learned or new lexical units, contributing to the consolidation and development of linguistic competence. To achieve this, learners must read at least one book weekly (e.g., a graded reader) containing high-frequency lexical units. Extensive listening is "an approach to teaching and learning that encourages students to be exposed to a large amount of easily understandable and enjoyable material in the target language over an extended period" (Ivonea & Renandya, 2019, p. 237). Research has documented that there is limited class time for teachers to instruct and for learners to learn everything. Extensive reading and listening activities can effectively complement and support learners' lexis development. Additionally, implementing these activities can provide retrieval conditions where learners can meet and use the target lexical items in varied contexts.

8. The inclusion of lexis recycling activities to flatten the forgetting curve. Research in human memory has determined that we lose roughly 80% of all the information we perceive as long as we do not attempt to retain it (Ebbinghaus, 1885; Murre & Dros, 2015). This finding indicates that the forgetting curve is very pronounced, making it essential to include activities that promote recycling or repetition. According to researchers, spaced repetition is recommended because it ensures a variety of encounters and consolidates lexical knowledge. Spaced repetition will promote long-term retention. Teachers should focus primarily on planning activities that allow learners to repeat the target lexis as much as possible (Nation, 1990, 2017).

9. The incorporation of lexis assessment and testing. Lexis assessment is the umbrella term that encompasses testing. Teachers should develop assessment literacy (Giraldo, 2018; Gutiérrez-Rojas & Rosado-Mendinueta, 2024) and use it to design more lexical assessment activities and tests for classroom application. This way, learners can monitor their learning progress, and teachers can assess their own lexis teaching practice. Educators should regularly assess the target lexis to help learners deepen their lexical knowledge, moving from noticing to elaboration by fostering retrieval conditions. In the field of lexis research, some experts have developed many tests to measure learners' lexical knowledge. Most available tests have focused on measuring the size or breadth of lexical knowledge and have subdivided it into receptive and productive components. He (2019) reviews four lexical tests used for pedagogical purposes, and Table 3 summarizes their most outstanding characteristics.

Table 3. Tests to Measure Lexical Competence

Test	Author	Purpose
The Vocabulary Levels Test https://bit.ly/3GPnKFz	Webb et al. (2017)	Receptive
The Vocabulary Size Test https://my.vocabularysize.com/	Nation and Beglar (2007)	Receptive
The Productive Levels Test https://www.lextutor.ca/tests/levels/productive/	Cobb (2000), Laufer and Nation (1999)	Productive
The Lexical Frequency Profile https://bit.ly/4lzSqcZ	Laufer and Nation (1995)	Productive

10. The incorporation of the four-strands approach. This approach aims to help language learners acquire a comprehensive understanding of lexis (Nation, 2007). It helps with interlexical and intralexical factors affecting lexical learning. Interlexical factors refer to how novel lexical items relate to learners' lexis in their first or second language. Intralexical factors can also influence a lexical item's learning burden, including pronounceability, orthography, morphology, synformy, and semantic features (e.g., abstractness, register, idiomaticity, and polysemy; Laufer, 1997). The four strands encompass four critical aspects of lexis learning: meaning-focused input, which involves exposure to authentic language use through reading and listening activities, allowing learners to encounter new words and phrases in context; meaning-focused output which emphasizes opportunities for learners to actively use vocabulary through speaking and writing tasks, reinforcing understanding and promoting retention; language-focused learning, which targets specific aspects of lexis, such as word parts and associations, through focused instruction and practice; and fluency development, which focuses on providing learners with opportunities to use lexis effortlessly and accurately in real-life communication settings, ultimately enhancing overall language proficiency. Incorporating the four strands into the curriculum is paramount.

In addition to the comprehensive approach to lexis learning provided by the four strands, integrating them into the curriculum offers several other significant benefits: enhanced language proficiency, increased engagement, contextual learning, focused instruction, transferability of skills, long-term retention, preparation for real-world communication, and progress monitoring and assessment. Together, these four strands form a holistic approach to lexis development, promoting a balanced and practical learning experience for language learners.

