







What is the science of reading?

The science of reading is evidence from the accumulation of five decades of research on reading acquisition and instruction that has been conducted using gold-standard methodologies. This evidence has:

- 1 Established our understanding of how students learn to read
- 2 Identified effective instructional practices
- 3 Clarified instruction for students who have difficulty learning to read

How does Lexia English's focus on speaking, listening, and grammar align with the science of reading body of literature?

Research shows that oral language, namely the skills and knowledge that go into listening and speaking, is the foundation of later reading ability. Having a solid foundation in oral language helps learners become successful readers and strong communicators, as oral language skills provide the foundation for word reading and comprehension.

Why? Students must be able to understand and use academic spoken language in order to be expected to understand written language. In other words, it's difficult to learn to read and comprehend words if you do not know what they mean. We can't expect students to comprehend what they are reading if they don't comprehend what they are listening to, and we can't expect them to read and comprehend words that they don't use in spoken language.

Therefore, oral language (spoken and listening comprehension) influences word recognition and is critical to reading comprehension. Oral language skills are at the heart of listening and reading comprehension, serving as a predictor for both—and, as a result, Lexia® English Language Development™ focuses on speaking, listening, and grammar to lay a strong foundation for learners' later reading ability.

We can't expect students to comprehend what they are reading if they don't comprehend what they are listening to. Oral language comprehension and word recognition influence each other and are critical to reading comprehension.





Lexia English's focus on grammar helps expose students to what is often the "glue" that makes a sentence "stick." Lexia English was designed to provide both receptive (Listening) and expressive (Speaking) instruction and practice for Emergent Bilinguals. The program also offers embedded, explicit, scaffolded grammar instruction that enables users to have conversations about different subject matter.

In Lexia English, grammar is taught through language frames, and students speak in grammatically correct and complete sentences. This focus on syntax helps expose students to

what is often the "glue" that makes a sentence "stick": Understanding how words are arranged to form language is critical to the comprehension of a sentence and overall language. It is the combination of oral and written language instruction that transforms student learning—the more Emergent Bilingual learners know about language and literacy, the better equipped they are to succeed in reading and beyond. Lexia English's focus on the development of speaking and listening skills accelerates language acquisition and ensures students progress linguistically and academically at their own pace.

With Lexia English, students are provided with multiple opportunities to acquire and practice listening and speaking skills in a safe, nonjudgmental environment. Purposeful repetition and extensive speaking practice at the right level are at the core of the program, along with listening practice. The software's asset-model orientation helps students become bilingual or multilingual. Intrinsic motivation is encouraged by offering choice, allowing students to see their progress, and celebrating learners' achievements as Emergent Bilinguals.

The connection between oral language and reading development

Critical components of speaking and listening for language vs. reading development



Instructional Focus in Speaking for Language Development

Grammar
Complex sentence structure
Semantics
Pragmatics
Building schema
Supporting comprehension
Supporting oral development

Instructional Focus in Speaking for Reading Development

Supporting native language oracy

Delivering presentations Oral reports Responding to questions Engaging in class discussions



Listening

Instructional Focus in Listening for Language Development

Listening strategies Listening comprehension Analyzing language choices

Instructional Focus in Listening for Reading Development

Listening to class discussions and lectures Listening comprehension





How Lexia English does it

The product's academic content is centered on the following subject areas: Math, Science, Social Studies, and General Knowledge and Biographies. At each of Lexia English's 19 levels, learners engage in academic conversations with the program's 17 characters that span these four domains. Background information is presented in an engaging format, and students then have the opportunity to practice their skills in various speaking, listening, and grammar activities.

At the same time, language frames are used to introduce grammar structure and provide learners with portable language that helps them make sense of and properly use grammatical conventions in conversation. Language frames go beyond foundational sentence starters and are used throughout the program within a variety of contexts and subject matter topics, as well as varying levels of complexity. The language frames are portable, enabling students to use the grammar structures they learn to build sentences in any content area and across a variety of settings.



In Lexia English, students' engagement with meaningful information about the world helps them build the background knowledge that's crucial for reading comprehension. The program's academic content in Math, Science, Social Studies, and General Knowledge and Biographies develops learners' base of knowledge across a wide range of subject matter, which subsequently enables them to tap into their existing knowledge to make sense of the words they read.

The language frames are portable, enabling students to use the grammar structures they learn to build sentences in any content area and across a variety of settings.

What does the literature say about the science of reading and Emergent Bilingual students?

