

# Introduction to Structured Literacy

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## Introduction

Classroom teachers are continually being asked to provide instruction to students who exhibit a wide range of abilities. Parents are concerned about whether their children are learning to read. As a nation, we are continually assessing the status of research-based knowledge and the effectiveness of various approaches to teaching children to read. In recent years, the International Dyslexia Association adopted the term Structured Literacy (SL) to describe a set of instructional approaches and interventions which provides key instructional features and content that play key roles in literacy development (IDA, 2019, 2020; Spear-Swerling, 2022). Research suggests that Structured Literacy approaches offer the most effective instructional practices not only for typically developing readers but also for students who experience challenges learning to read, spell, and comprehend written text (Moats, 2020).

Recent amendments to Chapter 49 (Act 55 of 2022) more clearly define "Structured Literacy" as systematic, explicit instruction that provides a strong core of foundational skills in the language systems of English; integrates listening, speaking, reading, spelling, and writing; and emphasizes the structure of language across the speech sound system (phonology), the writing system (orthography), the structure of sentences (syntax), the meaningful parts of words (morphology), the relationships among words (semantics), and the organization of spoken and written discourse.

"Successful literacy instruction and interventions provide a strong core of highly explicit, systematic teaching of foundation skills such as decoding and spelling skills, as well as explicit teaching of other important components of literacy such as vocabulary, comprehension, and writing" (IDA, 2019, p. 10).

SL includes a science-based, structured approach to literacy instruction. It plays an essential role in developing foundational reading skills in the areas of oral language, decoding, spelling, and the automatic recall of sight words. SL can be defined as "an approach that provides a framework to include both the principles of effective instruction (how we should teach) and the elements (what we should teach)" (Orton-Gillingham, 2022).

SL approaches are characterized by planned, purposeful selections of instructional examples, tasks, and texts. In other words, Structured Literacy promotes an instructional design that reduces the challenge of learning (Fletcher et al., 2019). If more schools adopted the features of SL in their general education programs,

schools could help prevent or rectify children's difficulties with learning to read and write (IDA, 2019). Clearly, it is important for educators to understand the key features and content of Structured Literacy and examine current instructional practices through the lens of this approach.

# Understanding and Rationale of Structured Literacy

"All students, regardless of socio-economic status, should have ready access to teachers of reading who have mastered the principles and practices of Structured Literacy" (IDA,2019, p. 19).

Learning to read includes the language skills of speaking, listening, reading, and writing. Research results and teaching practice indicate that students benefit from explicit, systematic, and sequential instruction. The pedagogical content knowledge for educators to deliver high-quality early reading instruction and later intervention must include an understanding of reading development, linguistic concepts, and features of the English language. This specialized disciplinary knowledge encompasses content knowledge and pedagogy needed to teach the complex skills of literacy. In other words, educators must understand conceptual foundations (process of reading) and structure of language, as well as receive supervised practice in teaching to fulfill the mission of helping students become successful readers.

There is a convincing body of empirical research demonstrating strong evidence that successful reading teachers, whether in the general education classroom or in the more specialized settings of intervention, need to have highly specialized knowledge specific to literacy. Research indicates that teachers of reading require domain-specific knowledge, including an understanding of the relationship between oral language and reading, knowledge of reading development, and a thorough understanding of all the essential components of reading instruction, as well as the ability to use this knowledge in all types of educational settings with children of varying ages (Foorman & Moats, 2004).

Structured Literacy provides key features of explicit, systematic, sequential, and multimodal instruction. The components of SL include foundational skills and higher-level literacy skills. SL teaches students the key skills they need to become efficient and accurate decoders, which leads to strong word identification and deeper text comprehension. SL also emphasizes oral language abilities essential to literacy development, including phonemic awareness, sensitivity to speech sounds in oral language, and the ability to manipulate those sounds.

Spear-Swerling (2019) offers the following thoughts about current programs or approaches used for literacy instruction in schools.

"A number of instructional programs and approaches have the features of SL. There is not one "best" SL approach for all children with dyslexia or other learning problems. Still, some instructional approaches and materials are simply incompatible with SL. Unfortunately, many of these are widely used in schools" (para. 10).

