

and the Science of Reading for Maryland



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 for all students in key domains (e.g., phonology, orthography, morphology, etc.), and
- 3. Clarified instruction for students who have difficulty learning to read.



	EVIDENCE The Why	APPLICATION The What
	The Science of Reading Says	Lexia Core5 Reading Does
Phonology The sound system of language	Elements of phonological awareness– particularly phonemic awareness–are necessary components in learning to read and predict reading success (Brady, 2020; NICHD, 2000).	Students build phonological and phonemic awareness through activities focused on rhyming, blending, segmenting, and sound manipulation.
Orthography The writing system of language	Proficient reading comprehension relies on automatic associations of sounds and letters. Well supported by research, instruction that matches sounds to letters or groups of letters—phonics—develops accurate decoding and spelling skills (Ehri, 2014; Hoover & Gough, 1990; NICHD, 2000; Treiman, 2018).	Students in Core5 engage in activities that increase their awareness of the orthography of English, such as matching sounds to letters, learning syllable types and rules for syllable division, and building knowledge of reliable spelling patterns.
Morphology The study of morphemes, or meaningful units of words	Knowledge of morphemes facilitates decoding and provides a springboard for vocabulary development. Morphology bridges the gap between alphabetic reading (i.e., word-level reading) and comprehension (Nunes & Barros, 2012; Henry, 2018).	Students learn meaningful word parts to support decoding and vocabulary development through activities that teach common prefixes, roots, suffixes, and Greek combining forms.
Semantics The meanings of words and the relationships of words	There are strong links between vocabulary knowledge and reading comprehension. As the primary goals of reading and writing are determining and communicating meaning, it is important for students to understand the meanings or shades of meanings of	Students in Core5 build vocabulary and an understanding of word relationships through activities focused on categorization, multiple meaning words, shades of meaning, synonyms and antonyms, similes and metaphors,



words (Beck & McKeown, 2007; NICHD, 2000).

www.lexialearning.com

analogies, and academic language.

	EVIDENCE The Why	APPLICATION The What
	The Science of Reading Says	Lexia Core5 Reading Does
Pragmatics The rules of conversation or discussion and the use of language in a particular context	When taught explicitly and systematically, pragmatics facilitates the social use of language, fluent reading, and comprehension (Gordon Pershey, 2001).	Through teacher-led lessons, students in Core5 engage in small-group activities that support their oral language skills as both speaker and listener.
Syntax The order and relationships of words in sentences as well as the structure of sentences in oral and written language	Success with complex texts is dependent on a reader's understanding of sentences with one or multiple clauses (Foorman, Herrera, et al., 2015; Foorman, Koon, et al., 2015).	Students develop an understanding of syntax through activities that teach them about parts of speech and sentence structure and how this structure impacts meaning.
Discourse The organization of spoken and written communication	The use of multiple strategies develops metacognitive skills and proficiency in understanding complex texts (Williams, 2008; NICHD, 2000).	Students build knowledge of discourse through early listening activities that teach developing readers about the structure of text and provide a framework for later reading comprehension. As students move through Core5, they develop reading comprehension skills through interaction with increasingly complex texts that include a variety of genres and text types.

www.lexialearning.com

IMPLEMENTATION | The How

The Principles of Structured Literacy and How Lexia Core5 Reading Does It



Explicit

Explicit means that concepts and skills are directly taught and practiced. In Core5, students learn skills and concepts explicitly through clear models and targeted practice.

Systematic

Systematic refers to a logically ordered presentation of concepts and skills that progresses from simple to complex. The Core5 scope and sequence follows a developmental sequence and orders the concepts and skills that are to be taught from simple to complex.

Cumulative

Cumulative indicates that new learning is built on prior learning. In Core5, as foundational concepts and skills are taught and practiced to automaticity, students' knowledge continuously increases through the introduction of more complex concepts and skills.

Diagnostic and Responsive

Diagnostic and Responsive signify that students' instructional needs are identified, and instruction is designed accordingly. In Core5, students' progress is frequently monitored, with adjustments to instruction made as needed.

