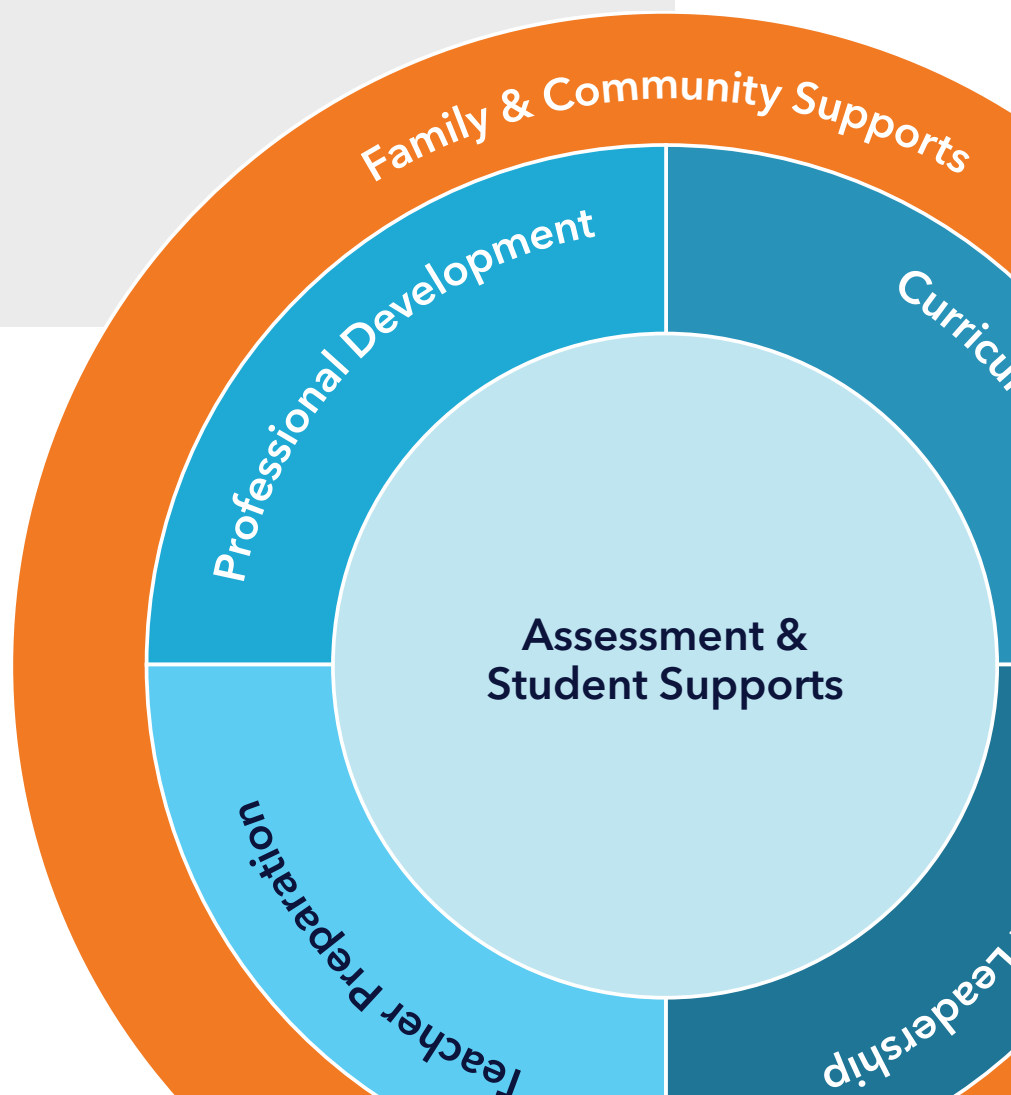


READING REFORM ACROSS AMERICA:

A Survey of State Legislation

JULY 2023

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The Albert Shanker Institute, endowed by the American Federation of Teachers and named in honor of its late president, is a nonprofit, nonpartisan organization dedicated to three themes—children’s education, unions as an advocate for quality, and both civic education and freedom of association in the public life of democracies. Its mission is to generate ideas, foster candid exchanges and promote constructive policy proposals related to these issues.

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FORWARD

Our interest in strengthening teaching and learning has been a career long pursuit. From our work in the classroom, to our respective local unions, as well as our subsequent educational leadership work, we have been dedicated to working in communities to support education. Furthermore, the Albert Shanker Institute and the American Federation of Teachers both have a long history of bolstering reading instruction for teachers and students. For decades, both organizations have pushed for science-based instruction, beginning with AFT's [1998 resolution](#) on Beginning Reading Instruction and the Shanker Institute's work on [early literacy](#).

Because reading is a fundamental right, and teaching children to read is a fundamental responsibility of schools and of society, seeing state legislatures introduce a spate of bills addressing reading in the last few years—almost a decade after Mississippi's initial 2013 pioneering legislation—caught our attention. We felt it was essential to provide a factual account of what states were doing, thereby productively contributing to a learning agenda center on what students and educators needed to be successful. Relatedly, we wanted to examine, and lift up, the degree to which these laws support a complete reading infrastructure—from teacher supports and knowledge-rich curriculum to meaningful family engagement—rather than rely on a single “silver bullet” or “quick fixes.”

