



# Urgency For Literacy

HOW TENNESSEE CAN DELIVER  
STUDENT READING SUCCESS







# Contents

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INTRODUCTION.....	2
TENNESSEE’S LITERACY CRISIS.....	3
DEFINING THE EARLY LITERACY CRISIS.....	5
GAPS IN TENNESSEE’S EARLY LITERACY PRACTICES AND POLICIES.....	8
RECOMMENDATIONS.....	19
REFERENCES AND SOURCES.....	21



## Introduction

Tennessee has made significant progress in student achievement for more than a decade by raising expectations for students, supporting educators to help students meet those expectations, and creating an environment of continuous improvement in education. A third-grader in a Tennessee classroom today should be in a better position than ever before to succeed in college, career, and life.

Unfortunately, that is not the case. Most Tennessee third-graders will not learn to read and write well based on the state’s current reading performance trends.

Tennessee faces potentially devastating consequences if the state does not take immediate action to address the literacy crisis. Tennessee must:

- Set a statewide, systemic vision for strong literacy instruction that is based on the science of how students learn to read
- Support current teachers and leaders to close the gaps in their knowledge of strong literacy instruction
- Ensure all new teachers are prepared to effectively teach reading on day one in the classroom

# Tennessee's Literacy Crisis

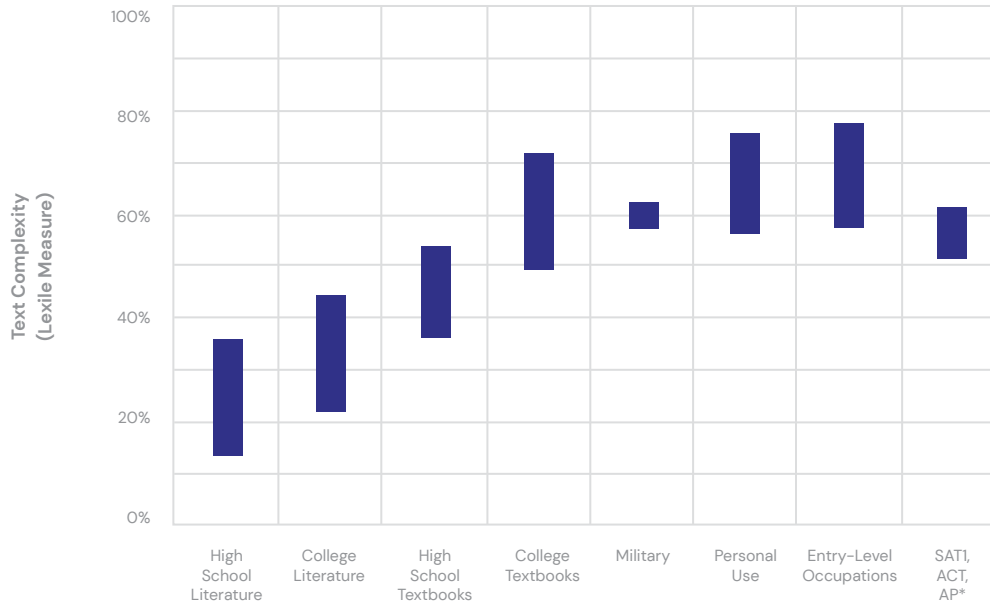
Imagine a five-year-old beginning kindergarten in a Tennessee school. Based on current student achievement data in English language arts (ELA), that student has a one-in-three chance of learning to read and write at grade level by the end of third grade. If that student is economically disadvantaged or a student of color, the odds drop to just one in five. If that student is an English learner or a student with a disability, the odds become even slimmer — just one in eight. If that student does not read proficiently by the end of third grade, current instructional practices are unlikely to enable that student to catch up.

As the student moves through K-12 education, the time and energy that should be used to make sense of increasingly complex ideas will be used just trying to read text. If that student makes it to high school graduation, which is four times less likely to happen compared to a student who reads proficiently by third grade,<sup>1</sup> the struggles will continue, as the texts will increase in complexity through college and career. Current completion rates in Tennessee show that only about 28 percent of our K-12 students go on to successfully complete a postsecondary degree — a number that is alarmingly similar to the approximately 34 percent of students across all grades who are meeting expectations in ELA.<sup>2</sup>



## Text Complexity Increases In College And Career

Compared to high school materials, the text encountered in postsecondary education and careers is more challenging to comprehend. Students who struggle with reading in K-12 will face barriers to college, career, and life with long-lasting consequences.



Source: Metametrics

If the student does not pursue education past high school, the odds of earning a livable wage are slim. 2017 Tennessee high school graduates who directly entered the workforce without any postsecondary education earned approximately \$13,000 in average annual wages.<sup>3</sup> Further, research shows that adults who cannot read proficiently are more likely to have interactions with the criminal justice system and poorer health outcomes.<sup>4</sup>

Falling behind in the early foundational years makes success in education, career, and life much harder. Tennessee's students and families should trust that educational opportunity at school will open doors at every step of the way. We must address our literacy crisis urgently, so that Tennessee students have a fighting chance at productive lives and economic independence.