Structured Literacy is not a quick fix for reading difficulties but provides a stronger foundation for literacy progress. It provides emphasis on important foundational skills; explicit, direct instruction from a teacher; and a continuum of assessments including universal screeners, diagnostic assessments, progress monitoring, and summative assessments. Spear-Swerling (2019) states that

"SL approaches are much more successful than many typical literacy practices for meeting the needs of children with dyslexia and other literacy problems. If educators are prepared to implement this kind of instruction, and are given appropriate instructional materials, they can reach a much wider range of children than with typical literacy practices. Virtually all teachers want to be effective with their students. Let's give them the knowledge and tools to do so" (para. 29).

# **Key Features of Structured Literacy**

Structured Literacy is an approach to reading instruction. The primary principles of structured literacy include systematic, cumulative, explicit, sequential, multimodal, and diagnostic features. SL is not one particular program or method; instead, it guides how the critical components of literacy are taught. School entities "should select a Structured Literacy approach that best fits the needs of their specific population of students and available resources" (IDA, 2019, p.11).

Systematic teaching means that instruction follows a planned, logical sequence. Learning skills moves from simple to complex. Cumulative means that each skill builds on concepts previously learned, building upon mastery of prior skills before advancing to more complex tasks. IDA (2015) provides the following definition of systematic and cumulative instruction:

"Systematic means that the organization of material follows the logical order of the language. The sequence must begin with the easiest and most basic concepts and elements and progress methodically to more difficult concepts and elements. Cumulative means each step must be based on concepts previously learned."

To determine if a lesson is part of a systematic and cumulative scope and sequence, look for classroom displays and/or student work that show past and current foundational skills foci and connections made by teacher to previously taught skills (Achieve the Core, n.d.).

Explicit teaching means that key skills are directly taught, modeled, and clearly explained, in other words, direct instruction. Explicit instruction follows an I do-We do-You do model of instruction where there is explicit teacher modeling, followed by guided practice for students with teacher feedback, and finally independent student practice (Archer & Hughes, 2010). Systematic and explicit instruction significantly improves children's word recognition, fluency, spelling, and reading comprehension. IDA (2015) provides the following definition of explicit teaching: "Structured Literacy instruction requires the deliberate teaching of all concepts with continuous student-teacher interaction. It is not assumed that students will naturally deduce these concepts on their own." Explicit, clear, and correct teaching of foundational skills will include "clear and accurate teacher pronunciation of sounds (phonemes), visual aids, explanation of rules for sound and spelling patterns, articulation of objective to students, and modeling of blending, segmenting, or other content-specific tasks" (Achieve the Core, n.d., p.3).

Sequential instruction is the orderly presentation of concepts in a series of connected lessons. A sequential approach presents material in a logical order for introducing, reviewing, and practicing concepts; it builds on previously taught material. The sequence typically begins with the easiest skills and progresses systematically to more difficult skills. Teachers only require students to practice what they have explicitly been taught. For example, "before teachers expect students to decode two-syllable words, they teach decoding of common one syllable word patterns as well as how to divide two-syllable words to facilitate decoding them" (Spear-Swerling, 2018, p. 202).

Multimodal teaching means matching instructional delivery with the most appropriate mode of learning for the student. Carreker and Birsh (2018) defined multimodal as "involving multiple sensory pathways. Multisensory instruction simultaneously engages the student's visual, auditory, and kinesthetic/tactile senses" (p. 832). In a study conducted by Wolf, Abbott, and Berninger (2017), a comprehensive approach to teaching, which integrates reading, spelling, handwriting, and written expression, is likely to be more effective than teaching the aspects of written language separately. Multimodal instruction involves engaging the student in simultaneous or in close sequence with the material using two or more sensory "modalities." For example, a student using manipulatives during phonics instruction may be engaging their visual, auditory, and tactile modalities. To foster multimodal language learning, it is recommended to pair listening. speaking, reading, and writing to the process. Some researchers hypothesize that engaging multiple senses may cause the brain to store information in long-term memory. Others believe multimodal instruction has more to do with attention. Both avenues of thought have to do neural processing and pathways created in the brain (Shanahan, 2020). Examples of multimodal teaching include hands-on activities such as: moving tiles into sound boxes, using hand gestures to support memory associations, building words with letter tiles, assembling sentences with word cards, or color-coding sentences in paragraphs.