Reading Reform Across America: A Survey of State Legislation offers a comprehensive examination of reading legislation from 2019 to 2022 on over 40 areas including teacher preparation, professional development, assessment, family engagement, and student supports.

This report reveals that state leaders, regardless of their political persuasion, are answering teachers' calls for better support with regard to reading instruction. Given the persistent and predictable

disparities in reading proficiency across racial and ethnic lines, it is encouraging to see states begin to take an all-in approach to supporting teachers and their students to strengthen reading instruction. At the same time, this report highlights opportunities to provide an even more systemic support to improve reading instruction and improve outcomes. While states are making notable progress, there is an unequal focus on different student groups along with an emphasis on screening and assessment that isn't balanced with a corresponding commitment to comprehensive supports for students.

To help our students become joyful and confident readers, we must understand that teaching reading is not just an art, but also a science. When state legislators organically come together to ground reading policy in scientific evidence, it signals the priority of this issue. While legislation is not the only path to strengthen reading instruction, we are encouraged by the state legislative endeavors we've seen since 2019 and we recommend that states persist and continue to expand their efforts to address additional priority areas.

We hope this report finds its way into the hands of advocates who will continue to promote collaborative and comprehensive approaches, policy makers who will follow the report's recommendations, and educators and families who will champion the reading instruction their students deserve.

Together,

Mary Cathryn D. Ricker, NBCT
Executive Director, Albert Shanker Institute

Randi Weingarten
President, Albert Shanker Institute and American Federation of Teachers

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INTRODUCTION

The clamor for the science of reading has reached fever pitch. Media outlets, including newspapers,¹ magazines,^{2,3} podcasts⁴ and documentaries,^{5,6} have amplified the call for changes in reading instruction due to the troubling performance of too many of our nation's students. While reading difficulties cut across socioeconomic lines, they disproportionately impact students living in poverty as well as those from black, brown, and indigenous communities. The COVID-19 pandemic has only heightened these concerns, instilling even greater sense of urgency among families, educators, and policymakers.

This report aims to investigate how states have responded to this increased pressure for improved reading outcomes. Specifically, we analyzed reading-related state legislation enacted between 2019 and 2022. Our study involved categorizing 223 bills enacted in 45 states and the District of Columbia^a during this period. We examined over 40 dimensions, such as teacher preparation, professional development and curriculum.

Our goal is to provide a basic yet systematic description of states' efforts to improve reading instruction. Although legislation is not the only means for policymaking, reading laws matter because most states are relying on them to shape how reading is taught. Furthermore, legislative efforts have at times been criticized widely,⁷ but our analysis reveals significant variation among states, rendering blanket characterizations unhelpful. Our objective is to provide a granular description of

WHAT IS THE SCIENCE OF READING?

The science of reading refers to a body of research from the fields of education, cognitive psychology, developmental psychology, and neuroscience, that explains how individuals learn how to read and identifies the best practices for reading instruction.⁹



states' efforts to enhance reading instruction, with the following goals:

- Foster constructive discussions that support states in developing effective roadmaps for advancing reading reform.
- Encourage states to devise supplementary policies (e.g., guidance, additional legislation) to address the areas needing improvement identified in this report.
- Appeal to the research community for assistance in filling legislative gaps, not only to align with current evidence-based principles, but also to adapt to the evolving nature of scientific research.

Whether we see the current state of American students' reading achievement as a new crisis or as part of a stable trend, the truth remains that more than one-third (37 percent) of the nation's fourth-graders performed below the National Assessment of Educational Progress (NAEP) "Basic" level in 2022. Because there is no achievement-level description for below "Basic," it is difficult to make full sense of this statistic. A recent study by White and colleagues⁸ examined data from the 2018 NAEP Oral Reading Fluency study and compared

^a For practical purposes we count the District of Columbia as a state when we describe our results.

it with NAEP 2019 results. The authors found that students who scored below the “Basic” level on the NAEP are more likely to struggle with reading fluency and word recognition. Therefore, White et al.’s analysis suggests that students scoring below “Basic” are likely to experience significant reading difficulties.

Regardless of how we interpret and contextualize these reading outcomes, we must continue to bridge the gap between reading research and practice to equip students and teachers with the tools necessary for proficient reading.

There are no quick fixes: The path to improvement will require time, consistent investment and a

holistic approach to reform. The magnitude of the task should motivate us to persevere and collaborate more effectively. Yet, we are concerned about the polarizing rhetoric surrounding reading and hope that this review can foster a more measured dialogue about the strengths and limitations of state efforts and reading improvement more broadly.

In the following pages, we provide an overview of our study’s purpose and guiding questions. Next, we detail our methodology. Third, we present our results, highlighting states whose legislation stands out in one or more domains. Finally, we summarize our conclusions and offer policy recommendation.



01. STUDY PURPOSE

The goal of this report is to characterize reading legislation enacted between 2019 and 2022. Some of our guiding research questions include:

1. **What is the scope of this legislation? What types of schools and grades do these laws target?**
2. **How do states define the science of reading? What skills are referenced in the legislation?**
3. **Do state laws define an infrastructure for reading that includes supports for both teachers and their students?**
4. **What in- and out-of-school supports are described? What student groups do these supports target?**

These questions were informed by research summarized in the next few paragraphs.