**Struggles with early literacy create preventable barriers to success in K-12, college, career, and life for our students.**

# Defining The Early Literacy Crisis

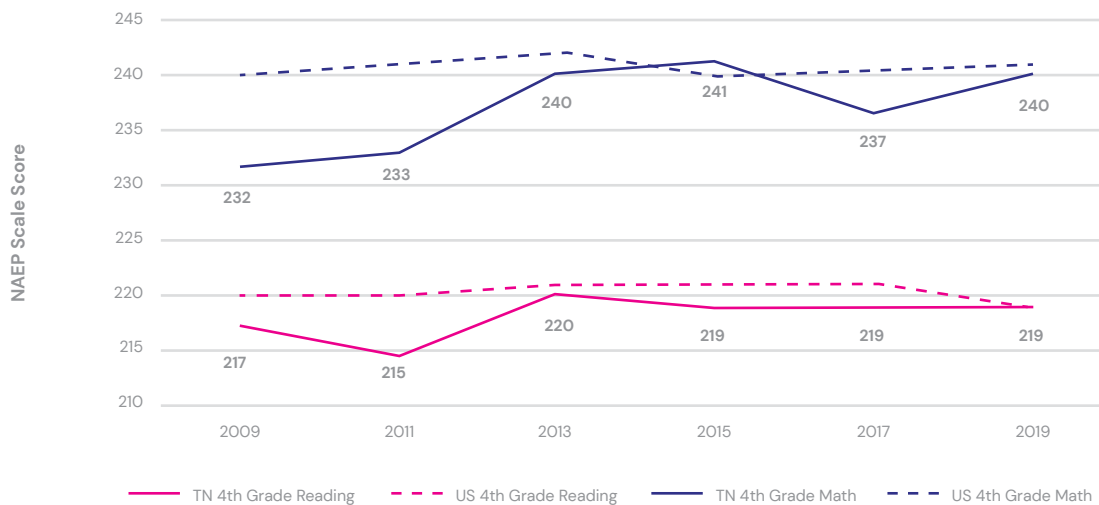
The Nation's Report Card and state assessments show worrying trends in reading, and Tennessee's own improvement work points to problems with instructional practices.

## Stagnant outcomes, widening achievement gaps:

Tennessee's rapid progress on the National Assessment of Educational Progress (NAEP) came largely from math and science gains because reading scores have remained stagnant since 2013. Worse still, reading scores have declined for the lowest percentile of students, meaning that the students who struggle the most with reading today have lower achievement overall than the students who struggled the most with reading 10 years ago.

### Tennessee's Fourth-Grade Reading Scores Flatline

While Tennessee's math results have shown significant growth since 2009 on the Nation's Report Card, the reading performance has not improved since 2013.

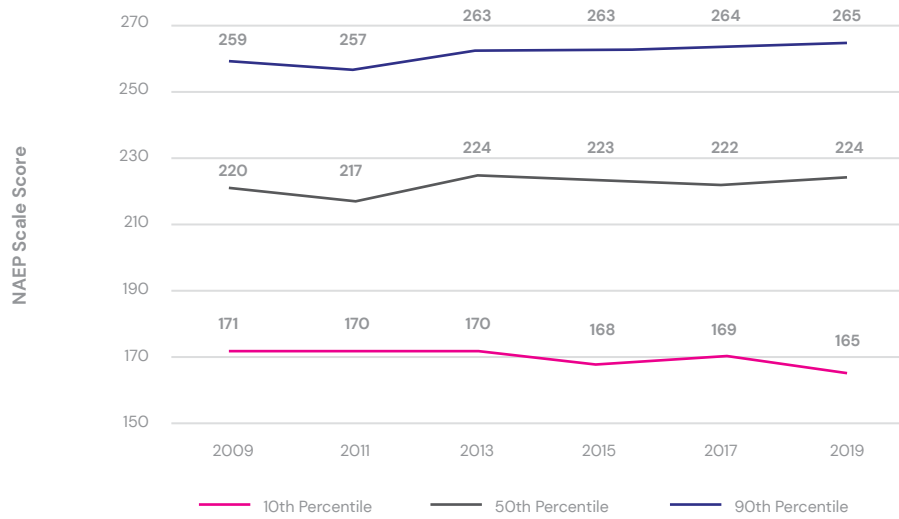


Tennessee vs. US fourth-grade reading and math scores, 2009–2019 National Assessment of Educational Progress

Source: NAEP, 2009–2019

## Fourth-Grade Reading Opportunity Gap Continues To Grow

Over the last decade, the reading score difference between the top and bottom performance groups on the Nation's Report Card has widened by more than 10 points.



