Evidence-Based Reading Instruction Guidelines



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To prepare Kansas students for lifelong success through rigorous, quality academic instruction, career training and character development according to each student's gifts and talents.

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SUCCESS DEFINED

A successful Kansas high school graduate has the

- Academic preparation,
- Cognitive preparation,
- Technical skills,
- Employability skills and
- Civic engagement

to be successful in postsecondary education, in the attainment of an industry recognized certification or in the workforce, without the need for remediation.

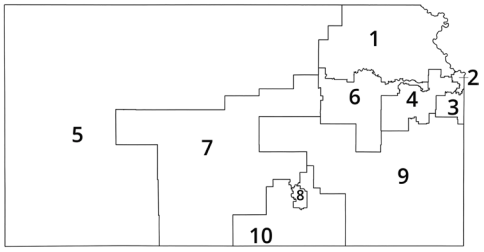
OUTCOMES

- Social-emotional growth
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- Academically prepared for postsecondary
- High school graduation
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Evidence-based reading instruction

Components of evidence-based reading instruction

"Our children's reading is too important to be left to theoretical, but unproven, practices and methods."

-Dr. Sally Shaywitz

Evidence-Based Reading Instruction

Learning to read and write is not a natural process and requires mastery of fundamental language skills. For the majority of students, explicit instruction in reading, spelling, writing, and language must be taught on a continuum for reading to take place. Many students with dyslexia or characteristics of dyslexia can be treated in the general education classroom with skilled teaching. Successful classroom instruction delivered by an informed educator, especially in the early grades, can prevent or at least effectively address and limit the severity of reading and writing problems. Possible reading problems can be identified as early as preschool and kindergarten. Therefore, evidence shows that with appropriate, intensive instruction, all but the most severe reading disabilities can be improved in the early grades and get students on the road to academic achievement.
A series of studies have substantiated that effective teachers matter much more than the particular program or materials. (Allington & Johnston, 2001; Darling-Hammond, 1999; Duffy, 1997; Pressley, et al, 2001; Sanders, 1998; Taylor, Pearson, Clark & Walpole, 2000) Expertise matters when it comes to effective reading instruction. Exemplary teachers routinely provide reading instruction which is explicit, systematic, multisensory and executed in a gradual release format. The skilled teacher should deliver instruction to dyslexic students in such a manner until skill automaticity is reached.

Explicit instruction – The skilled, effective reading teacher will deliver instruction in an explicit manner. Teaching using explicit instruction required that new skills are clearly modeled or demonstrated. New concepts should be presented with examples and non-examples such that students are not inferring what is to be learned. The process of modeling the new skill is repeated until such time that the student(s) can apply the skill independently (Mather & Wendling, 2012). As the student is demonstrating mastery of the new skill, the teacher provides corrective feedback.

Systematic instruction – Most commercial programs have a system in place for delivery of reading instruction. Teaching from a systematic resource does not guarantee student success. However, when a curriculum is closely aligned with the consensus of what's important, how it is introduced, and when it should be introduced, then resources can have more success than those programs lacking this structure. When teaching students with dyslexia a carefully planned sequence for instruction is considered systematic. The goal of systematic instruction is to maximize outcomes for students learning new material based the appropriate levels of background knowledge, building from simple to complex, and is designed prior to lessons being delivered.

Multisensory instruction – "Teaching is done using all learning pathways in the brain simultaneously in order to enhance memory and learning" (Birsh, 2011. p. 26). When learning to read, a student will use many senses; sight to learn words on a page, hearing to learn sounds of

language, movement to learn letter shapes, speaking to learn to the sounds of our language, and touch to connect oral language to print. Teaching using a multisensory approach means to engage more than one sense at a time. Every lesson taught using this approach won't use all of a child's senses. Most multisensory lessons engage students in material in more than one way.

Automaticity – Skilled teachers will instruct students until a new skill becomes automatic. Automaticity refers to the ability to produce reading skills without occupying working memory as a result of repetition and practice. When a skill becomes automatic (direct access without conscious awareness), it is performed quickly in an efficient manner. (Berninger & Wolf, 2009). In order for teachers to determine if automaticity has been reached, diagnostic testing and continual monitoring of skill mastery is required.