The implications of these considerations for integrating lexis into the curriculum are profound for educators, curriculum designers, and language policymakers. As highlighted by the Curricular Expedition (Secretaría de Educación de Medellín, 2014) and supported by Nation and Macalister's (2010) principles, a curriculum that weaves critical, practical, and technical perspectives enriches the pedagogical landscape and democratizes language learning. Educators can foster a more inclusive, autonomous, and effective language learning environment by prioritizing strategies such as lexicon learning, teaching frequent word families, and incorporating extensive reading and listening.

Adopting such an integrative and strategic approach to curriculum design is crucial in bridging the gaps in lexical competence among learners,

especially in diverse educational contexts. Moreover, we could significantly enhance learners' communicative competence and ability to engage with the world around them by embracing a curriculum that values the collective effort of all educational stakeholders and emphasizes the importance of lexical knowledge in all its complexity. This holistic view responds to immediate educational needs and aligns with broader societal goals of fostering informed, engaged, and linguistically capable citizens, thereby creating more equitable and just societies.

Conclusions

The paramount role of lexis in cultivating communicative competence is widely acknowledged, yet its deliberate and systematic integration into EFL curricula often needs to be addressed. The common practice of relying on coursebooks or specific lexical lists leads to a constrained, incidental approach to language learning. This practice neglects the comprehensive array of lexical items essential for effective communication and underestimates the challenges posed by interlexical and intralexical factors, such as pronounceability and idiomaticity. Consequently, learners are left ill-equipped to navigate the complexities of language use, and the potential for lexis-recycling strategies to mitigate these challenges remains largely untapped.

A paradigm shift is necessary in how lexis is incorporated into language curricula to bridge this gap. It is necessary to consider the 10 lexical tenets. By doing this, lexis can be systematized, and our learners can greatly benefit as they become aware of and strengthen their lexical competence. Educators can significantly enhance lexical competence by embedding core lexical principles, such as lexis learning strategies, teaching high- and mid-frequency lexical items, and incorporating extensive reading. Through diverse teaching methods and systematic assessment, these enriched curricula provide a solid foundation for effective com-

munication, aligning with academic frameworks and national educational policies.

The challenge of developing lexical competence is formidable, given the extensive range of English word families and the modest gains typically achieved by EFL learners. This challenge highlights the need for educators to adopt methodical and strategic approaches to curriculum design, primarily to address the cognitive demands of mastering a vast lexicon and narrow the proficiency gap between native speakers and English language learners.

The strategies proposed here (especially those focusing on the most frequent word families) are poised to significantly improve learners' understanding across diverse contexts. This commitment advances linguistic proficiency and promotes pedagogical inclusivity and efficacy. Furthermore, incorporating spaced recycling within the curriculum is crucial for enhancing retention, ensuring learners can effectively recall and apply lexical items. The evident correlation between lexis size and reading comprehension underscores the necessity of making lexical development a core element of educational initiatives. Insights from adjustments in national curricula and findings from bodies such as the National Reading Panel underscore the importance of placing lexis instruction at the heart of efforts to bolster reading comprehension.

In sum, the push to foreground lexis in language education is both a significant challenge and an invitation. Embracing empirical evidence and established best practices, including a nuanced differentiation between curriculum and syllabus, alongside a comprehensive engagement with the lexis inventory, can dramatically improve learners' communicative competence. This move towards systematic and focused lexis instruction transcends academic boundaries, emerging as a crucial strategy for equipping learners with the linguistic capabilities necessary for robust global interaction. The imperative is clear: An intentional, prominent

focus on lexis learning within language education is indispensable for nurturing linguistically proficient individuals who can navigate the intricacies of global communication.

References

Al Quasmi, A. (2020). A review of the literature on vocabulary acquisition and vocabulary size testing in second language learning. In S. S. Scatolini & M. A. George (Eds.), *Education and society in the Middle East and North Africa: English, citizenship and peace education* (pp. 6–21). Cambridge Scholars Publishing.

