Lexia ASPIRE™
PROFESSIONAL LEARNING

and the
Science of Reading
in California

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What is the science of reading?

The science of reading is evidence from the accumulation of 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, and
3. Clarified instruction for students who have difficulty learning to read

Why is the science of reading important for teachers of adolescent students?

Learning to read is not a natural act; rather, it requires explicit, systematic, and cumulative instruction that is also diagnostic and responsive. The science of reading solidifies an understanding of how spoken and written language systems work by informing instruction, not only for word recognition but also for components related to language comprehension. Although instruction informed by reading science is necessary for all students, it is essential for students who need more instructional support due to dyslexia, developmental language disorder, deficits in executive function, status as an Emergent Bilingual, or other factors. Professional learning in this approach can be especially important for teachers in grades 4-8 given the diversity of adolescents' learning needs and to ensure instructional time is focused on research-based practices. Ultimately, instruction that is informed by the science of reading is the only proven way to ensure students can become proficient readers and confident learners across the curriculum.

What is Aspire?

Lexia® Aspire™ Professional Learning is grounded in the science of reading and designed to support all upper elementary and middle school teachers, including classroom teachers, ELA teachers, content-area teachers, interventionists, and speech-language pathologists. It is a flexible, self-paced digital solution that empowers educators to accelerate literacy skills for students in grades 4–8 by providing personalized instruction for adolescent readers who have varied skill profiles. Through no fault of their own, many of these educators have not had the opportunity to learn how to teach literacy skills to adolescent learners. Though literacy skills are critical, educators are busy, and reading isn't their primary focus area for this age group. They require a resource that understands the depth of skills the educator needs and provides this in a continuous, flexible, efficient manner.

A helpful model based in the science of reading that illustrates the important components of reading comprehension is the Simple View of Reading. First introduced in 1986, this model states that reading comprehension is dependent on both word recognition and language comprehension. If a student does not have adequate underlying skills in each of these areas, reading success is compromised.[1]

Word Recognition ✕ **Language Comprehension** ═ **Reading Comprehension**

The courses in Aspire are designed to address each of these areas in an explicit and systematic way.
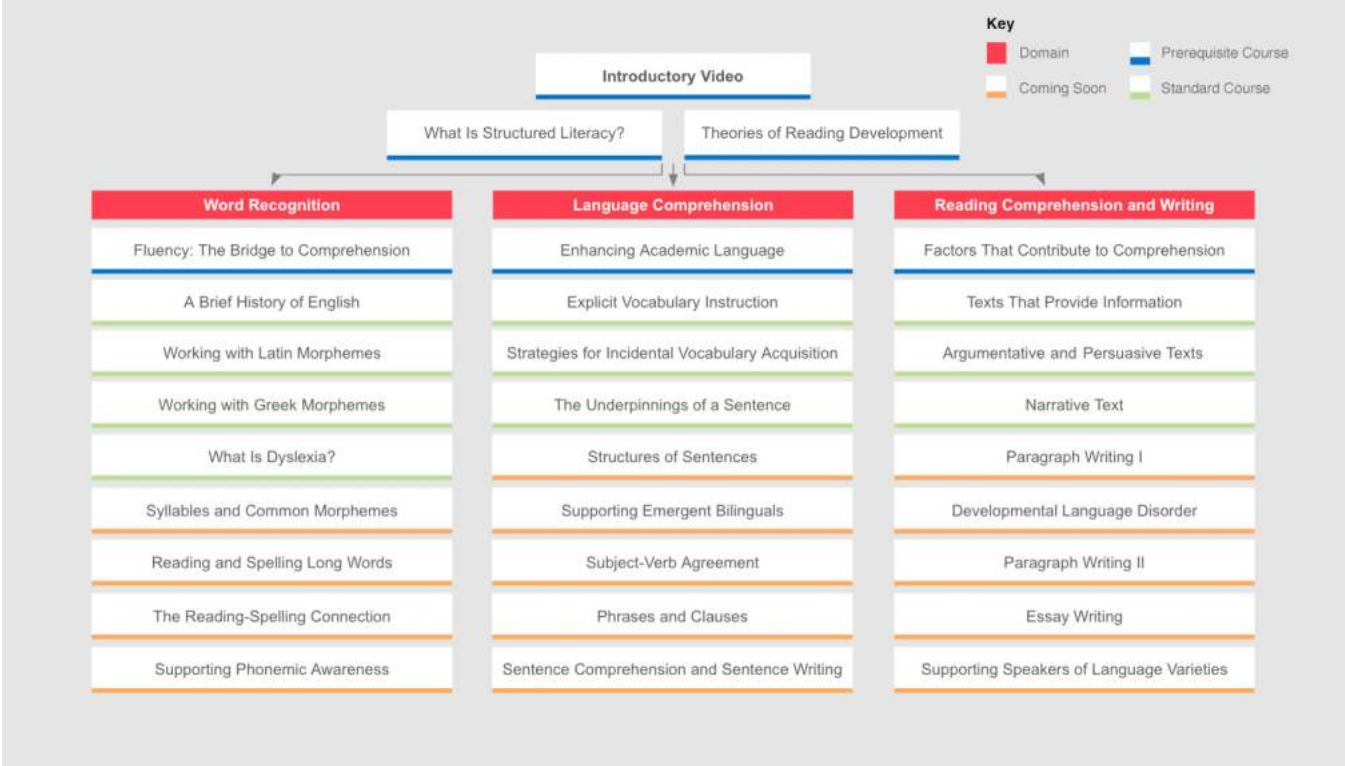
How does Aspire support all educators in grades 4–8?