READING: A COMPLEX SKILL

To understand how the legislation defines reading, we developed a list of terms drawing from well-known sources such as the National Reading Panel report,¹⁰ the National Early Literacy report,¹¹ and the National Literacy Panel for Language Minority Children and Youth.¹² Our list included phonemic and phonological awareness, phonics, vocabulary, fluency and comprehension — the five pillars highlighted by the National Reading Panel report. Based on the literature we added oral language, writing and background knowledge, which are also crucial pillars.

COHERENT INFRASTRUCTURE FOR READING

Education has frequently treated improvement as an individual endeavor: If individual teacher quality is improved, schools will get better and students' performance will improve. However, education researchers have consistently emphasized the vital role of organizational and social factors^{13, 14, 15} (e.g., social connections and supportive conditions) in



achieving genuine school improvement,¹⁶ and student learning.^{17, 18}

Woulfin and Gabriel make a compelling case for viewing reading reform as a collective effort.¹⁹ The authors argue that many debates about reading instruction fail to attend to systems and school conditions, often ignoring aspects such as professional development, the alignment of available tools and instructional materials, principals' communication about reading, and teachers' working conditions. In sum, a strong reading infrastructure must be supported by three interdependent pillars: curriculum, professional development and leadership.

Our coding included about a dozen terms that intend to capture these infrastructural foundations. We view pre-service preparation and in-service learning as closely intertwined, as they both contribute to the development of teachers' knowledge and expertise. Therefore, our infrastructure discussion includes teacher preparation.

STUDENT SUPPORTS: IN AND BEYOND SCHOOL

Seminal research by Bryk and colleagues (2010) demonstrated the significance of schools' ties with families and communities in supporting successful learning outcomes.²⁰ For this reason, our analysis includes family and community engagement as dimensions of interest.

In addition, we track student assessment, student supports and interventions (e.g., reading plans, tutoring) and aspects that other organizations such as ExcelInEd include in their analyses (e.g., parental notification). We view these in- and out-of-school student supports as crucial components of the reading improvement system (Figure 1).

Finally, we identify language related to special student populations, diversity and equity. Accordingly, we track terms related to English language learners;

students with special needs such as dyslexia; and culturally relevant and sustaining practices and instructional materials.

Recognizing that students from black, brown, and indigenous communities are disproportionately impacted we also paid attention to language related to ‘opportunity’ and ‘achievement’ gaps. However, we recognize that this is a complex issue that deserves further exploration.

FIGURE 1
The Reading Improvement System



02. METHODS

Our final dataset contains a total of 223 bills, all of which refer to reading and literacy. About half of them (120) are general education bills; 81 are reading specific bills; and 45 are budget bills.^b We cross-checked our list with information from the National Conference of State Legislatures, a non-partisan, nongovernmental organization responsible for identifying flagship bills in state legislation. Our cross-checking provided additional validation for the inclusiveness of our database.

Our analysis centers on state bills enacted since 2019, a year when a distinct wave of reading legislation began. Using Quorum, a public affairs software program that tracks state and local legislation, we retrieved several hundred bills using search terms such as reading, literacy, science of reading, curriculum and dyslexia. Our search occasionally retrieved unrelated bills – e.g., financial literacy bills — that were removed from our dataset.

We drew from several scholarly literatures to develop list of over 40 topics (see Appendix for a detailed list) and developed a straightforward procedure to determine the presence or absence of these topics in each bill. Two literacy experts and two education policy researchers independently reviewed a sample of bills from states in different geographic regions.

The purpose of this exercise was to ensure that salient topics were not missed. Next the team met to clarify procedures, definitions and related terms.



The level of detail provided by states per topic varied considerably. To account for this variability, our coding distinguishes between bills that merely mention a topic versus bills that contain more detailed language on that topic. Details on how these coding decisions were made can be found in the Appendix.

We trained three graduate research assistants and gave them several bills with which to practice, followed by discussion. Next, each research assistant was given three bills to code independently. Using Cohen's Kappa, we calculated inter-rater reliability, which averaged 0.75, indicating substantial agreement. We then proceeded to divide the 223 bills among coders. We periodically checked our reliability to ensure that it remained in the desired range.