Alqahtani, M. (2015). The importance of vocabulary in language learning and how to be taught. *International Journal of Teaching and Education*, *3*(3), 21–34. https://doi.org/10.20472/TE.2015.3.3.002

Anis, M., & Khan, M. R. (2023). Integrating multimodal approaches in English language teaching for inclusive education: A pedagogical exploration. *Universal Journal of Educational Research*, *2*(3), 241–257.

Apple, M. W. (1993). *Official knowledge: Democratic education in a conservative age* (1st ed.). Routledge.

Asyiah, D. N. (2017). The vocabulary teaching and vocabulary learning: Perception, strategies, and influences on students' vocabulary mastery. *Jurnal Bahasa Lingua Scientia*, *9*(2), 293–318. https://doi.org/10.21274/ls.2017.9.2.293-318

Bailey, A., Rosado, N., & Rey, L. (2018). Designing an English curriculum for everyone. In V. Wang (Ed.), *Handbook of research on program development and assessment methodologies in K–20 education* (pp. 87–108). Information Science Reference. https://doi.org/10.4018/978-1-5225-3132-6

Barclay, S., & Schmitt, N. (2019). Current perspectives on vocabulary teaching and learning. In X. Gao (Ed.), *Second handbook of English language teaching* (pp. 799–819). Springer. https://doi.org/10.1007/978-3-030-02899-2_42

Bauer, L., & Nation, P. (1993). Word families. *International Journal of Lexicography*, *6*(4), 253–279. https://doi.org/10.1093/ijl/6.4.253

Caro, K., & Rosado-Mendinueta, N. (2017). Lexis, lexical competence and lexical knowledge: A review. *Journal of Language Teaching and Research*, *8*(2), 205–213. https://doi.org/10.17507/jltr.0802.01

Chall, J. (1996). *Stages of reading development* (2nd ed.). Harcourt Brace.

Cobb, T. (2000). One size fits all? Francophone learners and English vocabulary tests. *Canadian Modern Language Review*, *57*(2), 295–324. https://doi.org/10.3138/cmlr.57.2.295

Constitución Política de Colombia de 1991, arts. 67, 68 y 69. https://leyes.co/constitucion.htm#google_vignette

Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, *34*(2), 213–238. https://doi.org/10.2307/3587951

Cullinan, M. (2016). Critical review of ESL curriculum: Practical application to the UAE context. *International Journal of Curriculum and Instruction*, *8*(1), 54–68.

Cummins, J. (2000). *Language, power and pedagogy: Bilingual children in the crossfire*. Multilingual Matters.

Cusen, G., & Buja, E. (2009). The role of theory in applied linguistics research: A study of vocabulary learning strategies. *Bulletin of the Transilvania University of Brașov*, *2*(51), 143–148.

Dang, T. N. Y., & Webb, S. (2014). The lexical profile of academic spoken English. *English for Specific Purposes*, *33*, 66–76. https://doi.org/10.1016/j.esp.2013.08.001

Dang, T. N. Y., & Webb, S. (2020). Vocabulary and good language teaching. In C. Griffiths & Z. Tajeddin (Eds.), *Lessons from good language teachers* (pp. 203–218). Cambridge University Press. https://doi.org/10.1017/9781108774390.019

Departamento Nacional de Planeación. (2015). *Plan Nacional de Desarrollo 2014–2018: todos por un nuevo país*. https://bit.ly/3TkzL9d

Department for Education. (2013). *National curriculum in England: Primary curriculum*. https://www.gov.uk/government/publications/national-curriculum-in-england-primary-curriculum

Ebbinghaus, H. (1885). *Über das Gedächtnis: Untersuchungen zur expeperimentellen Psychologie*. Dunker & Humboldt.