Diagnostic teaching requires continuous monitoring of a student's progress and then using the information gained to inform instruction. In addition, students have extended practice in reading text with teacher guidance—providing immediate, targeted feedback. Carreker and Birsh (2018) defined diagnostic and prescriptive instruction as "instruction in which students are engaged in components of the lesson while the teacher observes how students are handling the discrete components so that the teacher may plan instruction" (p. 822). The teacher must be accomplished at observing students and delivering individualized instruction. It is essential to identify reading problems early through appropriate assessments, target interventions correctly, monitor students' progress, and refine/adjust instruction accordingly (Spear-Swerling, 2022). SL instruction "is based on careful and continuous assessment, both informally (for example, observation) and formally (for example, with standardized measures)" (IDA, 2015). Structured Literacy uses data-based decision making, the process of using data to inform

instructional decisions, throughout the teaching process. Observable actions of diagnostic teaching include: immediate feedback, corrections, or confirmations of student answers; adjustments made to tasks based on observations; differentiated groups and materials; and evidence of planned supports based on student data (Achieve the Core, n.d., p.4).

## Content of Structured Literacy

Structured Literacy includes the following five systems of language: phonology, morphology, orthography, syntax, and semantics (pragmatics & discourse).

#### **Phonology**

Phonology is defined as the sound system of language, including the speech sounds, speech patterns, and rules that apply to those sounds (PaTTAN Glossary). Carreker and Birsh (2018) defines phonology as "the science of speech sounds, including the study of the development of speech sounds in one language or the comparison of speech sound development across different languages" (p. 836).

Phonological awareness is an umbrella term used to describe awareness at different levels of spoken language (Lane, 2004). For example, it includes words, syllables, onset-rime, and phonemes. Phonemic awareness is the capacity to attend to and manipulate phonemes. Phonemes are the smallest units of speech sounds that make a difference in meaning of a word.

Phonemic awareness is the most sophisticated and most important level of phonological awareness (Contesse, 2022). More specifically, phonemic awareness refers to the awareness of individual sounds. Spear-Swerling (2022) identifies the most critical skills for beginning readers must include explicit instruction in phoneme identity, phoneme blending, and phoneme segmentation. Systematic teaching should continue until mastery of each skill.

SL emphasizes a synthetic-phonics approach, which includes initial phonics instruction at the phoneme level. It focuses on grapheme-phoneme-level correspondences (letter-sound correspondences) or (symbol-sound correspondences). An example of a phonetic awareness activity is the "teacher models how to orally blend four- to five-phoneme words, beginning with easier-to-blend words that have continuous sounds (e.g., /s/, /m/, /f/), rather than harder-to-blend stop consonants (e.g., /g/, /t/, /b/)" (Spear-Swerling, 2019, p. 4).

#### Morphology

In a broad sense, morphology is defined as "the system of word-forming elements and processes in a language" (MerriamWebster.com). Carreker and Birsh (2018) defines morphology as "the internal structure of the meaningful units within words and the relationships among words in a language" (p. 831). A more specific definition is the study of structure and forms of words including derivation, inflection, and compounding or the smallest unit of meaning in the language. Morphemes are the smallest meaningful linguistic unit—base words, prefixes, suffixes, and roots. Carreker and Birsh (2018) provides the following examples: "...a base word or root (e.g, child, graph), a suffix (e.g. - hood in childhood), or a prefix (e.g. unin untie)" (p. 831). English is a morphophonemic language, meaning that words

are constructed to represent both their sounds (phonemes) and their meanings (morphemes).

Morphological awareness is the ability to understand, analyze, and manipulate morphemes in words. Students need to focus on sound, pattern, and meaning simultaneously; phonemic awareness and the alphabetic principle must be taught before advancing to complex morphology instruction. An example of an early morphological activity involves separating syllables. Students identify syllable types of separated syllables, join them into words, and read the words aloud (cac|tus, mas|cot, ban|dit, nut|meg, mag|net) (Carreker & Birsch, 2018). As students progress, the teacher will introduce more advanced skills, which include identifying the morphemes in a word: prefixes, suffixes, and roots. An example would be the word destruction: de- from/away from/out; struct - to build; ion- state of/act of/result of.