Tennessee's 10th, 50th, and 90th percentile performance scores on fourth-grade reading, 2009-2019 National Assessment of Educational Progress



### Little improvement after third grade:

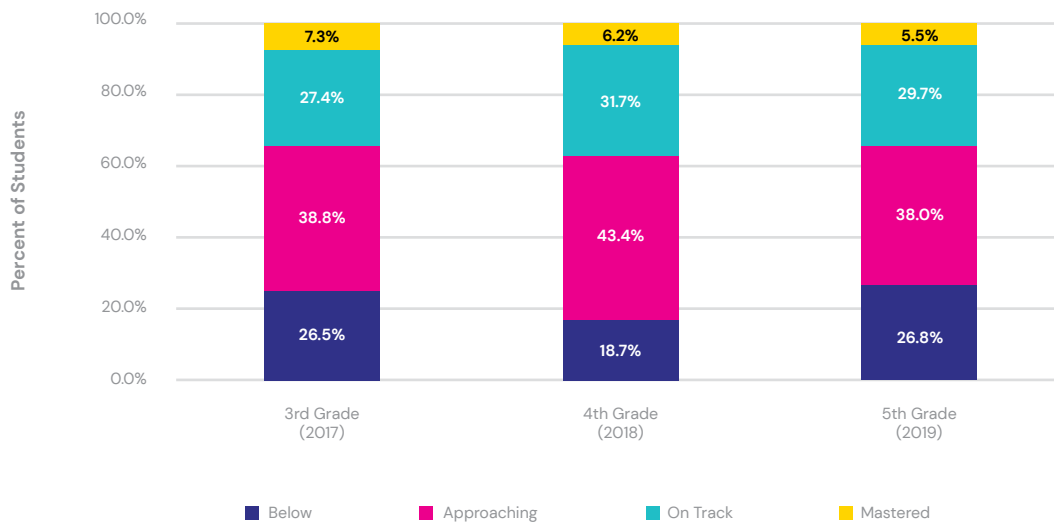
Students who are not on track by third grade are much less likely to catch up, state assessment results show. Following the 2017 group of third-graders who were fifth-graders in 2019, there is little change in the percentage of students on-track in ELA. These patterns have not changed since 2016, when the Tennessee Department of Education's (TDOE) analysis found that only 142 of the nearly 6,000 students, or a little more than 2 percent, who were severely behind in third grade ELA made substantive progress by fifth grade.<sup>5</sup>

### Instructional practices fall short:

As recently as 2018, the TDOE's Centers of Regional Excellence (CORE) offices conducted 700 Literacy Learning Walks and found that only 10 percent of lessons met the rigor and depth of the expectations of Tennessee's literacy standards.<sup>6</sup>

## Student Literacy Performance Changes Little After Third Grade

Tennessee third-graders who are not on track in English language arts are not catching up in the following years.



TNReady ELA assessment results for students who were in third grade in 2017 and fifth grade in 2019.

Source: TDOE, 2019



# Gaps in Tennessee's Early Literacy Practices and Policies

Tennessee has raised expectations through the state's college- and career-ready standards and introduced various statewide initiatives to focus attention on early literacy. While these were important first steps to elevating the issue of early literacy, educators and leaders across the state need more training, better materials, and targeted support to ensure classroom practices reflect what cognitive science research has shown helps students learn to read. These learnings must be the driving force for Tennessee's early literacy strategy. When we know better, we must do better.

The State Collaborative on Reforming Education (SCORE) engaged in multiple activities to better understand our state's literacy issues and develop recommendations for the state:

- **Strategic practice work** with school districts in the Leading Innovation for Tennessee Education (LIFT) network to support the selection and implementation of high-quality instructional materials<sup>7</sup>
- **Data review** of student outcomes data from LIFT, Tennessee, and leading states on early literacy growth
- **Research review** of national research, Tennessee-specific research, and research from states that have seen improvement in early literacy outcomes

- **Expert interviews** with dozens of educators, educator preparation faculty, researchers, and leaders at the local, state, and national level who deeply engage in literacy work. SCORE also visited with more than 60 district leaders from 40 school districts across Tennessee to understand current practices and gaps in educator knowledge about the science of reading.



## What The Research Says About The Science Of Reading

When research definitively describes a consensus view on effective literacy instruction, educators and education advocates have a responsibility to ensure that this research informs policy and practice.

The 2000 National Reading Panel reviewed more than 100,000 published reading studies and made clear, among several key findings, that systematic phonics instruction is essential to reading, contributes to better reading comprehension, and is most effective when it begins in kindergarten and first grade.<sup>8</sup> Subsequent research from the Institute of Education Sciences in 2009, 2010, and 2016 reaffirmed these findings and provided specific recommendations on early literacy instruction.<sup>9</sup>

Extensive cognitive science research confirms that learning to read is not a natural process, and that children must be explicitly taught how to read. When the term “science of reading” is used in this early literacy report, it refers to literacy instruction that reflects this research and is best characterized by the “Simple View of Reading.”<sup>10</sup>

Reading is the product of decoding ability and language comprehension, and both must be present. Struggling with either lowers a student’s reading ability.

## Reading = Decoding x Language Comprehension

### Components of the Simple View of Reading for Reading Instruction:

- A systematic, explicit approach to teaching students **foundational reading skills to decode words**, which includes concepts of print, phonological and phonemic awareness, phonics and word recognition, and fluency. These skills are sequenced based on research on effective phonics instruction and taught while building student knowledge with challenging texts.
- Intentional opportunities for students to **build knowledge through complex, meaningful texts** – essential for developing strong comprehension skills. High-quality instructional materials deliberately organize learning around topics that systematically build students’ knowledge within and across grade levels.

For more information on the science of reading, please refer to SCORE’s *The Science of Reading: Applying The Science Of Reading In Tennessee* report.