Echeverri-Sucerquia, P. A., & Quinchia Monroy, M. C. (2016). Retos en el diseño curricular de un programa de inglés

para adultos. *Colombian Applied Linguistics Journal*, *18*(2), 131–148. https://doi.org/10.14483/calj.v18n2.8700

Education First. (2023). *EF English Proficiency Index*. https://www.ef.com.co/epi/

Elttayef, A. I., & Hussein, N. O. (2017). Arab learners' problems in learning English language: A teacher perspective. *Journal of Literature, Languages and Linguistics*, *8*(23), 1–6.

En-nda, S., & Koumachi, B. (2022). Key issues in vocabulary teaching: A brief overview. *Journal of Learning and Development Studies*, *2*(1), 31–34. https://doi.org/10.32996/jlds.2022.2.1.3

Freed, N., & Karpicke, J. (2016). Spaced repetition is the key to long-term retention. *Journal of Experimental Psychology: Applied*, *22*(3), 366–378.

Geoff, J., & Humphrey, G. (2019). We need to talk about coursebooks. *ELT Journal*, *73*(4), 438–446. https://doi.org/10.1093/elt/ccz038

Giraldo, F. (2018). Language assessment literacy: Implications for language teachers. *Profile: Issues in Teachers' Professional Development*, *20*(1), 179–195. https://doi.org/10.15446/profile.v20n1.62089

Giraldo, F., Escalante-Villa, D., & Isaza-Palacio, D. (2023). English teachers' perceptions of a language assessment literacy course. *How Journal*, *30*(2), 70–91. https://doi.org/10.19183/how.30.2.750

Goulden, R., Nation, P., & Read, J. (1990). How large can a receptive vocabulary be? *Applied Linguistics*, *11*(4), 341–363. https://doi.org/10.1093/applin/11.4.341

Gutiérrez-Rojas, A., & Rosado-Mendinueta, N. (2024). Exploring listening assessment in a Colombian EFL context: A case study. *How Journal*, *31*(1), 37–66. https://doi.org/10.19183/how.31.1.694

He, C. (2019). A review on diagnostic vocabulary tests. *International Journal of Higher Education*, *8*(3), 126–133. https://doi.org/10.5430/ijhe.v8n3p126

Henriksen, B. (1999). Three dimensions of vocabulary development. *Studies in Second Language Acquisition*, *21*(2), 303–317. https://doi.org/10.1017/S0272263199002089

Instituto Colombiano para la Evaluación de la Educación. (2022). *Informe nacional de resultados del examen Saber 11° 2021*. https://bit.ly/3WLKJFu

Ivonea, F. M., & Renandya, W. A. (2019). Extensive listening and viewing in ELT. *TEFLIN Journal*, *30*(2), 237–256. https://doi.org/10.15639/teflinjournal.v30i2/237-256

Kazhan, Y., Hamaniuk, V. A., Amelina, S. M., Tarasenko, R. O., & Tolmachev, S. T. (2020). The use of mobile applications and Web 2.0 interactive tools for students' German-language lexical competence improvement. In A. E. Kiv & M. P. Shyshkina (Eds.), *Proceedings of the 7th Workshop on Cloud Technologies in Education (CTE, 2019)* (pp. 392–415). https://doi.org/10.55056/cte.376

Kolanchery, G. (2014). Lexis and vocabulary: Innovative strategies and approaches. *The Journal for ESL Teachers and Learners*, *3*, 18–21.

Laufer, B. (1997). What's in a word that makes it hard or easy: Some intralexical factors that affect the learning of words. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition, and pedagogy* (pp. 140–155). Cambridge University Press.

Laufer, B., & Nation, P. (1995). Vocabulary size and use: Lexical richness in L2 written production. *Applied Linguistics*, *16*(3), 307–322. https://doi.org/10.1093/applin/16.3.307

Laufer, B., & Nation, P. (1999). A vocabulary-size test of controlled productive ability. *Language Testing*, *16*(1), 33–51. https://doi.org/10.1177/026553229901600103

Ley General de Educación, Congreso de la República de Colombia (1994). https://www.mineducacion.gov.co/1621/articles-85906_archivo_pdf.pdf

Lipinski, S. (2010). A frequency analysis of vocabulary in three first-year textbooks of German. *Die Unterrichtspraxis*, *43*(2), 167–174. https://doi.org/10.1111/j.1756-1221.2010.00078.x

McGrath, I. (2013). *Teaching materials and the role of EFL/ESL teachers: Practice and theory*. Bloomsbury.