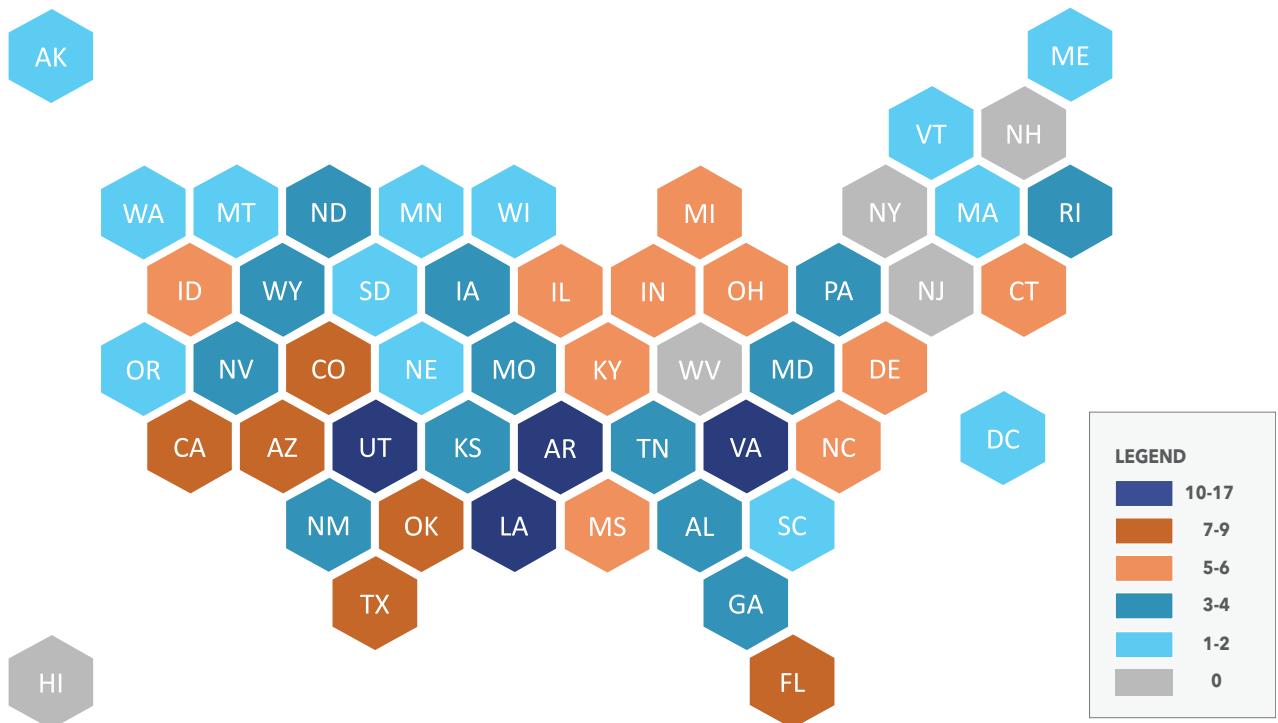
^b Some bills fall under two categories, leading to a number greater than 220.

03. RESULTS

This section is organized into five parts, beginning with an overview of the legislation’s scope, followed by an examination of how these bills characterize reading and literacy. We then discuss the reading infrastructure, which comprises the essential supports needed by teachers, specifically: (i) curriculum, (ii) teacher preparation and professional development, and (iii) leadership. Finally, we examine student assessment and supports both in school (e.g., tutoring, reading plan) and out of school (i.e., the role of families and communities in supporting literacy development).



FIGURE 2
 Number of State Reading Laws Enacted Between 2019 and 2022



Source : Authors' Analysis

03.1 LEGISLATION SCOPE

- These bills target more schools and students than previous efforts such as the Reading Excellence Act, Reading First or Striving Readers.
- Laws in 42 states target students beyond 3rd grade and include pre-K students in 31. Only 12 states' laws exclusively aim at Title I schools.^c Legislation from 37 states explicitly includes charter schools.

The momentum to enact laws proposing changes in literacy instruction has built steadily in the past few years. As Figure 2 shows, 46 states (including the District of Columbia) have passed at least one bill since 2019 – see also Table 3. Five states (Hawaii, West Virginia, New Hampshire, New Jersey, New York) did not enact reading legislation during our study period.^d

General characteristics of these bills are summarized in Tables 1.a. and 1.b. Unlike Reading First, the 2001 federal program targeted to K-3 reading in low-performing Title I schools, these bills are designed to affect instruction in all schools, regardless of their income status or level of performance.

TABLE 1.B. STATE FREQUENCIES BY SCHOOL TYPE AND GRADES TARGETED (2019-2022)

Title I Schools Explicitly Mentioned	States
Yes	12
No	34
Charter Schools	
Included	37
Targeted Grades	
Pre-Kindergarten	31
Beyond 3rd Grade	42

Source : Authors' Analysis

TABLE 1.A. BILL FREQUENCIES BY YEAR ENACTED, BILL TYPE, AND NUMBER OF ISSUES (2019-2022)

Year Enacted	
2019	63
2020	43
2021	67
2022	50
Type of Bill	
Education	120
Reading/Literacy	81
Budget	45
Number of Issues	
Single	82
Multiple	141

Note : Some bills fall under two categories, leading to a number greater than 223.

Source : Authors' Analysis

For example, only 12 states have legislation targeting Title I schools exclusively.

As Table 1.b. shows, laws in 37 states explicitly include charter schools. In terms of grades targeted, many states are going outside the K-3 grade band, with the addition of pre-K in 31 states and the targeting students of beyond 3rd grade in 42 states.

^c Title I schools are public schools in the United States that receive additional federal funding to support the education of students from low-income families.

^d Georgia, Indiana, New Mexico, Virginia and West Virginia passed new legislation in 2023. All bills enacted after December 2022 will be analyzed and added to our database in our next update.