The International Dyslexia Association (IDA) defines what all teachers of reading need to know and be able to do to teach all students to read proficiently. In the IDA Knowledge and Practice Standards for Teachers of Reading outlines standards for classroom teachers. Please refer to this resource for more detailed information regarding the complex skills surrounding being a skilled, effective teacher of reading.

The structured literacy framework

“Teaching reading IS rocket science!” -Louisa Moats, 1999

As teachers and reading specialists design literacy for all students, especially those that struggle with reading, it will be important for key implications documented by researchers to be recognized and woven into the district or school level intervention plans. Structured literacy interventions can assist teachers in using **evidence** when evaluating programs and teacher training for implementation.

Theoretical Models of Reading

The National Reading Panel (2000) emphasized that phonemic awareness and phonics (decoding) should be included in all reading instruction. There has been widespread agreement that providing instruction by a skilled teacher using direct, systematic and sequential instruction will enable students with dyslexia and struggling readers to make the greatest progress in reading achievement.

Gough and Tunmer, 1986 and Hoover and Gough, 1990 described reading as the product of word recognition (decoding) and language comprehension. They add that these components work together in an interdependent balance and that when there is a disconnection between these components, reading failure can occur. This model is referred to as the Simple View of Reading:

Decoding X Language Comprehension = Reading Comprehension

Hollis Scarborough, a leading researcher in literacy, expands the Simple View of Reading and communicates that reading is multifaceted skill that is gradually acquired through years of instruction and practice (see image below). Scarborough’s Reading Rope, illustrates how the many skills that are required to comprehend texts are intertwined and become more complex. The strands weave together over many years and enable a student to become a skilled reader.

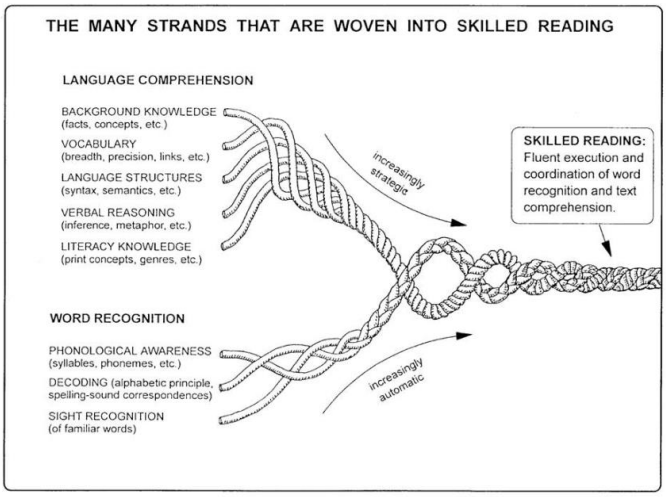


Image Source: Scarborough, 2001

Structured literacy instruction

For students who have not benefited from evidenced based core reading instruction, providing intervention by a skilled teacher using direct, systematic and sequential instruction, focused on the structure of language will enable students with dyslexia and characteristics of dyslexia to make significant progress in reading. This type of intervention, also called multisensory structured literacy, when provided with sufficient intensity, progress monitoring, and corrective feedback will result in the highest level of achievement. (Moats, 1994, 2004)

Some popularly used reading approaches, such as guided reading or balanced literacy, are not in and of themselves, sufficient for students with dyslexia or characteristics of dyslexia. These approaches do not provide sufficient or appropriate instruction in decoding and the essentials of the structure of the English language. (For more information see the International Dyslexia Association's fact sheet titled, Effective Reading Instruction for Students with Dyslexia).

