READ TO RISE
The Evolution of Teaching the Science of Reading and the Imperative for Universal Embrace

The National Parents Union
February 2024
FOREWORD

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In a world increasingly shaped by information and innovation, literacy stands as the bedrock upon which individual success and economic mobility are built. The National Parents Union proudly introduces the “Read to Rise” campaign, a groundbreaking initiative aimed at championing literacy as the catalyst for transformative change. As an organization deeply committed to empowering parents and communities, we recognize that the ability to read is not merely a fundamental skill but a gateway to opportunities that can break the chains of generational inequity. This campaign underscores the vital role literacy plays in unlocking economic mobility, allowing individuals to access higher education, pursue fulfilling careers, and actively contribute to a thriving society.

As we embark on this journey, we are acutely aware of the evolving landscape of teaching children to read. Our commitment to the “Read to Rise” campaign is fueled by the conviction that evidence-based approaches, accountability, and informed policymaking are paramount in shaping the future of education. In the pages that follow, you will delve into a comprehensive research paper exploring the evolution of teaching kids to read, dissecting the methods that have proven effective, and shedding light on the critical intersection between literacy and economic mobility.

This paper serves not only as a testament to the power of evidence-based practices but as a clarion call to lawmakers, urging them to embrace and champion these approaches in order to secure a brighter and more equitable future for all our children.

Together, let us rise through the transformative force of literacy and pave the way for a generation empowered to reach new heights.

Onward,

Keri Rodrigues
The ability to read is fundamental for academic success and personal development. The evolution of teaching the Science of Reading has been a journey marked by varied approaches, controversies, and revelations. This paper delves into the historical trajectory of teaching reading, highlighting the need for universal adoption of evidence-based methods to ensure every child receives effective instruction.

Third grade is a pivotal time in a student’s education. Students are still learning to read, but it is the last chance they will have to be taught the foundational literacy skills needed to be successful in the future. In the fourth grade, students start reading to learn. They are introduced to a broad variety of texts, and they are expected to not only fluently read the material but be able to comprehend, analyze, and discuss new information. Educators will begin to introduce new vocabulary through both classroom teaching and reading assignments, and students who are struggling to keep pace with their peers will begin to fall further behind.¹

However, in 2020, only one-third of fourth and eighth graders could read proficiently.² By 2022, the results of the National Assessment of Educational Progress (NAEP) recorded the largest decline in reading performance in thirty years, with the average reading performance of nine-year-olds dropping five points.³

Reading is the gateway to further learning, and the importance of being able to read proficiently by the end of third grade has been documented through decades of research. The research has proven over and over that students who fail to reach this milestone are much more likely to have lower academic achievement, face social and economic adversity throughout their lives, are more likely to leave school before graduation, struggle with mental health issues, and be incarcerated or unemployed.⁴ In addition to the aforementioned challenges, someone who reaches adulthood without the ability to learn new information through reading is more likely to be in poor health, less likely to vote, and less likely to promote reading readiness in their children.⁵

The global implications of this literacy crisis cannot be ignored either. Without the ability to read, students cannot be taught digital literacy and will not have the ability to understand rapidly changing technologies. Students who can’t read will not be able to master advanced concepts and topics in science, technology, engineering, and mathematics (STEM), leaving the United States unable to compete in the global marketplace. Senator Bill Cassidy summed it up perfectly when he said, “Failure to address literacy challenges fails our students and our country.”⁶

Almost all children can learn to read at grade level, but not all children have equal access to the type of early education that will prepare them for the classroom. Though there are barriers to literacy proficiency that are outside their influence, schools and districts can still have an impact on other factors. Districts can provide high-quality pre-kindergarten programs, engage families to ensure they understand the importance of attendance, and provide extended learning opportunities such as before- or after-school programs.⁷
HISTORICAL CONTEXT

Literacy instruction in the United States has continuously evolved, shaped by cultural, societal, scientific, and educational changes. From the early days of the American Colonies to the present digital age, literacy pedagogy has undergone major shifts in an ongoing pursuit of effective instructional methods.

The New England Primer, published in 1690 and adapted from previous texts brought from England, served as the foundational textbook in schools. Reading instruction consisted of rote memorization of letters and simple syllables, and little thought was given to teaching methods or how to measure a child’s reading comprehension.\(^8\)

In the mid-19th Century, Horace Mann argued against the use of Phonics-based literacy instruction. Mann, a politician and education reformer who is often referred to as “the father of public education,” believed that teaching students to sound out words would prevent them from learning to read for comprehension.\(^9\) He believed that children would be more successful if they learned words first before getting into the details of understanding letters and syllables.\(^10\) This became known as the Whole Language method.