03.2 DEFINING THE SCIENCE OF READING

- ▣ **Forty-two states enacted bills emphasizing the selection of programs, materials and training grounded in evidence and scientific research.**
- ▣ **The expression “science of reading” appears in legislation from 18 states.**

Science is very much in evidence in this legislation. Bills use terms such as “scientifically based reading” or “scientific reading instruction” or “science of teaching reading” to describe how children should be taught to read and/or to overcome reading difficulties. The specific expression “science of reading” is used in legislation from 18 states.

The phrase “science of reading” seems to have different guises. Importantly, only six states (including the District of Columbia) provide an actual definition. As summarized in Table 2, in some cases, “science of reading” captures the relationship between cognitive science and outcomes (Virginia, Rhode Island, Arkansas). In other bills

the expression refers to specific skills, highlighting the five pillars of reading with the addition of oral language and spelling in some cases. Writing as a skill is rarely referred to in these definitions, suggesting a more targeted focus on reading than on the broader aspects of literacy.

Two states also include explicit statements on what is *not* the science of reading. For example, Arkansas specifically prohibits using the “three-cueing system,” and Louisiana bans its use as a primary strategy for reading instruction.

Much of the legislative language describes the need for explicit, systematic and rigorous instruction in reading. Terms such as “evidence-based” and “empirically supported” are seen throughout most of the legislation. In fact, only four states (Montana, Oregon, South Dakota, Wisconsin) enacted reading-related laws without any reference to science or evidence.

WHAT IS THE THREE-CUEING SYSTEM?

Cueing systems in reading are the practices that aid in determining the meaning of unknown words. There are three cueing systems: grapho-phonemic cues (letters/sounds) (s; /s/); syntactic cues (grammar); and semantics (comprehension). The view is that if one system fails, such as letters and sounds, the other systems might compensate, often leading students to use context, or guessing of words. The research evidence has shown that the approach does not give children the systematic and explicit teaching necessary for them to be able to make the connection between the spoken and the printed word.²¹



TABLE 2. EXAMPLES OF HOW SCIENCE OF READING IS DEFINED ACROSS THE LEGISLATION

Bill	Definition
AR SB 153 (2019)	"Science of reading" means the study of the relationship between cognitive science and educational outcomes
DC ACT 23-548 / DC Law 23-1918 (2020)	"Science-based reading program" means a reading curriculum based on the science of reading, that includes explicit and systematic instruction in phonemic awareness, phonics, fluency, vocabulary and comprehension strategies.
DE SB 133 (2021)	Advances in understanding how children learn to read has produced a body of research by linguists, psychologists, and cognitive scientists known as the "science of reading" which reflects a conclusion that effective beginning reading instruction has 6 essential components of reading literacy: phonemic awareness, phonics, reading fluency, vocabulary, text comprehension, and oral language.
NC SB 387 (2021)	"Science of Reading" means evidence-based reading instruction practices that address the acquisition of language, phonological and phonemic awareness, phonics and spelling, fluency, vocabulary, oral language, and comprehension that can be differentiated to meet the needs of individual students.
RI HB 7164 (2022)	The term "scientific reading instruction" means instruction that is instructional centered, empirically based, and further based on the study of the relationship between cognitive science and educational outcomes
VA HB 1865 (2021)	"Science of reading" means the study of the relationship between cognitive science and educational outcomes
VA HB 319 (2022)	"Science-based reading research" means research that (i) applies rigorous, systematic, and objective observational or experimental procedures to obtain knowledge relevant to reading development, reading instruction, and reading and writing difficulties and (ii) explains how proficient reading and writing develop, why some children have difficulties developing key literacy skills, and how schools can best assess and instruct early literacy, including the use of evidence-based literacy instruction practices to promote reading and writing achievement.

Source : Authors' Analysis



TABLE 3. NUMBER OF BILLS CONTAINING THE EXPRESSIONS^a "EVIDENCE" AND "SCIENCE OF READING" AND NUMBER OF TIMES EACH OF THE PILLARS,^b WRITING AND ORAL LANGUAGE ARE MENTIONED IN THE LEGISLATION, BY STATE (2019-2022)