#### Orthography

Orthography is defined as part of language study that deals with letters and spelling (Merriam-Webster.com). Carreker and Birsh (2018) define orthography as "the writing system of a language. Correct or standardized spelling according to established usage" (p. 834), in other words, the study of the nature and use of symbols in a writing system. Orthography can also be thought of as standardized spelling according to established usage in a given language or a conventional writing system in a given language. In order to store words in long-term memory and read words accurately and automatically, as if by sight, students must orthographically map words bonding the spelling (orthography), pronunciation (phonology), and meaning (semantics) of a word (Ehri, 2005).

Orthographic mapping occurs when a student spontaneously applies alphabetic principle and decoding skills to read other unfamiliar words. Ehri (2014) defines orthographic mapping as involving "the formation of letter-sound connections to bond the spellings, pronunciations, and meanings of specific words in memory. It explains how children learn to read words by sight, to spell words from memory, and to acquire vocabulary words from print" (p. 5). Orthographic mapping is word specific: it bonds a specific spelling sequence in a word to its specific pronunciation. An example of an orthographic activity is phoneme-grapheme mapping. Mapping is a visual way to represent the relationship between phonemes (sounds) and their graphemes (letters). Students connect the sound they hear with the letter or letters that represent that sound.

#### **Syntax**

Syntax is the way in which linguistic elements (such as words) are put together to form constituents (such as phrases or clauses) (Merriam-Webster.com). Carreker and Birsh (2018) define syntax as "the system by which words may be ordered in phrases, clauses, and sentences; sentence structure; grammar" (p. 843). In other

words, it is defined as the principles that dictate the sequence and function of words in a sentence to convey meaning.

Think of syntax as how language is used to form a thought, the pattern or structure of word order in sentences, clauses, and phrases. Syntax includes grammar, sentence variation, and the mechanics of language. An example of a syntax activity is the "teacher presents examples of short 'kernel sentences' that can be combined into a longer, grammatically correct sentence (e.g., The car is red. The car sped quickly down the road.)" (Spear-Swerling, 2019, p. 4).

#### Semantics

Semantics is the study of the meaning of words and the relationships among words, including meaning at the word, sentence, and conversational level is a system of language (PaTTAN Glossary, PDE). Semantics is concerned with meaning, the analysis of the meanings of words, phrases, sentences, discourse, and whole texts. Carreker and Birsh (2018) define semantics as "the meaning of words and the relationships among words as they are used to represent knowledge of the world" (p. 840). An example of a semantic activity is a semantic map. A semantic map is a graphic organizer that depicts the relationship of words. Semantic maps visually display the meaning-based connections between words and support all students in identifying, understanding, and recalling the meaning of words they read in text.

Pragmatics and discourse are two additional systems of language that need to be addressed in relation to semantics. In the PaTTAN Glossary, pragmatics is defined as the rules that govern and describe how language is used in different contexts and environments (PDE). Carreker and Birsh (2018) define pragmatics as "the set of rules that dictates behavior for communicative intentions in a particular context and the rules of conversation or discourse" (p. 836). Perhaps it is easier to think of pragmatics as the study of the choices of language people make in social interaction and the effects of these choices on others. Pragmatics is concerned with what the speaker implies and the listener infers. Discourse is extended language, whether written or spoken, and how it is organized to convey meaning and purpose. Components of instruction include text structures and written expression. Hennessy (2021) provided some examples of instructional questions:

- Why did the author choose this paragraph type?
- What is the problem in this story?
- What is being compared?
- How is the organization of this text different from

# **Structured Literacy Instruction**

Structured Literacy instructional practices sometimes differ from typical literacy practices. Within a SL approach, teachers purposefully structure important literacy skills, concepts, and the sequence of instruction. This approach can be beneficial for all students. The following is a chart of six components with a general comparison between SL practices and typical literacy practices.