The early 20th Century saw the start of the Whole Language vs. phonics debate, commonly referred to as The Reading Wars. Whole Language – or Look-Say – encouraged students to memorize words as whole units, focusing on the meaning and context of the words. Phonics emphasized decoding words to understand the relationship between written letters and individual spoken sounds.\(^11\)

THE SCIENCE OF READING EMERGENCE

In the 1950s, Rudolf Flesch’s book, Why Johnny Can’t Read, was published, calling for a shift back to phonics-based teaching. In his book, Flesch argued that Look-Say didn’t teach reading. Rather, children were given books and told to guess at words or wait until the teacher told them. In the 1960s, Jeanne Chall, a psychologist at the Harvard Graduate School of Education, published her analysis of approaches to literacy in American schools in her book, Learning to Read: The Great Debate. Concluding that phonics instruction is more effective than the Look-Say method – especially for students from underprivileged families – Chall’s book recommended that phonics be taught early in a child’s education so they could focus on introducing the joy of reading more quickly.\(^12\)

To learn to talk, children only need to be surrounded by spoken language but people are not born wired to read. Our brains do not know how to do it innately and must be rewired to learn. Decades of scientific research shows that, while we use our eyes to read, the starting point for reading is sound. This is not a natural act – children need to be taught how to recognize the speech sounds that letters represent, how to decipher the words they hear and know how to say, and how those words connect to the letters on the page.\(^13\)

Despite the scientific research, the literacy debate continued, and whole language remained the predominant reading teaching method in public schools.

In 1997, Congress called for the National Institute of Child Health and Human Development (NICHD) to form the federally-funded National Reading Panel (NRP) to assess the effectiveness of the various approaches to literacy instruction. The fifteen panelists were primarily tenured psychology and education professors, many of whom were leaders in the field of literacy research.\(^14\)

When the NRP released its findings in a 400-page report in 2000, many hoped it would put an end to The Reading Wars. The report concluded that there are five essential pillars to literacy instruction: phonemic awareness, phonics, vocabulary, fluency, and comprehension.\(^15\) It marked a clear shift towards a more scientifically grounded approach to reading instruction, including the incorporation of evidence-based practices such as explicit phonics instruction, comprehension strategies, and phonemic awareness activities.
CHALLENGES AND CONTROVERSIES

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While Congress hoped to put an end to The Reading Wars, the report from the National Reading Panel did little to change the minds of whole language supporters, even if the science could no longer be denied. Grasping to the belief that learning to read was an innate process, whole language proponents began to advocate for a compromise and balanced literacy was born.

The concept of balanced literacy gained popularity as an approach to teaching literacy in a way that addressed concerns educators had with both the whole language and explicit phonics methodologies. While whole language emphasizes the importance of meaning and context in reading unfamiliar words, and phonics-based instruction emphasizes decoding and phonetic rules, many educators believe that both methods are inadequate for addressing the diverse needs of students.16

Lucy Calkins, the founder of Columbia’s Teachers College Reading and Writing Project, published her book, The Art of Teaching Reading, the same year that the National Reading Panel shared their report. Considered one of the leading figures in balanced literacy, it was Calkins’ philosophy of literacy that formed the foundation of her Units of Study,17 which served as resources for teaching reading and writing. Calkins’ curriculum focused on reading workshops, which generally included four parts and relied heavily on students using context cues instead of their understanding of how to sound out words.

Whole language instruction relies heavily on students using context cues to guess words and their meanings, but research has shown that students develop foundational decoding skills and become proficient in reading when explicit phonics teachings are part of their literacy education. The term “balanced literacy” is used broadly to encompass a range of instructional practices that vary across school districts, schools, and classrooms. Calkins’ Units of Study approach was appealing to educators because its format was flexible, allowing teachers to be more creative with their lesson planning while using books their students would find interesting.

Test scores failed to improve when schools implemented balanced literacy education, and the list of criticisms continued to grow.

The nebulous nature of the Calkins’ curricular approach made it difficult to implement a course of study that could be used to consistently evaluate student progress. Without a clear and consistent curriculum to follow, there was no way to ensure that teachers were including both whole language and phonics in their teaching. The balanced literacy emphasis on discovery-oriented activities may not be structured enough for some students to develop decoding and word recognition skills if there isn’t explicit phonics instruction included. Additionally, helping struggling readers may be more difficult without a structured and systematic approach to address the diverse needs of students.