	Total Bills	Evidence	Science of Reading	Phonemic Awareness	Phonological Awareness	Phonics	Vocabulary	Fluency	Comprehension	Writing	Oral Language
AL	7	5	3	13	14	24	16	15	16	8	8
AK	1	1	0	10	0	9	10	15	9	1	9
AZ	8	6	3	9	8	18	10	9	10	8	2
AR	10	5	6	0	0	0	0	0	0	6	0
CA	9	7	0	10	2	18	0	2	5	15	14
CO	9	5	5	19	2	20	21	19	20	0	19
CT	6	5	2	8	1	9	6	11	7	0	7
DE	5	5	3	7	2	7	6	7	8	2	5
DC	2	2	1	2	2	4	3	3	3	0	0
FL	7	7	1	27	8	20	21	16	19	7	7
FA	3	1	0	8	3	4	2	2	2	7	2
HI	—	—	—	—	—	—	—	—	—	—	—
ID	6	5	0	5	5	8	6	8	9	0	0
IL	5	2	0	0	1	1	1	1	1	5	0
IN	6	3	0	3	0	3	3	3	5	2	0
IA	4	2	0	0	1	1	1	1	1	1	1
KS	3	3	2	1	1	1	1	1	1	2	0
KY	6	6	0	12	0	11	11	11	21	35	3
LA	10	6	1	1	6	5	2	3	3	4	4
ME	2	1	0	0	0	0	0	0	0	0	0
MD	4	2	0	3	3	2	1	2	1	1	1
MS	1	1	0	0	0	0	0	0	0	0	0
MI	6	5	0	25	9	32	18	29	26	7	10
MN	2	2	0	0	0	0	0	0	0	1	0
MS	6	6	0	0	0	0	0	0	0	1	0
MO	4	2	0	7	6	10	9	10	10	1	2
MT	1	0	0	1	2	1	1	1	1	0	0
NE	1	1	0	1	0	1	1	1	1	0	0
NV	4	2	0	2	3	3	2	3	4	2	3
NH	—	—	—	—	—	—	—	—	—	—	—
NJ	—	—	—	—	—	—	—	—	—	—	—
NM	4	2	1	0	1	1	1	1	1	1	1
NY	—	—	—	—	—	—	—	—	—	—	—
NC	6	2	3	5	4	4	5	5	12	1	5
ND	3	1	0	6	1	6	2	3	4	0	0
OH	6	3	0	0	1	5	0	1	0	7	0
OK	8	5	3	11	1	11	12	9	9	3	3
OR	1	0	0	0	0	0	0	0	0	0	0
PA	2	1	0	2	1	2	2	2	2	2	3
RI	3	3	1	0	0	2	0	0	0	0	0
SC	1	1	1	0	0	0	0	0	0	0	0
SD	1	0	0	0	1	1	1	1	1	1	0
TN	4	1	0	4	0	4	4	4	4	0	0
TX	7	5	1	1	0	3	5	3	14	12	1
UT	15	10	2	1	11	12	8	6	8	12	9
VT	1	1	0	1	0	1	1	1	1	1	0
VA	17	9	1	5	1	5	5	5	4	10	3
WA	2	2	0	0	0	0	0	0	0	0	0
WV	—	—	—	—	—	—	—	—	—	—	—
WI	2	0	0	0	1	1	1	1	1	0	0
WY	2	2	0	0	1	2	0	1	1	0	0
Totals	223	146	40	210	103	272	199	216	245	166	122

Note: States marked in red passed no legislation related to reading during our study period.

Source : Authors' Analysis

^a Refer to Appendix for definitions of these terms as well as equivalent terms used in our content analysis.

^b The five pillars of reading are phonological and/or phonemic awareness, phonics, vocabulary, fluency and comprehension.

03.3 READING: A COMPLEX SKILL

- **Legislation from most states (34) adopts the National Reading Panel framework, identifying five pillars of reading. Our analysis suggests the legislation appears to pay comparable attention to these five pillars.**
- **Oral language and writing, which play a crucial role in reading development, are mentioned considerably less. Building knowledge as a foundation for reading comprehension is mentioned in legislation from only six states.**

These bills primarily define reading skills based on the five pillars outlined in the National Reading Panel report: phonemic awareness, phonics, vocabulary, fluency and comprehension. These skills often appear as a packaged entity throughout the legislation. Examining the frequency with which these terms appear across our dataset, we find strong positive correlations ranging from 0.8 to 0.9 among all these skills.

At the bill level, there are some small differences in the number of times these skills are mentioned. These differences may be related to the presence or absence of language specifically devoted to dyslexia, a “condition that is neurological in origin” characterized by “difficulties with accurate or fluent word recognition and by poor spelling and decoding ability including difficulties that typically result

from a deficiency in the phonological component of language that is often unexpected in relation to other cognitive abilities.” (AZ SB 1572; CO HB 19-1134; GA SB 48)

As Figure 3 suggests, phonological/phonemic awareness and phonics seem more salient in bills that include dyslexia provisions. In many of these bills, poor reading comprehension and vocabulary development are the consequences of phonological deficits, not necessarily the targets of instruction. For example, AZ SB 1572 reads, “The secondary consequences of dyslexia may include problems in reading comprehension and reduced reading experience that may impede growth of vocabulary and background knowledge.”

The presentation of the five pillars of reading as a singular unit, often without elaboration about how the pillars are to be integrated, may prompt some skepticism about the substance behind this language. Additionally, the National Reading Panel report, which introduced these pillars, is over two decades old and did not account for more recent developments in reading research. For example, evidence suggests that oral language development and writing are crucial aspects of reading.^{22, 23, 24} Furthermore, building background knowledge is a foundation of reading comprehension.²⁵ However, the set of bills we examined (whether they men-

WHAT IS THE NATIONAL READING PANEL REPORT?

In 1997, Congress convened the National Reading Panel to assess the effectiveness of different approaches used to teach children to read in the elementary years. The panel was made up of 14 people, including leading scientists in reading research, college representatives, teachers, educational administrators, and parents. The review resulted in the report *Teaching Children to Read*, which was released in 2000 by the National Institute of Child Health and Human Development. The report highlights five areas of reading instruction that have shown to produce skilled reading: phonemic awareness, phonics, fluency, vocabulary, and text comprehension.²⁶ These skills have subsequently been described as the “five pillars of reading instruction.”