For students with dyslexia and those with characteristics of dyslexia, instruction in structured literacy plays an essential role to develop below grade level foundational reading skills of decoding, encoding, and sight vocabulary. Structured literacy is explicit, systematic, cumulative, and multisensory. This type of instruction should include the following:

- *Simultaneous, multisensory* – "Teaching is done using all learning pathways in the brain (visual, auditory, kinesthetic, tactile) simultaneously in order to enhance memory and learning." (Birsh, 2018, p. 26)

- *Systematic and cumulative* – "Multisensory language instruction requires that the organization of material follow order of the language. The sequence must begin with the easiest concepts and most basic elements and progress methodically to more difficult material. Each step must also be based on (elements) already learned. Concepts taught must be systematically reviewed to strengthen memory." (Birsh, 2018, p.26)

- *Explicit instruction* – "Explicit instruction is explained and demonstrated by the teacher one language and print concept at a time, rather than left to discovery through incidental encounters with information. Poor readers do not learn that a print represents speech simply from exposure to books or print." (Moats & Dakin, 2008, p. 58)

- *Teaching to automaticity* – "The teacher must be adept at prescriptive or individualized teaching. The teaching plan is based on careful and (continual) assessment of the individual's needs. The content must be mastered to the degree of automaticity." (Birsh, 2018, p. 27)

Components of Structured Literacy

Phonological awareness is the understanding of internal linguistic structure of words (onset and rime, syllables, phonemes). An important aspect of phonological awareness is the ability to segment words into their component phonemes. A phoneme is the smallest unit of sound in a given language that can be recognized as being distinct from other sounds. The importance of recognizing phonological awareness as a foundation for decoding cannot be overemphasized. Students who exhibit difficulty in acquiring phonemic awareness skills typically will experience difficulty learning the alphabetic principle.

> *"The level of phonemic awareness that children possess when first beginning reading instruction and their knowledge of letters are the two best predictors of how well they will learn to read during the first two years of formal reading instruction."*
>
> *-National Reading Panel Report, 2000*

Sound-symbol association is the ability to associate letter or letter combinations with their sounds. In reading, students must read/say the correct sound when they see the letter in which it is associated. Additionally, students must be able to blend sounds into words for reading. In spelling, students must spell/write the correct letter for which they hear the sound. Next, students must segment the sounds in words and write the associated letter(s) in order to spell words. There are 44 (sounds) phonemes in the English language represented by letters or combinations of letters of the 26 letters of the English alphabet.

> *"Weakness in phonemic awareness characterize children with reading problems across a span of general verbal ability. Their primary problem in learning to read involves learning to translate between printed and oral language."*
>
> *-Torgesen, 2002*

Syllable instruction is breaking down words into parts (syllables) with one vowel sound or pattern. There are six syllable types in the English language as listed below:

Syllable Type	*Example*
Closed (CVC)	bat, trip, mash, crust, bend
Vowel-consonant-e (VCe)	ripe, gate, stripe, mope
Open (VC)	hi, be, no, she
Consonant-le	table, circle, beetle, eagle
Vowel-r	yard, germ, dirt, turn
Vowel digraphs/diphthongs	trout, noise, joy, oil

Orthography refers to the written spelling patterns and rules in a language. For example, the sound /j/ immediately following a short vowel in a one syllable word is spelled with -dge. Students must be taught the regular and irregular orthographic patterns of a language in an explicit and systematic manner. Orthography instruction should be integrated with phonology, sound-symbol knowledge, and morphology.

Morphology is the set of rules that govern how morphemes (base words, prefixes, roots, and suffixes) can be combined to form words. A morpheme is the smallest unit of meaning in a language. Learning frequently used morphemes in a systematic manner to automaticity not only helps spelling but also provides students with strategies for decoding.

"Even the most obscure and complicated appearing words can be broken down into more manageable units and deciphered if the reader is aware of their derivation or roots."

-Shaywitz, 2006

Syntax is the set of rules that govern the sequence and function of words in a sentence in order to convey meaning. Syntax is the proper order of words in a sentence or phrase and is a tool used in writing proper grammatical sentences. Some examples of syntax, or grammar, could be; parts of speech, rules for correct word order, sentence length, sentence types, and sentence constructions.

Vocabulary is the knowledge of words and their meanings in oral language and in print. Vocabulary can be receptive (understanding) and expressive (productive). Vocabulary knowledge plays a significant role in comprehension. Explicit vocabulary instruction is critical for struggling readers and students with dyslexia.