Ministerio de Educación Nacional. (n.d.). *Programa nacional de inglés: Colombia very well!* https://bit.ly/3SWn3xc

Ministerio de Educación Nacional. (1999). *Lineamientos curriculares: idiomas extranjeros.* https://bit.ly/3SYsOdt

Ministerio de Educación Nacional. (2006). *Guía N° 22 Estándares Básicos de Competencias en Lenguas Extranjeras: Inglés.* https://bit.ly/3ApO8lJ

Ministerio de Educación Nacional. (2016). *Orientaciones y principios pedagógicos: currículo sugerido de inglés.* https://bit.ly/3MimqtK

Moody, S., Hu, X., Kuo, L.-J., Jouhar, M., Xu, Z., & Lee, S. (2018). Vocabulary instruction: A critical analysis of theories, research, and practice. *Education Sciences, 8*(4), 180. https://doi.org/10.3390/educsci8040180

Moudraia, O. (2001). *Lexical approach to second language teaching* (ED455698). ERIC. https://files.eric.ed.gov/fulltext/ED455698.pdf

Murre, J. M. J., & Dros, J. (2015). Replication and analysis of Ebbinghaus' Forgetting Curve. *PLoS ONE, 10*(7), e0120644. https://doi.org/10.1371/journal.pone.0120644

Nation, P. (1990). *Teaching and learning vocabulary.* Newbury House.

Nation, P. (2006). How large a vocabulary is needed for reading and listening? *The Canadian Modern Language Review, 63*(1), 59–82. https://doi.org/10.3138/cmlr.63.1.59

Nation, P. (2007). The four strands. *Innovation in Language Learning and Teaching, 1*(1), 2–13. https://doi.org/10.2167/illt039.0

Nation, P. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press. https://doi.org/10.1017/CBO9781139858656

Nation, P. (2017). How vocabulary is learned. *Indonesian Journal of English Language Teaching, 12*(1), 1–14. https://doi.org/10.25170/ijelt.v12i1.1458

Nation, P., & Beglar, D. (2007). A vocabulary size test. *The Language Teacher, 31*(7), 9–13.

Nation, P., & Macalister, J. (2010). *Language curriculum design.* Routledge. https://doi.org/10.4324/9780203870730

Nation, P., & Yamamoto, A. (2012). Applying the four strands to language learning. *International Journal of Innovation in English Language Teaching and Research, 1*(2), 167–181.

National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* https://bit.ly/4dv55tN

Nie, Y., & Zhou, L. (2017). A study of vocabulary learning strategies used by excellent English learners. *Research on Modern Higher Education, 4*, 101–106.

Núñez París, F. (2008). Teoría del currículum y didáctica de las lenguas extranjeras. *Revista Nebrija de Lingüística Aplicada a la Enseñanza de Lenguas*, (4), 1–30.

Pérez, Y., Rey, L., & Rosado, N. (2019). Characteristics of EFL curriculum in the Colombian Caribbean Coast: The case of 12 state schools. *English Language Teaching, 12*(11), 85–96. https://doi.org/10.5539/elt.v12n11p85

Pinar, W. F., Reynolds, W. M., Slattery, P., & Taubman, P. M. (1995). *Understanding curriculum* (1st ed.). Peter Lang.