## Tennessee's Recent Efforts To Improve Early Literacy

- **Raising learning expectations for students, investing in teacher professional learning:** When Tennessee raised academic expectations and made widespread achievement growth, the state trained more than 60,000 educators to ensure teachers understood the instructional practices aligned to the standards.<sup>11</sup>
- **Response to Instruction and Intervention (RTI<sup>2</sup>):** Tennessee adopted RTI<sup>2</sup> as a formal framework for intervention in 2013. RTI<sup>2</sup> provides a systematic way to identify students who have fallen behind and provide them with intensive support to meet Tennessee's academic expectations, which helped close the state's racial gap in specific learning-disability identification in elementary grades.<sup>12</sup> RTI<sup>2</sup> included professional development for teachers in science-based reading instruction, providing a foundation for future efforts to build on. Tennessee also added RTI<sup>2</sup> funding as a component of the Basic Education Program (BEP), the state's school funding formula.
- **Read to Be Ready:** In 2016, the Tennessee Department of Education (TDOE) elevated the issue of early literacy by investing an initial \$9 million to begin improving early literacy instruction. The investment provided a framework for classroom practice, created a coaching network, and launched summer reading camps. A companion effort, the Tennessee Early Learning Network, encouraged schools to develop their own strategies to improve early literacy outcomes.





**Key Finding #1: Tennessee lacks a clear, comprehensive, and cohesive vision for strong literacy instruction that is grounded in the science of reading.**

Tennessee saw its greatest gains in academic achievement when it focused on creating a more coherent education experience for all students.<sup>13</sup> The state's college- and career-ready academic standards centered teacher instructional practice around the latest research in mathematics instruction, but there is growing evidence that this did not occur in early literacy instruction. SCORE's research suggests that while Tennessee's academic standards incorporate foundational skills in early grades, Tennessee's literacy improvement strategies in the past lacked a strong science-based vision that translated into classroom practice.

- **Limited knowledge of science of reading:** During visits with 40 districts during the 2019–20 school year, SCORE heard from district leaders and instructional supervisors who understood the value of adopting strong instructional materials. However, they were only beginning to understand that without a strong foundation for teachers and leaders in the science of reading, students may not fully benefit from stronger instructional materials.
- **Limited access to high-quality instructional materials:** High-quality instructional materials provide teachers with a research-based vision for instruction and students with a deliberate and comprehensive sequence of learning. On the 2019 Tennessee Educator Survey, more than 70 percent of teachers reported spending more

than four hours each week creating or sourcing instructional materials, a pattern which has persisted since the state survey began asking that question and represents time that teachers could use to personalize instruction for students.<sup>14</sup>

Recent research questions whether the most popular sources for teacher-curated materials, such as Teachers Pay Teachers and Share My Lesson, provide high-quality materials. Reviewers found that many resources on these sites fail to align to rigorous academic standards and are not worth using.<sup>15</sup> When teachers are not provided with high-quality instructional materials, they must piece together lessons from outside sources that are likely misaligned to academic standards and fail to provide comprehensive opportunities to build student knowledge year after year. Students get inconsistent and inequitable access to learning experiences, exacerbating opportunity gaps within and between schools.

- **Continued “reading wars” in Tennessee:** While the National Reading Panel outlined key aspects of effective early literacy instruction, what persists nationally and in Tennessee is a patchwork of philosophies and a patchwork of practices and curricula.<sup>16</sup> This fragmented approach allowed the continuation of the “reading wars” between different philosophies of reading that many hoped had been resolved by the panel’s report.

Starting in 2016, Read to Be Ready brought much-needed attention to Tennessee’s early literacy challenges. In early implementation, Read to Be Ready focused on classroom structures

and improving student access to knowledge-building texts.<sup>17</sup> While TDOE’s 2017 Teaching Literacy in Tennessee framework mentions research on the value of systematically teaching foundational skills in grades K–3, it also states that Tennessee’s approach “does not adhere to any one specific approach (e.g. balanced literacy, whole language, or phonics first).”<sup>18</sup>

This neutral position inadvertently perpetuates ineffective early literacy instruction by leaving room for practices borrowed from whole language, at times masquerading as balanced literacy, that are not based on the cognitive science around how children learn to read.<sup>19</sup> Read to Be Ready, by itself, was not enough to address all of Tennessee’s early literacy challenges. TDOE’s updated vision on early literacy, which will be released in 2020, may provide much-needed clarity to educators.<sup>20</sup>



## Key Finding #2: Current teachers and leaders have unfinished learning about literacy instruction.

Recognizing that early literacy was a statewide priority, SCORE worked with LIFT districts to improve teacher practices and student outcomes. As leaders in LIFT districts focused on current educator practices through the use of high-quality instructional materials, they repeatedly encountered teachers who were unaware of key science of reading principles. LIFT leaders spent significant time helping teachers with unfinished learning around research-based practices.

An early knowledge survey administered by LIFT found that almost half of teachers (47 percent) thought that their lessons should focus on a single standard or skill rather than asking deep, text-specific questions. Further, more than a quarter of teachers (27 percent) thought that students should primarily engage with texts only on their individual reading level, as opposed to grade-level, complex texts. While these misconceptions were eventually overcome, they highlight the depth of misunderstanding many teachers have and the amount of support they will need to meaningfully change their practice.