Reading comprehension is the process of extracting and constructing meaning through the interaction of the reader with the text to be comprehended and the specific purpose for reading. The reader's skill in reading comprehension depends upon the development of accurate and fluent word recognition, oral language development, background knowledge, use of appropriate strategies, and motivation.

Reading fluency is the ability to read text with sufficient speed and accuracy to support comprehension (Moats & Dakin, 2008, p.52). Fluency also has the component of prosody, which is the pitch, tone, volume, emphasis, and rhythm in speech and oral reading.

A Structured Literacy Checklist

This checklist is designed to help educators evaluate structured literacy resources. It identifies the necessary components of structured literacy and will help to identify areas in resources that may need to be supplemented with additional evidence-based instructional practices.

Directions: The checklist on the following pages will guide you through the components of structured literacy. Read each descriptor and check the appropriate box as it is determined if the resource you are reviewing meets or does not meet each requirement.

Yes	No	Phonological Awareness
		Segmenting sentences into words (i.e., “The cat ran fast.” This sentence has 4 words.)
		Syllable segmentation and blending
		Phonemic awareness including segmentation, blending, and manipulation. • Phoneme Isolation (i.e., identifying first, medial, and ending sounds in words) • Phoneme Blending (i.e., blending sounds to form words) • Phoneme Segmentation (i.e. breaking words into individual phonemes) • Phoneme Deletion (i.e., removing first, medial, or ending sounds in words to make a new word) • Phoneme Substitution (i.e., substituting first, medial, or ending sounds in words to make a new word)

Yes	No	Sound-Symbol Association
		Sounds and letters connected for both reading (visual) and spelling (auditory) to mastery.
		Blending sounds and letters into words to mastery.
		Segmenting whole words into individual sounds to mastery.
		English language rules taught explicitly (i.e., digraphs, trigraphs, vowel teams, etc.)

Yes	No	Syllable Instruction
		Instruction on the 6 basic syllable types and the identification of sounds of the vowel within a syllable
		Syllable division rules

Yes	No	Orthography
		Focus on spelling patterns, rules, and word meanings including parts of speech and word origin
		Explicit instruction in letter formation

Yes	No	Morphology
		Study of base words, roots, prefixes and suffixes
		Study of endings (inflectional and derivational)

Yes	No	Grammar/Syntax
		Focus on grammar and sentence variations
		Study of mechanics of language and function of word order to covey meaning

Yes	No	Vocabulary
		Words taught explicitly in multiple settings
		Synonyms, antonyms, and multiple meanings integrated into classroom discussion
		Essential features with visual representations for concepts identified during discussion

Yes	No	Fluency
		Attention to accuracy, rate, and prosody
		Use of normative data to ensure adequate progress

Yes	No	Reading Comprehension
		Process of deriving meaning and establishing a coherent mental model of the text's content
		Attention to integration of ideas within text and between texts
		Use of text structure to accomplish a goal (i.e., explaining main idea or recalling details)
		Purposeful teaching of strategies related to the text structure with opportunities to apply in new situations
		Access background knowledge and identify language in text that may be problematic (indirect meanings, figurative language, complex sentences, etc)
		Use of graphic organizers

Yes	No	Delivery of Instruction
		Explicit instruction in a gradual release model
		Sequence of instruction is systematic and cumulative

Review each component of the checklist and answer the following questions below.

1. Can you answer yes to all components in each category listed above?
    a. Yes_____ Then your resource meets the components of structured literacy.
    b. No_____ See question two below

2. If not, what components need added to your resource?
    a. List the components that need supplemented: _____
    _____

    b. Can you supplement your resource using evidence-based materials? (i.e., not supplementing with items from Teachers Pay Teachers, Pinterest, etc.)

        i. Yes _____ Then see question three below.
        ii. No_____ These resources do not meet the components of structured literacy.

3. If you answered yes to question two, what depth does your resource detail?

        i. Is the teaching explicit? Yes_____ No_____
        ii. Is the teaching sequential? Yes_____ No_____
        iii. Is the teaching cumulative? Yes____ No_____

4. If you answered yes to all three questions above, then your resource meets the components of structured literacy. If you answered no to any portion above then your resource does not meet the components of structured literacy.

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