

Structured Literacy™: Effective Instruction for Students with Dyslexia and Related Reading Difficulties

by Louisa Moats

Structured Literacy™ (SL) teaching is the most effective approach for students who experience unusual difficulty learning to read and spell printed words. The term refers to both the *content* and *methods or principles* of instruction. It means the same kind of instruction as the terms *multisensory structured language education* and *structured language and literacy*.

Structured Literacy™ teaching stands in contrast with approaches that are popular in many schools but that do not teach oral and written language skills in an explicit, systematic manner. Evidence is strong that the majority of students learn to read better with structured teaching of basic language skills, and that the components and methods of Structured Literacy™ are critical for students with reading disabilities including dyslexia.

Content of SL Instruction: Language

Dyslexia and most reading disorders originate with language processing weaknesses. Consequently, the content of instruction is analysis and production of language at all levels: sounds, spellings for sounds and syllables, patterns and conventions of the writing system, meaningful parts of words, sentences, paragraphs, and discourse within longer texts.

Phoneme awareness. Becoming consciously aware of the individual speech sounds (phonemes) that make up words is a critical foundation for learning to read and spell. A phoneme is the smallest unit of speech that can change the meaning of a word. For example, the different vowel phonemes in *mist*, *mast*, *must*, and *most* create different words. Although linguists do not agree on the list of phonemes in English, it has approximately 43 phonemes—25 consonants and 18 vowels.

In preschool and early kindergarten, children typically learn the underpinnings for phoneme awareness, including rhyming, counting spoken syllables, and reciting phrases beginning with the same sound. By the end of kindergarten, children should identify each speech sound by ear and be able to take apart and say the separate sounds of simple words with two and three sounds. More advanced phoneme awareness skills, especially important for spelling and reading fluency, include rapidly and accurately taking apart the sounds in spoken words (segmentation), putting together (blending) speech sound sequences, and leaving out (deleting) or substituting one sound for another to make a new word. These exercises are done orally, without print, and should be part of instruction until students are proficient readers. A large proportion of individuals with dyslexia has difficulty with this level of language analysis and needs prolonged practice to grasp it.

Phoneme awareness is an essential foundation for reading and writing with an alphabet. In an alphabetic writing system like English, letters and letter combinations represent phonemes. Decoding print is possible only if the reader can map print to speech efficiently; therefore, the elements of speech must be clearly and consciously identified in the reader's mind.

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Sound-symbol (phoneme-grapheme) correspondences. An alphabetic writing system like English represents phonemes with graphemes. Graphemes are letters (a, s, t, etc.) and letter combinations (th, ng, oa, ew, igh, etc.) that represent phonemes in print. The basic code for written words is the system of correspondences between phonemes and graphemes. This system is often referred to as the phonics code, the alphabetic code, or the written symbol system.

The correspondences between letters and speech sounds in English are more complex and variable than some languages such as Spanish or Italian. Nevertheless, the correspondences can be explained and taught through systematic, explicit, cumulative instruction that may take several years to complete.

Patterns and conventions of print (orthography). Through explicit instruction and practice, students with dyslexia can be taught to understand and remember patterns of letter use in the writing system. For example, some spellings for consonant sounds, such as *-ck*, *-tch*, and *-dge*, are used only after short vowels. Some letters, like *v* and *j*, cannot be used at the ends of words. Only some letters are doubled. Some letters work to signal the sounds of other letters. These conventions can all be taught as part of the print system or orthography.

Print patterns and conventions exist as well for representing the vowel sounds in written syllables. It is a convention that almost every written syllable in English has a vowel grapheme. Structured Literacy™ programs usually teach six basic types of written syllables: closed (*com*, *mand*), open (*me*, *no*), vowel-consonant-e (*take*, *plete*), vowel team (*vow*, *mean*), vowel-r combinations (*car*, *port*), and the final consonant-le pattern

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Abbreviation

SL: Structured Literacy™

(lit-*t*le, hum-*b*le). Recognizing written syllable patterns helps a reader divide longer words into readable chunks, and helps in understanding spelling conventions such as doubling of consonant letters (*little* vs. *title*).

Morphology. A morpheme is the smallest unit of meaning in a language. Morphemes include prefixes, roots, base words, and suffixes. These meaningful units are often spelled consistently even though pronunciation changes as they are combined into words (*define, definition; nation, national; restore, restoration*). Recognizing morphemes helps students figure out and remember the meanings of new words. In addition, knowledge of morphology is an aid for remembering spellings such as *at-tract-ive* and *ex-press-ion*.

Syntax. Syntax is the system for ordering words in sentences so that meaning can be communicated. The study of syntax includes understanding parts of speech and conventions of grammar and word use in sentences. Lessons include interpretation and formulation of simple, compound, and complex sentences, and work with both phrases and clauses in sentence construction.

Semantics. Semantics is the aspect of language concerned with meaning. Meaning is conveyed both by single words and by phrases and sentences. Comprehension of both oral and written language is developed by teaching word meanings (vocabulary), interpretation of phrases and sentences, and understanding of text organization.

Reading comprehension is a product of both word recognition and language comprehension. Throughout Structured Literacy™ instruction, students should be supported as they work with many kinds of texts—stories, informational text, poetry, drama, and so forth, even if that text is read aloud to students who cannot yet read it independently. Reading worthwhile texts that stimulate deep thinking is a critical component of Structured Literacy™.

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Principles and Methods of SL Instruction

Explicit. In SL instruction, the teacher explains each concept directly and clearly, providing guided practice. Lessons embody instructional routines, for example, quick practice drills to build fluency, or the use of fingers to tap out sounds before spelling words. The student applies each new concept to reading and writing words and text, under direct supervision

of the teacher who gives immediate feedback and guidance. Students are not expected to discover or intuit language concepts simply from exposure to language or reading.

Systematic and cumulative. In an SL approach, the teacher teaches language concepts systematically, explaining how each element fits into the whole. Instruction follows a planned scope and sequence of skills that progresses from easier to more difficult. One concept builds on another. The goal of systematic teaching is automatic and fluent application of language knowledge to reading for meaning.

Hands-on, engaging, and multimodal. Methods often include hands-on learning such as moving tiles into sound boxes as words are analyzed, using hand gestures to support memory for associations, building words with letter tiles, assembling sentences with words on cards, color-coding sentences in paragraphs, and so forth. Listening, speaking, reading, and writing are often paired with one another to foster multimodal language learning.

Diagnostic and responsive. The teacher uses student response patterns to adjust pacing, presentation, and amount of practice given within the lesson framework. The teacher monitors progress through observation and brief quizzes that measure retention of what has been taught.

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Louisa Moats, Ed.D., has been a teacher, psychologist, researcher, graduate school faculty member, and author of many influential scientific journal articles, books, and policy papers on the topics of reading, spelling, language, and teacher preparation. She was Co-Principal Investigator of an NICHD Early Interventions Project in Washington, D.C., public schools and Principal Investigator on two small business innovation research (SBIR) grants from the National Institutes of Health. In addition, she led the committee that developed the International Dyslexia Association's Knowledge and Practice Standards for Teachers of Reading. Dr. Moats developed her current approach to teacher training, called LETRS, from her experiences as an instructor at the Harvard Graduate School of Education, St. Michael's College in Vermont, the Dartmouth Medical School Department of Psychiatry, and the University of Texas, Houston. Dr. Moats' awards include the prestigious Samuel T. and June L. Orton award from the International Dyslexia Association for outstanding contributions to the field; the Eminent Researcher Award from Learning Disabilities Australia; and the Benita Blachman award from the Reading League.



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