Scientifically-Based Reading Instruction and Intervention

The purpose of this section of the toolkit is to discuss the importance of using a structured literacy approach that is based in the science of reading and to compare this approach to a balanced literacy approach.

What is Structured Literacy?

Structured literacy is a scientifically-based approach to reading instruction recommended by the International Dyslexia Association for struggling readers and individuals with dyslexia[1,2]. It is supported by research from practice guides by the Institute of Education Sciences and high-quality reviews of intervention research[3,4,5,6]. In a structured approach to literacy instruction, the components of language (i.e., phonology, sound-symbol association, syllables, morphology, syntax, and semantics) are taught to students using an explicit, systematic method that incorporates diagnostics teaching and cumulative review[1,2,7]. This approach does not require students to guess or imply what the teacher is trying to teach. It is highly interactive and includes frequent teacher-student interactions where students receive meaningful feedback.

The Components of Language Emphasized in Structured Literacy

Each of the six major components of language are described below[1,2,7,8]:

- **Phonology** –the sound structure of a spoken language; includes phonemic awareness – the ability to distinguish, blend, segment, and manipulate individual sounds (phonemes) in words
- **Sound-Symbol Recognition** – how sounds (phonemes) map to letters (graphemes); also referred to as letter-sound correspondences, sound-symbol correspondences, phoneme-grapheme correspondences; leads to the development of the *alphabetic principle* – the knowledge that letters represent sounds
- **Syllables** – knowledge of the six syllable types and syllable division patterns; leads to advanced word-reading skills beyond sound-symbol recognition
- **Morphology** – understanding that words are made up of *morphemes* – the smallest unit of meaning in a word; includes prefixes, suffixes, roots, base words, combining forms; leads to the development of advanced single- and multi-syllable word reading and with academic vocabulary
- **Syntax** – grammar, sentence structure, and mechanics in sentences; supports effective communication through oral and written language
- **Semantics** – meanings of words and phrases; includes oral and written vocabulary (expressive and receptive)

Key Features of Structured Literacy Instruction

There are several key features of lessons that incorporate a structured literacy approach[1,2,7]:

1. Explicit teaching (including modeling and appropriate practice) of all language components
2. Skills are broken down into small, applicable chunks
3. Lessons are systematic and sequential – in other words, each lesson builds on previous skills and is taught in a logical order that considers prerequisites
4. Lesson goals are clearly stated to students
5. Skills are taught and practiced in isolation before they are practiced in decodable texts (e.g., students practice sounding out Consonant-Vowel-Consonant words in a list before they read these words in a decodable story)
6. Decodable texts (texts in which the majority of words can be sounded out) are used to provide students with additional word-reading practice.
7. Previously learned and mastered skills are reviewed frequently (i.e., cumulative review); these reviews lead students to develop automaticity necessary for fluent text reading

The Problem with Balanced Literacy Approaches

Balanced approaches to literacy instruction often go by various names, such as traditional or typical reading instruction, whole-language, Four Blocks, Reading Recovery, and Guided Reading[7]. These approaches often incorporate practices that do not directly teach students specific skills; instead, they rely on more implicit activities where students are expected to infer different reading skills. Students spend a lot of class time working with partners or independently to practice reading skills[7]. Although balanced literacy approaches incorporate some practices that align with the science of reading, they do not meet the needs of students who require explicit systematic instruction, including students who are "at risk" or "at some risk" or exhibit the characteristics of dyslexia[7,9].

Balanced literacy approaches are typically based in the whole language theory of reading and three-cueing system. These approaches emphasize meaning-based instruction and the belief that readers use cues (e.g., semantic, syntactic, and graphophonic) to pronounce words[10]. For example, when a student comes to an unknown word, he/she may be asked: Does it make sense? Does it sound right? Does it look right? In programs that are based in balanced literacy, students are asked to use these cues to read unknown words and they read predictable, leveled, or trade books instead of decodable books[7]. These predictable and leveled texts have many pictures, and teachers direct students to look at these pictures to read unknown words.

Additionally, critical phonemic awareness and phonics skills may be taught, but are rarely done so in an explicit, systematic, or sequential manner[7].

Structured Literacy versus Balanced Literacy

Many resources exist that explain the differences between structured literacy and balanced literacy. Due to copyright laws, these resources cannot be reproduced in this toolkit; however, we have linked these resources in the Scientifically-Based Reading Instruction and Intervention Resources section of this toolkit.

1. International Dyslexia Association. (2020). *Structured literacy: Effective instruction for students with dyslexia and related reading difficulties.* https://dyslexiaida.org/structured-literacy-effective-instruction-for-students-with-dyslexia-and-related-reading-difficulties/

2. International Dyslexia Association. (2019). *Structured literacy: An introductory guide.* https://app.box.com/s/mvuvhel6qaj8tghvu1nl75i0ndnlp0yz

3. Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., & Wissel, S. (2016). Foundational skills to support reading for understanding in kindergarten through 3rd grade (NCEE 2016-4008). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/wwc_foundationalreading_040717.pdf

4. Gersten, R., Compton, D., Connor, C.M., Dimino, J., Santoro, L., Linan-Thompson, S., and Tilly, W.D. (2008*). Assisting students struggling with reading: Response to Intervention and multi-tier intervention for reading in the primary grades. A practice guide*. (NCEE 2009-4045). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/rti_reading_pg_021809.pdf

5. Wanzek, J., Stevens, E. A., Williams, K. J., Scammacca, N., Vaughn, S., & Sargent, K. (2018). Current Evidence on the Effects of Intensive Early Reading Interventions. *Journal of learning disabilities*, *51*(6), 612–624. https://doi.org/10.1177/0022219418775110

6. Wanzek, J., Vaughn, S., Scammacca, N., Gatlin, B., Walker, M. A., & Capin, P. (2016). Meta-Analyses of the Effects of Tier 2 Type Reading interventions in grades K-3. *Educational Psychology Review*, *28*(3), 551–576. https://doi.org/10.1007/s10648-015-9321-7

7. Spear-Swerling, L. (2019). Structured Literacy and Typical Literacy Practices: Understanding Differences to Create Instructional Opportunities. *TEACHING Exceptional Children, 51*(3), 201–211. https://doi.org/10.1177/0040059917750160

8. Moats, L. C. (2020). *Speech to print: Language essentials for teachers* (3rd ed.). Brookes.

9. Moats, L. (2007). *Whole-language high-jinks: How to tell when "scientifically-based reading instruction" isn't.* Thomas B. Fordham Foundation & Institute. https://files.eric.ed.gov/fulltext/ED498005.pdf

10. Hempenstall, K. (2014, February). *Part 1: Whole language! What was that all about?* National Institute for Direct Instruction. https://www.nifdi.org/news/hempenstall-blog/441-part-1-whole-language-what-was-that-all-about