A recent research paper by Ortiz et al. aims to shed light on this very question: "Even though it is the foundation for learning to read, the importance of oral language development receives little attention in the design and delivery of reading instruction. While the SOTR (Science of Teaching Reading) requires that reading instruction be based on results of continuous assessments of student performance, there is no comparable mandate requiring continuous assessment of progress toward meeting native language and English oral language proficiency standards. Typically, the only oral language data





available to teachers are those provided by state-mandated English proficiency assessments conducted in late spring. The net effect is that teachers do not have access to timely data to guide the planning and delivery of oral language instruction in the native language or English. As a result, students may not receive explicit instruction in language skills important to reading success."

The study continues: "...Emergent Bilinguals who are being taught to read in English, their L2, need ESL support across grades to ensure they both learn to read and read to learn. To that end, oral language and reading instruction for these students can be enhanced by

The highest priority should be given to programs that accelerate development of oral language proficiency and academic language, the most critical skills needed by Emergent Bilinguals for school success in English literacy.

- Goldenberg, 2020

incorporating the principles of Structured Literacy, an approach that has been shown to be effective for all students and essential for those experiencing learning difficulties."

Speaking and listening practice is the missing ingredient

Both linguistics and reading research underscore the importance of oral language for Emergent Bilingual students' academic success. Lexia English, through its built-in purposeful repetition and speaking practice, boosts learners' academic English Language acquisition and helps them lay the groundwork for literacy development as well.

The act of engaging with spoken language by producing it for oneself is at the heart of language acquisition.

- Richards & Rodgers

For a more in-depth overview of Lexia English's pedagogical approach, read our <u>Speaking</u>, <u>Listening</u>, and <u>Grammar</u> papers.





Lexia English supports educators inside and outside the classroom

Lexia English is an adaptive blended learning program that combines computer-based online resources with teacher-led materials for in-classroom application. The U.S. Department of Education's National Technology Plan endorses an adaptive approach to learning because this allows educators to simultaneously and systematically assess and instruct to ensure continuous improvement. Lexia English's adaptive blended learning model blends the power of artificial intelligence and human intelligence; this framework combines the best of both worlds by utilizing powerful, intuitive technological features while simultaneously leveraging and empowering the human intelligence component with robust data and additional teacher-led resources.

Moreover, the Lexia English educator platform utilizes the sophisticated myLexia® technology to provide educators with real-time, simple, actionable data and reports that help inform instruction without stopping to give a test or interrupting classwork. Our patented system, Assessment Without Testing®, gathers and analyzes data as students work through the Lexia English online content. Based on individual student performance, it lets a teacher know if a learner is progressing in the language proficiency standards and recommends Lexia Lessons® for teacher-facilitated peer-to-peer speaking and listening practice. The educator platform offers educators and administrators information to help them adjust instruction and secure better learning outcomes for all, with insights into: student strengths, skills, and weaknesses; real-time actionable data; and teacher-led and printable resources. The information a teacher has about their students can be used to create lesson plans that are engaging to the learner and help students integrate new knowledge in a succinct way.







No more guessing: Unparalleled visibility into learners' language proficiency progress

The robust reporting capabilities of myLexia allow educators to see the progress a learner is making in their language proficiency level. The teacher-led lessons are targeted and designed so teachers know exactly which standards have been mastered and which need more exposure. The comprehensive reports help educators answer questions around students' program use and instructional next steps, such as:

- X At what language proficiency level of content are my students working?
- X How much time are my students spending on the program each week?
- How much more content do my students have to complete to finish their program level?
- X What teacher-led instructional resources would students benefit from?
- × How should I prioritize my offline instructional time with students?
- Which students should I pair or group together for additional conversational practice?











Learn how Lexia English can benefit your students

Sources:

Ortiz, A. et al (2021). The science of teaching reading and English learners: Understanding the issues and advocating for equity. Bilingual Research Journal. Vol 44, Issue 2. DOI: https://doi.org/10.1080/15235882.2021.1976584

Goldenberg, C (2020). Reading Wars, Reading Science, and English Learners. *Reading Research Quarterly*. Volume 55, Issue S1. DOI: https://ila.onlinelibrary.wiley.com/doi/10.1002/rrq.340

Richards, J. & Rodgers T. (2007). Approaches and Methods in Language Teaching (2nd edition). New York: Cambridge University Press.





Lexia, a Cambium Learning® Group company, is the Structured Literacy expert. For more than 30 years, the company has focused solely on literacy, and today provides a full spectrum of solutions for both students and teachers. With robust offerings for differentiated instruction, personalized learning, assessment, and professional learning, Lexia helps more learners read, write, and speak with confidence.









f in g a lexialearning.com