

# Science of Reading

Jackie M Beyer

CIED5813 ® Educational Advocacy &  
Leadership

Oklahoma State University

Instructor: Shelly Martin-Young Ph.D.

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The science of reading refers to research collected over time detailing the best ways students learn to read including details on how developing young brains function. (NCIL, 2022)

One research study does not make a science. In early literacy alone, tens of thousands of studies have been published, and some even show results that are at odds with one another. (Jiban, 2024)

Students need to be explicitly taught how to read using a sequential systematic research-based order of instruction. Teachers need professional development and proper training.

“The science of reading is the converging evidence of what matters and what works in literacy instruction.”

## Fourth Grade Slump

Students in grades k-3 are “learning how to read” but once they reach fourth grade they are “reading to learn.” If they are behind before they get to the upper elementary grades they will struggle to catch up the rest of their academic career.

### Teaching Based on the 5 Big Ideas

**Comprehension** - The ability to understand what you are reading.

**Fluency** - The ability to read words, phrases, sentences, and stories correctly, with enough speed, and expression.

**Phonemic Awareness** - The ability to identify and play with individual sounds in spoken words.

**Phonics** - Reading instruction on understanding how letters and groups of letters link to sounds to form letter-sound relationships and spelling patterns.

**Vocabulary** - Knowing what words mean and how to say and use them correctly.

# Every Child Can Learn To Read

*Dr. Sally Shaywitz from the Yale Center for Dyslexia and Creativity*

This is “when texts become more varied, complex, and challenging linguistically and cognitively. Beginning at Stage 3 (grades 4-8), students use reading as a tool for learning, as texts begin to contain new words and ideas beyond their own language and their knowledge of the world. Words and concepts in such material are beyond the everyday experience of children. In order to read, understand, and learn from these more demanding texts, the readers must be fluent in recognizing words, and their vocabulary and knowledge need to expand, as does their ability to think critically and broadly. If children are unable to make the transition from Stage 2 to 3, their academic success is usually severely challenged.” (Chall & Jacobs, 2003) This is why teachers understanding the science of reading is so essential.

Dr. Sally Shaywitz from the Yale Center for Dyslexia and Creativity states that 1 in 5 readers in every classroom is a struggling reader whether they have dyslexia or not. It is imperative that all elementary school teachers have the basics in teaching young readers how to use the science of reading during children’s most formative years.

“Strong reading comprehension skills are central not only to academic and professional success, but also to a productive social and civic life. These skills build the capacity to learn independently, to absorb information on a variety of topics, to enjoy reading, and to experience literature more deeply.” (Shanahan, et al, 2010). “Constructing meaning while reading can be demanding intellectual work” (Shanahan, et al, 2010)

requiring teachers to be informed on how best to help students be successful.

Teaching students how to use reading comprehension strategies including teaching the how to construct meaning from text can have the greatest impact on early readers. Using skills like: Activating prior knowledge or predicting, inferencing, visualizing, and summarizing or retelling can help students with reading comprehension.

The upper elementary grades represent a critical time in literacy development. There are several advancements expected of students as they transition from the early elementary to late elementary grades. (Donegan & Wanzek, 2021)

Building text fluency is the easiest way teachers and parents can help students become better readers. Simply reading along with your child or making sure they are able to read 19/20 words on a page when reading independently without decoding challenges is the best way for students to learn to read. Reading before bed will also help students rewire their brains as they sleep. But teachers can’t work on these essential skills if they don’t know how or what to do.

Making sure your school is using the science of reading in every classroom can mean the difference between your students graduating from high school and becoming productive members of your community and ending up in prison. “According to the National Adult Literacy Survey, 70% of all incarcerated adults cannot read at a fourth-grade level, “meaning they lack the reading skills to navigate many everyday tasks or hold down anything but lower (paying) jobs.” Data supports that those without sufficient income earned by work are the most prone to crime.” (Literacy Mid-South, n.d.)

# Resources

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