According to Jessica Winter, a journalist for The New Yorker, Calkins’ Units of Study form a curriculum that teaches “literacy by vibes.” Her reading workshops presumed that a child could become fluent in reading by being placed in a book-rich environment. In the chapter about phonics, when it comes to high-frequency words, Calkins notes that “children who are thriving as readers and writers at the end of first grade usually seem to ‘just know’ these words.”18

In his Senate committee report, Senator Bill Cassidy quoted a 2019 EdWeek Research Center survey that showed nearly six in ten educators were using balanced literacy as their teaching method philosophy.19 Based on three-cueing, balanced literacy has been rejected by researchers who are now embracing the pedagogical shift to explicit, systematic phonics instruction as a foundation for learning to read. Outdated curricula add to our nation’s literacy crisis, and kids are falling farther and farther behind in districts where there is a lack of commitment to adopting evidence-based practices.
THE NEED FOR UNIVERSAL EMBRACE OF THE LATEST RESEARCH

The Science of Reading is not a political agenda or one-size-fits-all approach, nor is it a specific program or component of literacy instruction. Rather, it is a growing body of knowledge based on and supported by thousands of research studies that revealed how the brain works, how children learn to read, what instruction works best for most students, and what goes wrong when students don’t learn.20

One of the foundational elements of the Science of Reading is known as The Simple View of Reading. This theory suggests that mastering reading comprehension requires the ability to both decode words and comprehend language and is typically shown as an equation.

\[ \text{DECODING} \times \text{LANGUAGE COMPREHENSION} = \text{READING COMPREHENSION} \]

Decoding encompasses skills such as word recognition and fluency, while language comprehension is the understanding of language and sentence structure. The use of the multiplication sign demonstrates that not mastering one component may lead to overall reading failure.21

While the Science of Reading is not a specific curriculum, the research behind this body of evidence has proven time and time again that nearly every child – 95%, according to a study from EAB – can learn to read with confidence when taught using curriculum based on the Science of Reading.22 More than that, struggling readers who receive extra, evidence-based instruction also improve.23

ALL STUDENTS HAVE THE ABILITY TO LEARN HOW TO READ

Graphic courtesy of EAB
CASE STUDY: THE “MISSISSIPPI MIRACLE”

One only needs to look at Mississippi to see what can be accomplished when a state mandates an evidence-based reading curriculum for its schools.

In 2011, four out of five Mississippi fourth graders scored below proficient on the National Assessment of Education Progress (NAEP). Two years later, Mississippi passed the Literacy-Based Promotion Act (LBPA), based on a 2002 Florida law that resulted in students achieving some of the country’s highest reading scores. The LBPA emphasized screening for reading difficulties, early identification, and interventions to address the needs of students at risk for reading failure. Students who cannot pass a reading test in third grade are given additional chances after they receive intensive tutoring and attend summer literacy camps. If they still do not pass, students are held back in third grade. Schools have consequences for failing to teach kids to read, but the state also offers assistance to keep kids on track.

The policy worked.

While it is often called the “Mississippi Miracle,” the success did not happen overnight. In the decade since the implementation of the LBPA, Mississippi has gone from being ranked 49th to 21st in fourth-grade reading.

On the 2022 NAEP – the first national measure of student learning since the start of the pandemic – Mississippi maintained its historic gains in fourth-grade reading, scoring at the national average, despite a post-pandemic decline in reading scores nationwide. Other states have taken notice.
CASE STUDY: TENNESSEE

In 2021, the Tennessee General Assembly enacted the Tennessee Literacy Success Act, which required school districts and public charter schools to provide students in kindergarten through third-grade foundational literacy instruction based on the Science of Reading. The bill required schools to administer yearly reading screeners to these same grade levels to assess proficiency and identify any potential learning challenges, while also mandating that parents be notified in writing of significant deficiencies and outlining the interventions and supports available to the parent and student.28

To address the impact of the pandemic on student learning, the General Assembly enacted the Tennessee Learning Loss Remediation and Student Acceleration Act, which required school districts and public charter schools to offer additional academic support, including learning loss bridge camps, summer learning camps, and tutoring to students. Additionally, this act requires third graders who do not score met or exceeded expectations on the Tennessee Comprehensive Assessment Program (TCAP) to repeat the year.29