About 85% of public-school curriculum in the United States is delivered via reading.[2] Inability to read at grade level increases the risk that students will fall behind in other core subject areas. While many learners gain the required literacy skills in early elementary school, about 69% of fourth-graders and 67% of eighth-graders are reading at or below basic grade level. In ELA, mathematics, science, and social studies, students are expected to read, interpret, and analyze increasingly complex texts. When presented with academic vocabulary and complex text across subject areas, students require embedded literacy instruction to access grade-level content. Therefore, in addition to ELA teachers, educators in other content areas should be able to integrate literacy skill instruction into their subject matter—whether directly or indirectly—to support comprehension of key topics.

The content of Aspire and the science of reading

Aspire takes about 40 hours to complete and focuses on the three areas aligned to the Simple View of Reading that are essential for becoming a proficient reader: word recognition, language comprehension, and reading comprehension and writing. Although these are somewhat separate components of literacy development, they strengthen each other through constant interaction—as the Simple View of Reading illustrates, reading comprehension is the product of word recognition and language comprehension. In the early grades, there is a strong relationship between reading comprehension and both word recognition and language comprehension, but as students move into upper elementary and middle school, the importance of language comprehension increases.[3] The content of Aspire reflects the needs of the adolescent reader to enable teachers to support their students' literacy growth.

Aspire Domains	EVIDENCE	The Why	APPLICATION	The What
	The Science of Reading Says	How Lexia Aspire Does It
Theoretical Background	Teachers are one of the most powerful variables in student achievement.[4] Educators' understanding of the principles of instruction based on Structured Literacy as well as the theories of reading development increases student performance at all grade levels, particularly when combined with content knowledge.[5]	Explains the importance of applying the principles of Structured Literacy and the development of reading skills for all students, with a particular focus on the adolescent learner.
Word Recognition	Proficient reading comprehension relies on automatic associations of sounds and letters. Well supported by research, instruction that focuses on phonological awareness—particularly phonemic awareness—develops accurate decoding and spelling skills.[6] Morphology is a key element of the academic language students need to read and comprehend complex text independently and proficiently. It is the study of the meaningful parts of words and, in addition to increasing word recognition, it is a springboard to vocabulary development and accurate spelling.[7] Fluency is the bridge between word recognition and comprehension. The fluent reader reads with an adequate rate and accuracy, freeing up cognitive resources to focus on meaning.[8]	Presents instructional techniques and concepts that advance students' accuracy, automaticity, and fluency by focusing on the reliable and recurring patterns in spoken and written words. Content includes the areas of phonemic awareness (sound awareness), phonics (letter/sound associations, syllable types, and syllable division), and morphology (base words, prefixes, roots, and suffixes) for reading and spelling of single syllable and multisyllabic words.