After four years of implementation, the network districts achieved several notable gains in 2019:

- **Promising progress:** Sullivan County Schools, which serves a largely rural and economically disadvantaged student population, saw each of its 11 elementary schools meet or exceed student growth expectations. Lenoir City Schools, which serves Tennessee's third-largest percentage of English learner students, saw a 10-point proficiency gain over three years by English learners in third grade.

- **Achievement gap closure:** There is promising evidence that the LIFT network has started to close achievement gaps when comparing 2018 and 2019 results. Whereas the state saw no meaningful change in performance, LIFT districts improved achievement by 2.5 percentage points, with students of color in LIFT districts making greater gains than students of color in the rest of the state.
- **Better instructional practices:** Initial classroom walks of LIFT districts in early 2016 showed that only about 20 percent of lessons were focused on a high-quality text that gave students the opportunity to build knowledge and engage with complex ideas. In December 2019, that number had skyrocketed to almost 100 percent. Similarly, in initial classroom observations, only 10 percent of observed lessons explicitly and systematically provided all students with the opportunity to master foundational skills. However, a December 2019 review of classrooms showed that close to 70 percent of observed lessons now provide that explicit and systematic instruction.



**Key strategies included:**

- **Developing a coherent instructional vision.** Teachers, school leaders, and district leaders all prioritized aligning their actions, professional learning, and district resources around the curriculum, creating a coherent vision for evidence-based instruction that benefits students.
- **Selecting, providing, and supporting high-quality instructional materials.** By ensuring that teachers have strong materials that reflect the latest research on effective reading instruction, districts were able to help teachers improve instructional practices around foundational literacy skills, as well as support students to systematically develop knowledge from year to year. Rather than focusing on disparate teaching strategies, instructional coaching focused on helping teachers deeply understand their instructional materials and support students to own their learning.

**“I have been teaching for 33 years. When I first started using high-quality instructional materials, I was a little hesitant because it looked scripted. But I actually love the format and the repetition. Everything is so purposeful, and you can dive in wholeheartedly and see results. It has refined and cemented that foundation that we had been lacking.”**

*– Tennessee teacher  
working in a LIFT district*



Despite these investments in resources and training, leaders repeatedly found that teachers were underprepared in their knowledge of the science of reading. This mirrors national trends that show a majority of teachers are still relying on methods that are not supported by research. A recent national survey found that 75 percent of teachers working with early readers teach “three-cueing,” an approach that teaches students to use context, pictures, and other clues to guess the meaning of words they don’t know.<sup>21</sup> This is in direct conflict with the research-based practice of helping students systematically sound out unfamiliar words.



“In my teacher prep experience, I never learned about the science of reading. I heard a lot about balanced literacy and the cueing system, which was supported by outdated research. Although I’m now in a district with high-quality materials that help me teach reading the correct way, it would have been nice to know the why and how of teaching reading before I entered the classroom. It’s upsetting to know that I wasn’t taught how kids learn to read based on research.”

– *Early career Tennessee teacher working in a LIFT district*



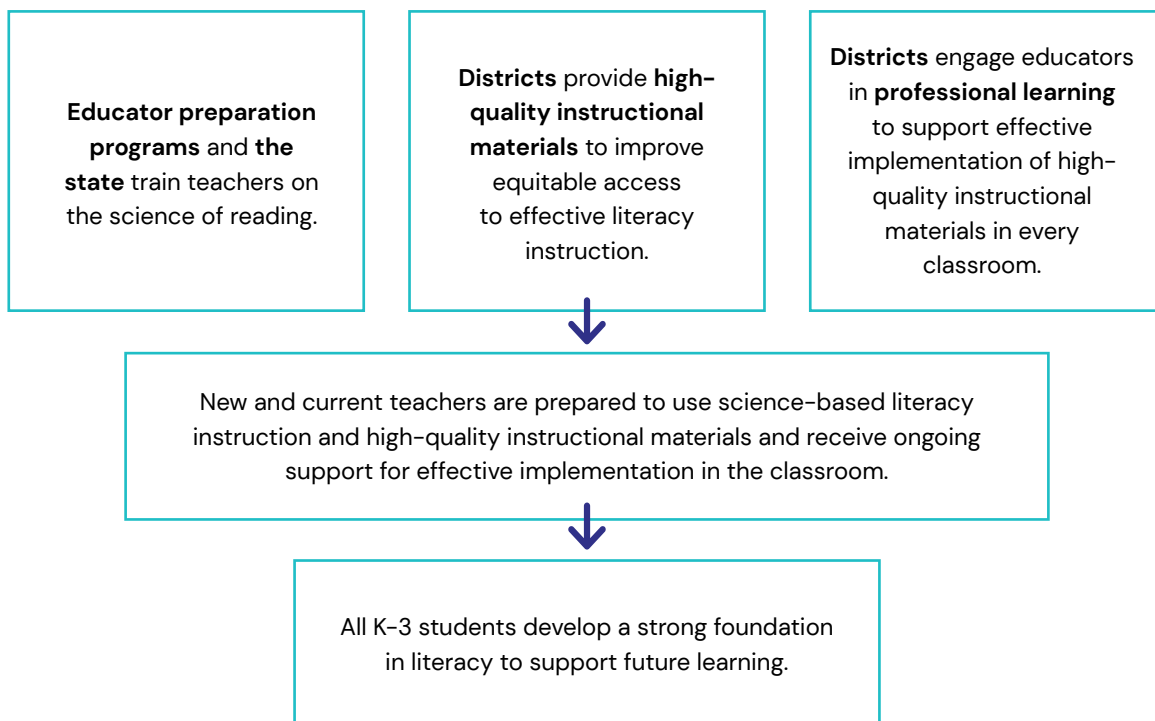
One state that addressed this head-on is Mississippi. After leading the nation in reading growth on the 2019 National Assessment of Educational Progress (NAEP), the state has gained national attention.<sup>22</sup>