The retention policy took effect for the 2022-23 school year and, by the end of spring 2023, about 40% of third-graders achieved a “met” or “exceeded” expectations on the TCAP. However, that meant that 60% of third-graders were set to be held back because they did not achieve the required scores. The law included several avenues for students to be exempt from being held back, including having a disability or being an English language learner with less than two years of English instruction. When the final numbers were tallied, just under 900 students were held back because of their reading scores.30
CASE STUDY: MINNESOTA’S READ ACT

In Minnesota, the legislature passed the Reading to Ensure Academic Development (READ) Act in 2023, to have every child in Minnesota read at or above grade level every year, beginning in kindergarten, and to support multilingual students and those receiving special education services. The path to achieving these goals includes: using a curriculum based on the Science of Reading, providing teachers with training on evidenced-based reading instruction, conducting regular screenings for mastery and dyslexia for students in kindergarten through third grade, and continued monitoring of students in fourth-grade and up who are not proficient in reading.

Beyond dyslexia, other learning disabilities can impact how a student learns to read. Developmental Language Disorder (DLD) – when a person has difficulty understanding language – impacts approximately two children in every classroom, and commonly occurs with ADHD and Dyslexia. When students’ needs are unmet, unaddressed, or addressed with unhelpful systems, gaps in learning opportunities widen. What may initially be a narrow gap in reading ability can quickly grow, leaving students with lost confidence, low self-esteem, and loss of interest.

Learning to read using context cues to guess words and their meanings doesn’t work for all students, and identifying and diagnosing a potential learning impairment in a struggling reader can take years. Support for a learning disability like dyslexia often comes via private avenues, limiting accessibility to those who do not have the financial means to participate. Science of Reading-based instruction is more inclusive, using systematic methods to teach students how to read – including those with learning disabilities – which levels the playing field for all early learners.

Nationwide, more than one-third of fourth-graders cannot read at a basic level. Students who are not reading at grade level by fourth grade are four times more likely to drop out of high school, which leads to additional challenges as adults such as lower earnings, higher unemployment rates, higher chances of going to jail or prison, and a greater chance of needing access to government benefits. When looking at the statistics for students of color, those with learning differences, and those who grow up in low-income households, the rate of fourth-grade students who cannot read proficiently is even more bleak. This is not a failure of the students and families but of the inequality in access to effective literacy instruction.
NATIONAL PARENTS UNION RECOMMENDATIONS

PROFICIENCY BY 3RD GRADE

Learning to read by the third grade is a critical milestone in a child’s educational journey, laying the foundation for future academic success and lifelong learning. By the end of third grade, students transition from learning to read to reading to learn, as they encounter more complex subject matter across various disciplines. Proficient reading skills at this stage are essential for students to comprehend, analyze, and synthesize information from diverse sources, empowering them to excel in other subjects and develop a love for learning. Beyond academics, reading proficiency in early grades is closely linked to overall cognitive development, critical thinking, and the ability to navigate the demands of an information-rich society. It serves as a gateway to expanded opportunities, fostering a sense of confidence and self-efficacy that propels students toward higher educational achievements and future career success.

Recognizing the pivotal role of third-grade reading proficiency, it becomes imperative to address the needs of students who are not on grade level by this critical juncture. Early identification and targeted interventions for struggling readers are crucial to prevent the development of long-term learning gaps. Interventions can take various forms, including personalized tutoring, small-group instruction, and evidence-based literacy programs tailored to meet individual needs. By providing timely and effective interventions, educators and stakeholders can help these students catch up to their peers, fostering not only academic success but also bolstering their self-esteem and motivation to learn. Investing in early literacy interventions is an investment in the future, as it equips students with the essential skills needed for a lifetime of learning, personal growth, and active participation in society.

INVEST IN INITIAL TRAINING AND ONGOING PROFESSIONAL DEVELOPMENT

Evidence-based reading instruction is growing in popularity, but there is still resistance from educators who don’t know the science. A 2023 study conducted by the National Council on Teacher Quality (NCTQ) found that only 25% of teacher preparation programs adequately address the five pillars of the Science of Reading. A 2020 study conducted by the EdWeek Research Center found that more than 70% of special education and K-2 teachers used literacy instruction methods that are not grounded in the Science of Reading.

The NCTQ study evaluated 693 undergraduate and graduate teacher preparation programs, finding that 40% of programs were instructing future teachers to use debunked teaching practices, including strategies that encourage children to guess at words they don’t know rather than sound them out. The five pillars of reading instruction – phonemic awareness, phonics, fluency, vocabulary, and comprehension – are interconnected, so a teacher who lacks a complete understanding of one component will not be able to effectively teach the others. Of the five pillars, phonemic awareness receives the least attention across the programs, with two out of three teacher preparation programs failing to adequately address phonemic awareness. In addition, despite needing multiple opportunities to practice their skills to be effective instructors, nearly one-third of the programs do not provide chances to practice teaching the core components of reading. Only Mississippi and Colorado received high scores from the NCTQ for their teacher preparation programs, that use science-based instruction.