Qian, D. D. (2005). Demystifying lexical inferencing: The role of aspects of vocabulary knowledge. *TESL Canada Journal, 22*(2), 34–54. https://doi.org/10.18806/tesl.v22i2.86

Rathert, S., & Cabaroğlu, N. (2021). Teachers as slaves or masters to their coursebooks: An in-depth study on two English language teachers' coursebook utilization. *Language Teaching Research, 1*(1), 1–26. https://doi.org/10.1177/13621688211036239

Richards, J. C., & Schmidt, R. (2002). *Longman dictionary of language teaching and applied linguistics* (3rd ed.). Pearson Education.

Rosado, N., & Caro, K. (2018). The relationship between lexis and reading comprehension: A review. *English Language Teaching, 11*(11), 136–147. https://doi.org/10.5539/elt.v11n11p136

Schmitt, N. (1997). Vocabulary learning strategies. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy* (pp. 199–227). Cambridge University Press.

Schmitt, N. (2010). Key issues in teaching and learning vocabulary. In R. Chacón-Beltrán, C. Abello-Contesse, & M. Torreblanca-López (Eds.), *Insights into non-native*

vocabulary teaching and learning (pp. 28–40). Multilingual Matters. https://doi.org/10.21832/9781847692900-004

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. https://doi.org/10.1111/j.1540-4781.2011.01146.x

Schmitt, N., & Schmitt, D. (2020). *Vocabulary in language teaching* (2nd ed.). Cambridge University Press. https://doi.org/10.1017/9781108569057

Schuth, E., Köhne, J., & Weinert, S. (2017). The influence of academic vocabulary knowledge on school performance. *Learning and Instruction*, *49*, 157–165. https://doi.org/10.1016/j.learninstruc.2017.01.005

Secretaría de Educación de Medellín. (2014). *Documento No. 9: El plan de área de humanidades idiomas extranjero - inglés.* https://tomascipriano.files.wordpress.com/2019/04/9_humanidades_idioma_extranjero.pdf

Shaw, E. M. (2011). *Teaching vocabulary through data-driven learning* [Master's thesis, Brigham Young University]. ScholarsArchive. https://scholarsarchive.byu.edu/etd/3024

Sidek, H. M., & Rahima, H. A. (2015). The role of vocabulary knowledge in reading comprehension: A cross-linguistic study. *Procedia: Social and Behavioral Sciences*, *197*, 50–56. https://doi.org/10.1016/j.sbspro.2015.07.046

Sirkel, K. (2017). The importance of the acquisition of formulaic language for the development of communicative competence and learner autonomy. *Estonian Journal of Military Studies*, *4*, 35–50.

Siyanova-Chanturia, A., & Webb, S. (2016). Teaching vocabulary in the EFL context. In W. A. Renandya & H. P. Widodo (Eds.), *English language teaching today: Linking theory and practice* (pp. 227–239). Springer. https://doi.org/10.1007/978-3-319-38834-2_16

Stenhouse, L. (1986). *Investigación y desarrollo del currículum*. Morata.

Stern, H. H. (1983). *Fundamental concepts of language teaching*. Oxford University Press.

Susanto, A. (2017). The teaching of vocabulary: A perspective. *Jurnal KATA*, *1*(2), 182–191.

Webb, S. A., & Chang, A. C.-S. (2012). Second language vocabulary growth. *RELC Journal*, *43*(1), 113–126. https://doi.org/10.1177/0033688212439367

Webb, S., Sasao, Y., & Ballance, O. (2017). The updated vocabulary levels test: Developing and validating two new forms of the VLT. *International Journal of Applied Linguistics*, *168*(1), 33–69. https://doi.org/10.1075/itl.168.1.02web

Wilkins, D. A. (1972). *Linguistics in language teaching*. Edward Arnold.

About the Authors

Keiby Caro is a language teacher and teacher educator at Universidad del Atlántico (Colombia). He holds a master's and a doctorate in Education from Universidad del Norte (Colombia). His research interests are related to EFL lexis and assessment.

Nayibe Rosado-Mendinueta is an associate professor at Universidad del Norte (Colombia). She is a member of the research group *Lenguaje y Educación*. Her research interests include teacher learning, student learning, complexity, technology in language teaching, and the development of language competence.