Upon realizing that many of the state’s early elementary teachers did not have a firm understanding of the science of reading, Mississippi recognized the need to support current teachers. Beginning in 2014, Mississippi worked to train 15,000 K-3 teachers in the science of reading through Language Essentials for Teachers of Reading and Spelling (LETRS) training.

In this intensive training, educators were equipped with deep understanding of the science behind how students learn to read, spell, write, and process language to develop fluency and comprehension. Coaching support was also provided after the initial training. Similar training was provided by the Tennessee Department of Education in a limited, optional capacity from 2013–16 to Tennessee teachers when the state adopted more rigorous academic standards and began implementation of RTI<sup>2</sup> that connected research-based instruction and systems of intervention.

### Supporting Educators And Students In Building Early Literacy Skills

While LIFT districts focused on aspects of literacy instruction within district control, district leaders often had to redirect resources to help teachers learn the science of reading and align with instructional practices supported by cognitive science. Teacher knowledge of the research, high-quality instructional materials, and aligned professional learning form the pillars of effective early literacy instruction. Without all these pillars of support, Tennessee’s students will continue to struggle to read.



**Key Finding #3: New teachers enter the field unprepared to teach reading.**

Fewer than half of Tennessee’s early career teachers report they were well prepared for their classrooms,<sup>23</sup> and districts across the state share that most teachers starting out in their classrooms did not learn about the science of reading during their educator preparation programs. This reflects national trends that suggest educator preparation faculty do not put sufficient emphasis on the role of systematic foundational skills instruction.<sup>24</sup> One district leader in a large rural district shared:



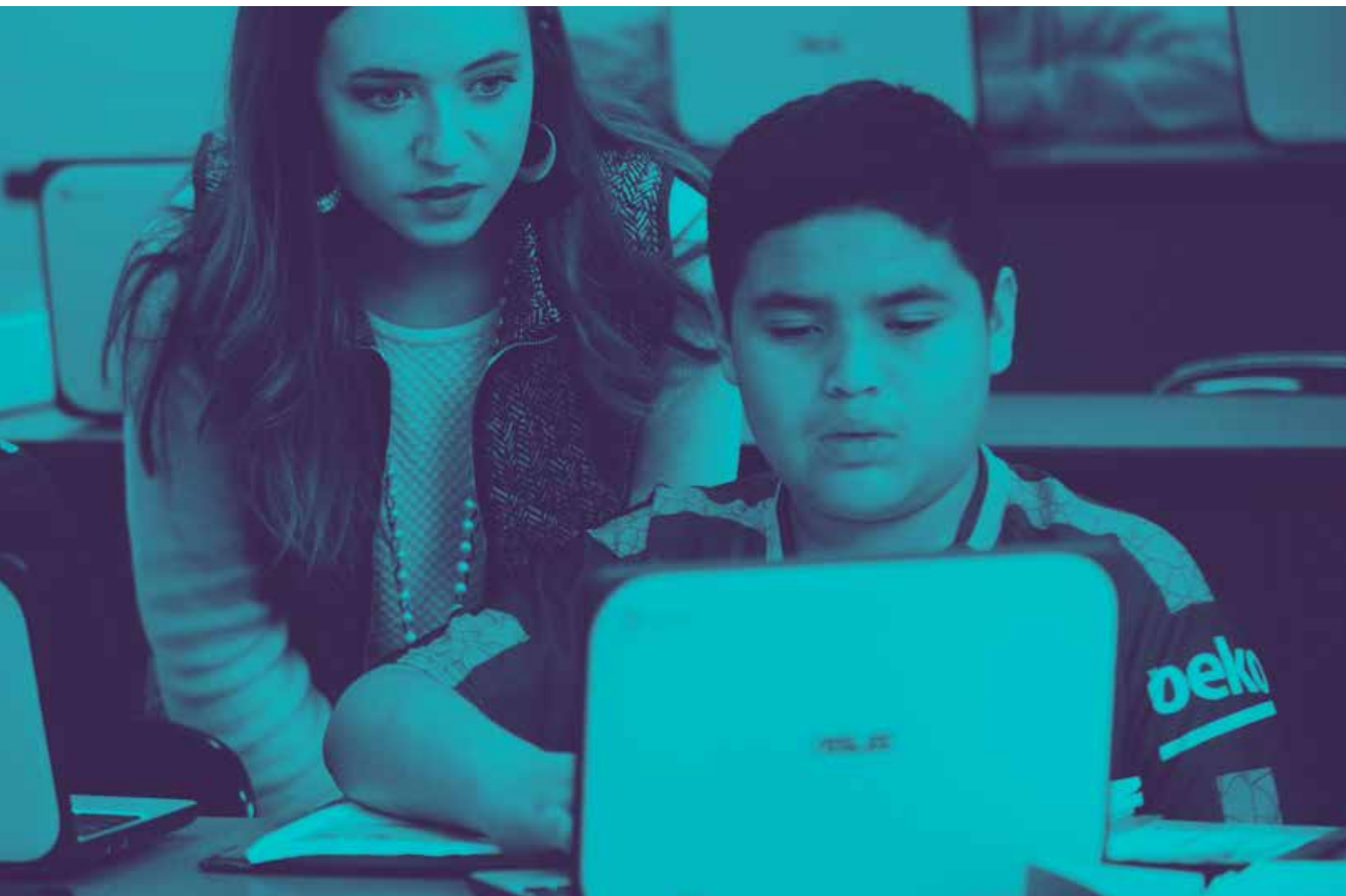
**“Of the dozens of teacher candidates who interviewed for positions in our district, only one knew about the science of reading and could speak to the importance of both foundational skills instruction and building background knowledge. She developed that knowledge after she started student teaching in our district and was exposed to high-quality instructional materials and rich professional learning.”**