Table 1

Components of Structured Literacy versus Typical Literacy Practices

Key Features & Content	Structured Literacy Practices	Typical Literacy Practices
Delivery of instruction	<ul> <li>teacher-led, highly explicit, systematic instruction</li> <li>integrates listening, speaking, reading, and writing</li> <li>emphasizes structure of language across the speech sound system</li> <li>includes modeling and clear explanations</li> <li>teaches important prerequisite skills before advanced skills</li> <li>provides multiple opportunities for practice</li> </ul>	<ul> <li>may lack consistent and systematic instruction</li> <li>instruction is implicit, not explicit</li> <li>may focus on activities that do not promote literacy growth (shape of word)</li> <li>little attention to higher-level components (syntax, text composition)</li> <li>limited amount of teacher-led instructional time (more time in shared, guided, and/or independent reading)</li> <li>assessments may not focus on identification of reading problems)</li> </ul>

Key Features & Content	Structured Literacy Practices	Typical Literacy Practices
Types of texts	decodable texts     largely controlled     to specific     phonics patterns     and coordinated     with a phonics     program's scope     and sequence	leveled or predictive texts     (do not lend themselves to applying phonics skills)
	provides prompt, specific feedback to affirm a student response or to correct an error	
	<ul> <li>practices the correction with the support of the teacher</li> </ul>	
Teacher feedback	<ul><li>encourages student</li></ul>	<ul> <li>limited feedback and may</li> </ul>
	<ul> <li>monitors and facilitates independent work</li> </ul>	encourage guessing • inaccuracies
	<ul> <li>completes work at a high criterion level before advancing to next skill</li> </ul>	overlooked
	<ul> <li>phoneme- grapheme level approach; synthetic approach (part-to- whole)</li> </ul>	
Phonics	phoneme- grapheme level approach; synthetic approach (part-to- whole)	<ul> <li>larger-unit         approach (word         families, whole-to-         part); analytic</li> </ul>

Key Features & Content	Structured Literacy Practices	Typical Literacy Practices
Phonemic awareness	<ul> <li>phoneme</li> <li>blending and</li> <li>segmentation</li> </ul>	<ul> <li>little focus         on phonemic         awareness</li> </ul>
Decoding and spelling	<ul> <li>well-coordinated between decoding and spelling</li> <li>students are encouraged to look carefully at printed words and apply decoding skills</li> </ul>	<ul> <li>little emphasis on decoding and spelling</li> <li>memorizing whole words rather than applying phonics skills</li> </ul>

Below are several specific examples and non-examples of the key features of Structured Literacy.

#### Examples

- Explicit important skills and concepts are taught clearly and directly, high degree of teacher-student interaction, using examples and nonexamples
- Systematic and Sequential skills and concepts are taught in a logical order, teaching important prerequisite skills first before moving to more advanced skills
- Cumulative Practice and Ongoing Review built in practice and review of previously learned skills
- Feedback constant feedback with clear correction at the point of error and as needed, step-by-step demonstrations of skills provided by the teacher or student peer with guided practice of the correction practiced by the student

#### Non-Examples

- Explicit students are expected to infer skills and concepts by exposure or incidental learning, lack of teacher-student interaction, teaching is implicit
- Systematic and Sequential students are expected to decode specific phonics word patterns without prior exposure
- Cumulative Practice and Ongoing Review students are expected to retain skills without additional practice and review
- Feedback is provided at the end of a lesson or during an assessment

### Conclusion

Structured Literacy ensures that prerequisite skills are addressed and that all students receive systematic, explicit, sequential, and multimodal instruction using research-based curricula. Educators can differentiate instruction for high-achieving students, such as those who master the alphabetic code or basic writing skills quickly. For example, "primary-grade students with strong foundational reading skills would likely profit more from instructional time devoted to independent reading than students with significant decoding difficulties" (Moats, 2018, p.10).

#### The key features of SL include:

- explicit, systematic, and sequential teaching of literacy at multiple levels

   phonemes, letter–sound relationships, syllable patterns, morphemes,
   vocabulary, sentence structure, paragraph structure, and text structure
- cumulative practice and ongoing review
- a high level of student–teacher interaction
- the use of carefully chosen examples and non-examples
- multimodal instruction
- decodable texts
- prompt, corrective feedback

#### The content of SL includes:

- Phonology
- Morphology
- Orthography
- Syntax
- Semantics
- Pragmatics
- Discourse

In conclusion, Structured Literacy is about helping students develop the linguistic knowledge and skills needed to become proficient readers and writers. If SL is implemented as part of general education instruction, many students will benefit from the key features and content of the approach.

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