

## The Cost of Ignoring the Science of Reading

According to Dr. Connie Juel, a Stanford University reading researcher, 88% of students who are poor readers in 1<sup>st</sup> grade will remain poor readers at the end of 4<sup>th</sup> grade. The Annie E. Casey Foundation reports that if children are not proficient readers by the end of 3<sup>rd</sup> grade they are four times more likely to drop out of high school. Poor readers don't just "catch up."

A 1993 report from the US The Department of Justice links academic failure to delinquency, stating that this link is "welded to reading failure." According to the US Department of Education, 85% of children in the juvenile justice system have reading problems. 70% of incarcerated adults read below a 4<sup>th</sup> grade level. Wyoming spends about 300 million dollars annually on incarceration.

Despite billions of additional dollars being poured into education nationally, reading scores have been flat for over a decade, with an increasing gap between the highest and lowest-performing students. According to the 2019 National Assessment of Educational Progress (NAEP), 65% of the nation's 4<sup>th</sup> graders and 60% of Wyoming's 4<sup>th</sup> graders do not read proficiently. 66% of the nation's and of Wyoming's 8<sup>th</sup> graders do not read proficiently.

This is not the fault of teachers. Teachers teach the way they learned to teach. The enormous gap between reading research and teacher preparation programs around the country contributes to our nation's reading problem. Only a few universities have fully aligned their teacher preparation programs with scientific research. The most effective way to teach all children to read has been settled by scientific research for decades. We must ensure that this information makes its way to our competent and dedicated Wyoming teachers.

The good news? Research from the National Institutes of Health shows that 95% of struggling

readers can be brought up to grade level with proper intervention. Pre third grade intervention grade is more effective and less costly.

In 1986, two respected researchers, Drs. Philip Gough and William Tunmer explained that reading comprehension requires two skills: (1) ability to read the words on a page and (2) ability to understand the words we read. For example, if your child can read the words but doesn't know what they mean, he won't comprehend. If your child does not have the phonics skills to read the words, her intelligence and vocabulary cannot help her comprehend. The most common cause of reading difficulties is difficulty reading the words on a page. Students leave 3<sup>rd</sup> grade without the phonics skills needed to read unfamiliar words. Ask any parent of a struggling reader about their on-going battle to get effective reading help for their child who is passed from grade to grade.

Around 1980, schools all but stopped teaching phonics in favor of something called the Three Cueing System. This system encourages children to rely on pictures and context clues to predict or guess words, using phonics to sound out words as a last resort, if at all. This shift away from phonics was based on a scientifically invalid but passionately marketed idea called whole language learning. The idea was that learning to read is as natural as learning to speak and that children magically learn to read by being exposed to print and making educated guesses at words. What is now called Balanced Literacy consists of Three Cueing System practices with what education reporter Emily Hanford called a "phonics patch."

Decades of neuroscience research and brain imaging have thoroughly debunked the idea that reading is natural. This research shows that using clues to "read" words is ultimately ineffective because it does not teach children how to read unfamiliar longer words. Unfortunately, these invalid ideas remain the basis for most reading instruction. Why is this? Possibly because reading research is done in neuroscience and psychology labs and never makes it into the colleges of education. Or perhaps because once publishing companies and professors became invested in the idea that "reading is natural," incorporating new research into their materials and teaching practices was just too costly and challenging.

In 1999, the National Reading Panel (NRP) was commissioned by The National Institute of Child Health and Development to conduct a meta-analysis on reading research to determine the

best way to teach all children to read. This 450-page report was published in 2000 and should have put the Three Cueing System folks out of business. This report concluded that the most effective reading instruction incorporates explicit instruction in phonemic awareness, systematic phonics, opportunities to improve reading fluency, and comprehension enhancements, including robust, engaging vocabulary instruction delivered via read-alouds.

All children benefit from comprehensive, explicit, systematic instruction and practice with the NRP identified skills. This kind of instruction is absolutely critical for children with reading disabilities for whom mastering the letter-sound relationships is hard, and for disadvantaged children who may lack vocabulary and background knowledge. These children are unlikely to become skilled readers without such instruction.

Know better. Do better.

---

**January 14, 2020 | Reprinted with permission, Wyoming Tribune Eagle**

Heather Fleming is co-founder of the nonprofit WY Lit. She is a certified structured literacy teacher and will complete her master's degree in Reading Science at Mount St. Joseph University in Cincinnati, Ohio in 2020. Heather provides a variety of training for educators and parents of struggling readers. She can be reached at [heather@wylit.org](mailto:heather@wylit.org).

Kari Roden is co-founder WY Lit. She is currently an intensive reading interventionist in Laramie County School District 1. Her expertise is in dyslexia and individualized, data-driven instruction for struggling readers. She can be reached at [kari@wylit.org](mailto:kari@wylit.org).