These findings point to significant opportunities to ensure all of Tennessee’s early literacy teachers enter the classroom ready to teach literacy effectively. Only a comprehensive strategy to ensure that teachers enter the classroom with a deep understanding of the science of reading will lead to success for Tennessee students.

Mississippi has addressed this through a multiyear effort focused on improving instructional practices aligned to the science of reading for both preservice teachers and

higher education faculty. Several lessons can be learned from our neighboring state:

- **Science of reading training for higher education faculty:** The Barksdale Reading Institute in Mississippi conducted a review of the state’s eight public educator preparation programs in 2005, finding that preservice teachers were getting an average of 20 minutes of instruction on phonics over the course of their program. After recommending changes to the sequence of courses



in EPPs, Barksdale conducted a similar study in 2016 of all public and private EPPs in the state and found that many professors could not explain the research undergirding effective early literacy instruction. To close this gap, Barksdale Reading Institute initiated a professional learning model for EPP faculty to help them finish their unfinished learning. This included professional learning in the science of reading, instructional coaching on undergraduate campuses, and seminars focused on reflection and modeling instruction.

- **Rigorous literacy standards for EPPs:** Although Tennessee adopted literacy standards for EPPs in 2017, those standards do not go far enough in setting

a vision for what preservice teachers should learn to be prepared to teach reading on day one in the classroom. The standards are not specific enough on the key components of scientifically based literacy instruction, and, while they outline some key content, the current wording falls short of helping candidates see what that application should look like in practice. The Center for Effective Reading Instruction provides an example of what a strong set of standards, which include both content standards and examples of coursework expectations, could look like.<sup>25</sup> More robust standards that include both content and application would provide much-needed clarity for EPP faculty in structuring the content of their courses.

# Recommendations

For the sake of Tennessee’s students, we cannot wait to act. The literacy crisis must be met with urgency. State policymakers and educators need to take bold steps to improve literacy policy and practice in Tennessee.

## 1 Set a statewide, systemic vision for strong literacy instruction that is based on the science of how students learn to read.

Tennessee should declare the science of reading to be the state’s only approach to literacy instruction. Research shows that systematic phonics instruction coupled with systematic knowledge-building is essential to learning how to read. State lawmakers should codify science-based reading as literacy policy in Tennessee, which has already happened in Mississippi, Colorado, Arkansas, and Texas.

Tennessee should develop a comprehensive early literacy plan and transparently report progress toward identified goals annually. Tennessee should set measurable goals and monitor progress for urgent improvement. This plan should call on educator preparation programs, state government, and school districts to address key barriers to early literacy improvement. Annual updates on our progress are essential.<sup>26</sup>

## 2 Support current teachers and leaders to close the gaps in their knowledge of strong literacy instruction.

In partnership with a high-quality professional development provider, the Tennessee Department of Education should ensure all K-3 teachers and school leaders are trained in science-based literacy instruction. Funding should be provided to offer training on the science of reading to all the approximately 15,000 K-3 public school educators in Tennessee.<sup>27</sup> These efforts should build on the training conducted previously as part of Tennessee’s RTI<sup>2</sup> system.

Tennessee should develop a process to ensure that external providers of professional development working with Tennessee school districts are providing support aligned to the science of reading. External providers of professional development serve as crucial supports for districts in executing on their vision for rigorous instruction, but it is critical that these providers are held to the same standards of evidence-based content and pedagogy.

The Tennessee Department of Education should support districts in the implementation of high-quality instructional materials in grades K-3 literacy. Tennessee should provide resources and technical assistance to support school districts in adopting, providing, and implementing high-quality instructional materials so that all students have access to science-based instruction in literacy. These supports should build on TDOE’s work to ensure only high-quality instructional materials are included on the state’s approved textbook adoption list.