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All for Literacy

Aspire Domains	EVIDENCE | The Why	APPLICATION | The What
	The Science of Reading Says	**How Lexia Aspire Does It**
Language Comprehension	Academic language includes both oral and written language and predicts students' overall reading and school success. These specialized language skills include advanced vocabulary and syntax.[9] Explicit instruction in all the elements of academic language is beneficial for all students.[10] Research studies have confirmed that syntax, especially in combination with vocabulary, is predictive of reading comprehension.[11]	Focuses on instructional techniques to enhance students' academic language, including advanced vocabulary and syntax (e.g., the parts of speech and the parts of sentences like phrases and clauses) that lead to improved reading comprehension and writing.
Reading Comprehension and Writing	Proficient reading requires the coordination of the reader's accurate word recognition skills and strategic text comprehension skills. Learners differ in their levels of fluency, vocabulary, background knowledge, knowledge of text structures, and verbal reasoning ability.[12] Students who understand the structure of expository text (i.e., subject, main idea, supporting ideas, details) have fewer problems with comprehension.[13] Essay writing is important because it is a way for students to demonstrate their knowledge. Furthermore, research indicates that 56% of colleges rated essay writing as either critically or moderately important for admission and 82% of employers indicate that effective written communication was the most desired attribute of potential employees.[14] The writing of longer pieces cannot and should not be limited to the ELA room.[15] When students are provided the opportunity to write longer, more robust works, the research has found that they are more likely to retain and critically interpret content that is presented in mathematics, social studies, and science classes.[16]	Presents techniques to help all students gain the skills and strategies necessary to analyze literary and informational texts of increasing complexity for deeper meaning and understanding across the curriculum. It builds on this knowledge to improve writing skills through an understanding of text structure.

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All for Literacy

The Principles of Structured Literacy

The instructional content in Aspire is backed by solid pedagogy based in the science of reading and the principles of Structured Literacy. Structured Literacy instruction promotes equitable literacy education for all students. It is an instructional approach informed by the science of reading[17] and integrates listening, speaking, reading, and writing. The approach emphasizes the **components** of *phonology* (the speech sound system), *orthography* (the writing system), *morphology* (the meaningful parts of words), *syntax* (the arrangement of words, phrases, and clauses in sentences), *semantics* (the meanings of words and relationships among words), *pragmatics* (the use of spoken and written language in a particular context), and *discourse* (the organization of spoken and written communication). Aspire includes courses that define all of these components and provides instructional materials and routines specifically designed for the adolescent reader to enable teachers to support their students' literacy growth.

Structured Literacy highlights the **principles** of explicit, systematic, and cumulative instruction. This means that concepts and skills are directly taught (*explicit*), and there is a logically ordered presentation that begins with basic concepts and progresses to complex concepts (*systematic*), with new learning building on prior knowledge (*cumulative*). Students' instructional needs and strengths are identified (*diagnostic*), and instruction is adjusted according to data (*responsive*). This literacy instruction is beneficial for all students and essential for students who are at risk for reading difficulties.[18] Aspire focuses on instructional techniques that incorporate these principles.

Explicit

"Explicit" means that concepts and skills are directly taught and practiced.

Aspire provides educators with lesson plans, routines, and other resources designed to support them in presenting skills and concepts to students explicitly.

Systematic

"Systematic" refers to a logically ordered presentation of concepts and skills that progresses from simple to complex.

Within each course, Aspire provides educators with a framework that enables them to lead students systematically through the content.

Cumulative

"Cumulative" indicates that new learning is built on prior learning.

In Aspire, educators are provided with the knowledge base necessary to introduce increasingly more complex concepts and skills to students based on previously presented information.

Diagnostic and Responsive

"Diagnostic and Responsive" signify that students' instructional needs are identified, and instruction is designed accordingly.

Aspire focuses on the diverse needs of individual students and guides educators to use student responses to monitor and adapt their instruction as needed.

Thus, Aspire helps educators learn techniques based in the science of reading and transfer these to their classroom, empowering them to support and boost student outcomes.

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