BOX 1

Arizona

An example of legislation that supports writing, oral language, background knowledge and motivation as important components of literacy

In SB 1572, Arizona defines the essential components of reading instruction as “explicit and systematic instruction in the following: (a) phonological awareness, including phonemic awareness, (b) phonics encoding and decoding, (c) vocabulary development, (d) reading fluency as demonstrated by automatic reading of text, (e) reading comprehension of written text, (f) written and oral expression, including spelling and handwriting.” Elsewhere, the bill mentions the importance of “sufficient background information and vocabulary to foster reading comprehension and the development and maintenance of a motivation to read.”

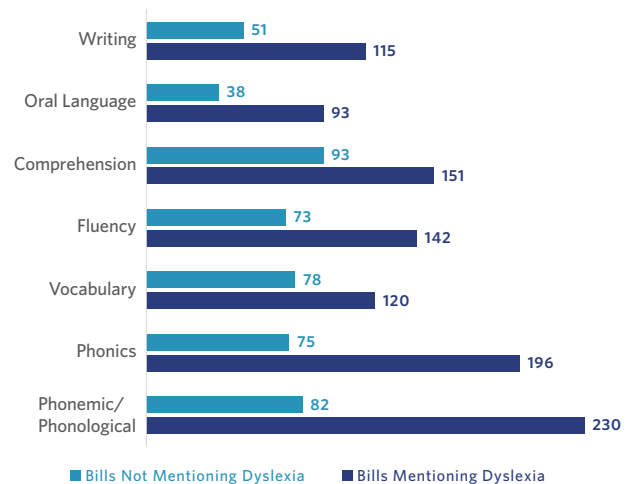
The legislation stipulates that adopted curricula and teacher training must incorporate all these essential components. The law also requires that screening and reading assessments measure progress toward the six components. Additionally, SB 1572 also mentions using a specific assessment tool to measure a student’s motivation to read in kindergarten through 3rd grade.

tioned dyslexia or not) contained fewer references to these other pillars of reading.^e

Arizona’s legislation stands out insofar as it describes reading more broadly, attending to writing, oral language, background knowledge and motivation as important aspects of literacy development (Box 1). Kentucky’s legislation is also an outlier; while most states group reading and writing together or mention writing only in passing, KY SB 9 is explicitly and solely devoted to writing instruction as a component of literacy (Box 2).

FIGURE 3

Number of Times the Five Pillars, Writing, and Oral Language Appear in Bills Mentioning vs Not Mentioning Dyslexia (2019-2022)



Source : Authors' Analysis

^e Despite tracking references to background knowledge systematically, we find an almost complete omission of this term in the legislation. About ten bills in six states (Arizona, Florida, Michigan, Minnesota, Pennsylvania, Virginia) mention background knowledge, understood as a pillar of reading comprehension. But even in these states’ laws the term is mentioned very much in passing (i.e., once in the entire bill). The term sometimes appears in dyslexia related bills where the loss of background knowledge is viewed as a consequence of poor decoding skills.

BOX 2

Kentucky

An example of legislation that supports writing instruction as a component of literacy

In SB 129, Kentucky defines writing as “the purposeful act of thinking and expression that uses language to explore ideas and communicate meaning to others.” It recognizes that writing is a complex, multifaceted act of communication that has an important role in educational improvement.

The law requires an on-demand assessment to be administered annually to elementary, middle and high school students. In addition, students are required to take a yearly assessment on the mechanics of writing, using multiple-choice and constructed response questions at each grade level.

The Kentucky Department of Education will provide guidelines to all schools for including an effective writing program within the curriculum. Within each school, “a committee appointed by the principal shall adopt policies that determine the writing program for its school and submit it to the Department of Education for review and comment.” It should include a variety of language resources; technological tools; and multiple opportunities for students to develop complex communication skills for a variety of purposes.

In a companion law, SB 9, the Kentucky Department of Education provides technical assistance to local school districts in helping teachers in each subject area implement evidence-based reading instruction (e.g., the five pillars), and the connections between reading and writing. To support instruction, the Department will develop a web-based resource that includes:

(a) Information on the use of specific screening processes and programs to identify student strengths and needs, including those for advanced learners; (b) current, evidence-based research and age-appropriate instructional tools that may be used to make substantial improvement in writing for students who experience difficulty with characteristics of dysgraphia.

In addition, the Collaborative Center for Literacy Development: Early Childhood through Adulthood shall collaborate with public and private institutions of postsecondary education and adult education providers to provide similar services to pre-service teachers, in-service teachers and administrators.

03.4 INFRASTRUCTURAL SUPPORTS

- **Laws in most states discuss pre-service preparation and in-service professional development, with 25 and 32 states, respectively, addressing them in depth.**
- **In contrast, only about one-third of states discuss curriculum or leadership in more depth, with a mere 11 states extensively addressing both areas in their laws.**

Shifting how reading is taught is not for the faint-hearted. Major changes to reading instruction require investment in resources, time and personnel. Previous reform attempts have shown that massive efforts are required to train seasoned and prospective teachers; align and enact new curricula; and steer all these changes through effective leadership.^{27, 28}

Woulfin and Gabriel persuasively argue for the significance of a robust infrastructure to improve reading.²⁹ This infrastructure is essential for achieving quality and equity in reading. The following paragraphs discuss our findings in these areas.