### 3 Ensure all new teachers are prepared to effectively teach reading on day one in the classroom.

**The State Board of Education should work with the Tennessee Department of Education to ensure the state’s literacy standards for educator preparation programs reflect the science of reading and are aligned to the state’s early literacy plan.** Tennessee should strengthen the quality of its literacy standards for EPPs and ensure that all literacy course offerings at EPPs align to those standards.

**The State Board of Education should ensure that teacher licensure assessments reflect the science of reading.** Tennessee should evaluate its teacher licensure assessment in reading to ensure it aligns with the science of reading and that it does not include any references to “cueing,” an ineffective practice

that is tied to whole language. Tennessee should consider replacing the current assessment with a state-developed assessment if commercially available assessments do not align with the science of reading.

**The Tennessee Department of Education and the Tennessee Higher Education Commission should create a competitive grant process to support EPPs in changing practice.** Through grants, state leaders should incentivize teacher preparation programs to align course structure and content to the science of reading.

**The State Board of Education should publicly report on EPP implementation of the science of reading.** As Tennessee makes improvements to literacy policy, the State Board of Education should publicly report how educator preparation programs are developing teacher candidates for effective literacy instruction through its annual Educator Preparation Report Card.

1. *Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation*. Annie E. Casey Foundation (January 2012).
2. *By the Numbers: SCORE 2020 Index of Tennessee Education Data*. SCORE (February 2020).
3. Tennessee Department of Education (2019).
4. *Early Warning: Why Reading by the End of Third Grade Matters*. Annie E. Casey Foundation (2010).
5. *Setting the Foundation: A Report on Elementary Grades Reading in Tennessee*. Tennessee Department of Education (February 2016).
6. *Tennessee Succeeds: 2018 State of Education in Tennessee*. Tennessee Department of Education. (2018)
7. *LIFT Instructional Material Implementation Guidebook*. SCORE (2019).
8. *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction*. National Reading Panel (2000).
9. *Assessing Students Struggling with Reading: Response to Intervention and Multi-Tier Intervention in Primary Grades*. Institute of Education Sciences (February 2009); *Improving Reading Comprehension in Kindergarten Through 3rd Grade*. Institute of Education Sciences (September 2010); *Foundational Skills to Support Reading Comprehension in Kindergarten Through 3rd Grade*. Institute of Education Sciences (July 2016).
10. Gough, Philip B. and William E. Tunmer. "Decoding, Reading, and Reading Disability." *Remedial and Special Education* (January 1986); Hoover, Welsey A. and Philip B. Gough. "The Simple View of Reading." *Reading and Writing* (1990).; Hanford, Emily. "At a Loss for Words." *APM Reports* (August 2019).
11. Olson, Lynn. *Scaling Reform: Inside Tennessee's Statewide Teacher Transformation*. FutureEd Georgetown University (October 2018).
12. *Assessing Progress: Four Years of Learnings from RTI2 Implementation in Tennessee*. Tennessee Department of Education (February 2018).
13. Reardon, Sean F. "Educational Opportunity in Early and Middle Childhood: Variation in Place and Age." *Stanford Center for Education Policy Analysis* (2018); Papay, John P. and Mary E. Laski. "Exploring Teacher Improvement in Tennessee." *Tennessee Education Research Alliance* (April 2018).
14. *Tennessee Educator Survey*. Tennessee Education Research Alliance (2018).; *Tennessee Educator Survey*. Tennessee Education Research Alliance (2019).
15. Polikoff, Morgan and Jennifer Dean. *The Supplemental-Curriculum Bazaar: Is What's Online Any Good?*. Thomas B. Fordham Institute (December 2019).
16. Schwartz, Sarah. "The Most Popular Reading Programs Aren't Backed By Science." *Education Week* (December 2019).; Hanford, Emily. "Experts say widely used reading curriculum is failing kids." *APM Reports* (January 2020).; Jager Adams, Marilyn et al. *Comparing Reading Research to Program Design: An Examination of Teachers College Units of Study*. Student Achievement Partners (January 2020).
17. *Teaching Literacy in Tennessee*. Tennessee Department of Education (May 2017).
18. *Setting the Foundation: A Report on Elementary Grades Reading in Tennessee*. Tennessee Department of Education (February 2016); *First Steps: A Report on Elementary Grades Reading in Tennessee*. Tennessee Department of Education (April 2018).
19. Hanford, Emily. "Rethinking How Students With Dyslexia Are Taught To Read." NPR (March 2018).
20. Aldrich, Marta W. "Five education issues to watch as Tennessee's legislature reconvenes this week." *Chalkbeat* (January 2020).
21. *Early Reading Instruction: Results of a National Survey*. EdWeek Research Center (2020).
22. "Mississippi Ranks No. 1 in Nation for Score Gains on National Assessment of Education Progress." *Mississippi Achieves* (October 2019).
23. *Tennessee Educator Survey*. Tennessee Education Research Alliance (2019).
24. Will, Madeline. "Will the Science of Reading Catch On in Teacher Prep?" *Education Week* (December 2019).
25. *Knowledge and Practice Standards for Teachers of Reading*. International Dyslexia Association (May 2018).
26. Tennessee Code Annotated § 49-1-907.
27. BEP Review Committee Meeting (December 2019).





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