States have the authority to regulate teacher preparation programs, however only a handful have specific requirements for what prospective teachers learn about reading. What can be learned from states like Mississippi is that strong state policies, effective implementation, and accountability will improve the quality of teacher preparation programs which, in turn, improves the quality of classroom instruction. However, what has been billed as the “Mississippi Miracle” was less a miracle and more a methodical overhaul grounded in smart policy and the determination of administrators to push through resistance.
USING EVIDENCE-BASED MATERIALS

Utilizing high-quality instructional materials is paramount in ensuring that students receive effective and evidence-based reading instruction. A curriculum that is well-designed, research-based, and aligned with literacy best practices provides educators with the tools to impart essential reading skills to students. High-quality instructional materials encompass a comprehensive approach, integrating phonemic awareness, phonics, fluency, vocabulary, and comprehension strategies. They are often designed to be adaptable to diverse learning styles and cater to the needs of all students, including those with varying levels of proficiency. By selecting and implementing such materials, educators can cultivate a strong foundation for literacy, enhancing students’ reading abilities and fostering a lifelong love for learning.

Several states have recognized the significance of high-quality instructional materials and have implemented rigorous curriculum approval methods to ensure that districts adopt the most effective approaches to teach children how to read. For instance, Louisiana’s Department of Education employs a comprehensive curriculum review process, known as the Louisiana Believes Educator Support System, to evaluate and approve instructional materials. Similarly, California has established a thorough curriculum framework and evaluation process, incorporating input from educators, experts, and the public to endorse materials that align with research-based practices. These examples highlight the commitment of states to quality education, emphasizing the need for evidence-based instructional materials to guide educators in equipping students with the necessary reading skills for success.

COMMITMENT TO MEASURING STUDENT PROGRESS

The need for ongoing assessment in education cannot be overstated, particularly when it comes to literacy development. Continuous evaluation allows educators to track individual student progress, identify areas of strength and weakness, and tailor interventions to meet each student’s unique needs. By implementing regular assessments, teachers can quickly identify struggling readers and intervene promptly with targeted strategies to address specific challenges. Ongoing assessment is not merely a tool for gauging academic achievement; it serves as a compass guiding educators to provide timely and individualized interventions. This dynamic approach to assessment ensures that students receive the necessary support and adjustments throughout their learning journey, fostering a proactive and responsive educational environment that maximizes each student’s potential. Ultimately, the combination of ongoing assessment and individual interventions creates a pathway for personalized learning, empowering students to overcome obstacles and thrive academically.

TO ENSURE EVERY CHILD HAS THE OPPORTUNITY TO BECOME A PROFICIENT READER, A UNIVERSAL EMBRACE OF THE SCIENCE OF READING IS ESSENTIAL.

CONCLUSION

The evolution of teaching the Science of Reading reflects a journey from traditional approaches to evidence-based methodologies grounded in scientific research. To ensure every child has the opportunity to become a proficient reader, a universal embrace of the Science of Reading is essential. This necessitates a concerted effort from educators, policymakers, and the broader educational community to prioritize evidence-based practices in reading instruction.
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FOOTNOTES


8 Reading the Past: Historical Antecedents to Contemporary Reading Methods and Materials Arlene Barry https://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1044&context=reading_horizons

9 Is there really a ‘science of reading’ that tells us exactly how to teach kids to read? https://www.washingtonpost.com/education/2021/01/26/readingwars-scienceofreading-teaching/


14 Kim, James S; Research and the Reading Wars https://scholar.harvard.edu/files/jameskim/files/bookch2.pdf

15 The National Reading Panel; Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature of Reading and Its Implications for Reading Instruction. https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf


22 Narrowing the Third-Grade Reading Gap: Embracing the Science of Reading. EAB https://pages.eab.com/rs/732-6KV-655/images/Narrowing the Third-Grade Reading Gap research briefing.pdf


24 Lurye, Sharon. Kids’ reading scores have soared in Mississippi ‘miracle.’ Associated Press https://www.pbs.org/


Minnesota Department of Education. The Minnesota Reading to Ensure Academic Development (READ) Act https://education.mn.gov/MDE/dse/READ/