CURRICULUM

Studies suggest that a high-quality, culturally relevant and knowledge-rich curriculum can be an important lever for reading reform.³⁰

High-quality curricula provide a scope and sequence of content and skills, with opportunities for review, and pedagogical practices and activities for students who need additional support.³¹ At their most effective, they use asset-based pedagogies that incorporate students' cultural identities and lived experiences into the classroom as tools for learning and critical thinking. Converging evidence across the fields of special education, literacy education and English language learning has shown that high-quality, culturally relevant and knowl-

edge-rich curricula can improve student outcomes.³² Recognizing its importance, Chiefs for Change, an organization of state and district leaders representing over 7 million students, has made the adoption of evidence-based curricula^g a centerpiece of its ongoing efforts.³³

Although curricula are an important component of implementing a quality reading program, they clearly receive less attention in this legislation than the other infrastructural supports. In our analysis, only 16 states mention curriculum in detail. Legislation in nine states directly refers school districts to approved curriculum lists. Laws in ten states do not provide information on curriculum (Tables 4 and 5).

However, this does not imply that other states are not imposing rules or mandates regarding curricula to be adopted in districts.

According to an analysis by American Public Media,³⁴ for example, some 14 states include curriculum lists that may serve as recommendations or, in some cases, mandates. However, these provisions are not referred to in the legislation analyzed here.

TEACHER PREPARATION AND PROFESSIONAL DEVELOPMENT

Studies suggest that the success of any ambitious educational improvement requires knowledgeable and committed teachers.³⁵ Shifting to instructional practices that place a deeper understanding on the evidence in reading means that teachers will need to learn more about the subjects they teach and about how to promote children's learning most effectively. Research suggests that coherent and sustained teacher preparation and professional development, which involve active learning through coaching and

^g High-quality instructional materials are one of five core principles guiding Chiefs for Change's efforts.

modeling support, are more effective in enhancing teachers' knowledge and skills.³⁶

As shown in Table 4 and Figure 4, teacher pre-service and in-service preparation lie at the heart of this legislation; that is, most states focus on these two levers for change. Teacher preparation, addressed at least somewhat in legislation from 38

states and more extensively in that from 25, emphasizes the training of prospective teachers on the five pillars of reading and the scientifically derived evidence for our understanding of how children learn to read. In addition, of those bills that cover teacher preparation more extensively, 19 require instruction on dyslexia and four mention multisensory instruction.

BOX 3

Delaware

An example of aligned curriculum and professional development

Like many other states, Delaware identifies the five pillars of reading as the essential components of an evidenced-based curriculum. Districts are asked to select from an approved list or can apply to use an alternative curriculum that is evidenced-based. All curricula on this approved list should include a “logical scope and sequence that is sequential, systematic, and cumulative.” At the same time, the law recognizes that one core reading program may not contain all of these elements and may need to be combined with other resources. Therefore, the core program and the supplementary sources need to be well-aligned to ensure that students receive an evidence-based curriculum.

The law also requires districts to align their assessments and progress-monitoring tools to support instruction and to identify students who need additional support. To ensure that teachers are well-prepared to take on these responsibilities, it requires districts to provide professional development aligned with the adopted curriculum and creates a supervisory role for an individual to assist in its implementation.

The connection between pre-service and in-service preparation, however, is tenuous in these bills. We found bills in only two states that appear to address the importance of aligning teacher preparation and in-service professional development. FL CS/HB 7011, for example, indicates that “to the greatest extent possible,” credential programs and certifications should “align with the training for K–12 teachers, reading coaches, and school administrators” (FL CS/HB 7011). Similarly, CT SB 1202 proposes to develop a coordinated statewide reading plan for students in kindergarten through grade 3 that includes “teaching training and reading performance tests aligned with teacher preparation and professional development activities.”

Professional development for teachers currently in the field is discussed extensively in the legislation (40 states discuss it, 32 of them in detail). More than a third of the bills specifically mention training in assessment so that teachers are better able to tailor instruction for those who struggle in reading.

Only three states (Alabama, Michigan, North Carolina) appear to identify a particular program for professional development in their legislation — e.g., Language Essentials for Teachers of Reading and Spelling (LETRS). However, an increasing number of states, whether it is explicitly stated in their laws or not, have adopted LETRS for professional development purposes.³⁷

According to MI SB 0845, in Michigan LETRS is offered on a first-come, first-served basis “with voluntary enrollment prioritization for pre-k through grade 1 teachers.” Other bills use language to describe professional learning programs more broadly, referring to implementing programs for teachers using “principles of adult learning” (UT SB 127) or “facilitating school-wide professional development and study groups” (AL HB 220) to improve student reading achievement.

Recent research has shown that coaching is a promising model to support teachers’ professional learning, although scaling up implementation in large school districts remains challenging.³⁸ In this legislation, coaching is described in 20 states, more extensively in 11 of them.

To illustrate some of the language used in the legislation, UT SB 127 calls for “relevant and cohesive professional learning sessions; to use principles of adult learning to effectively partner with educators in job-embedded professional learning to integrate learning experiences into classroom practice.” KY SB 9 describes a “teacher academy or coaching models to provide intensive data-focused professional development,” and “expert support in literacy and early reading instruction and intervention.”

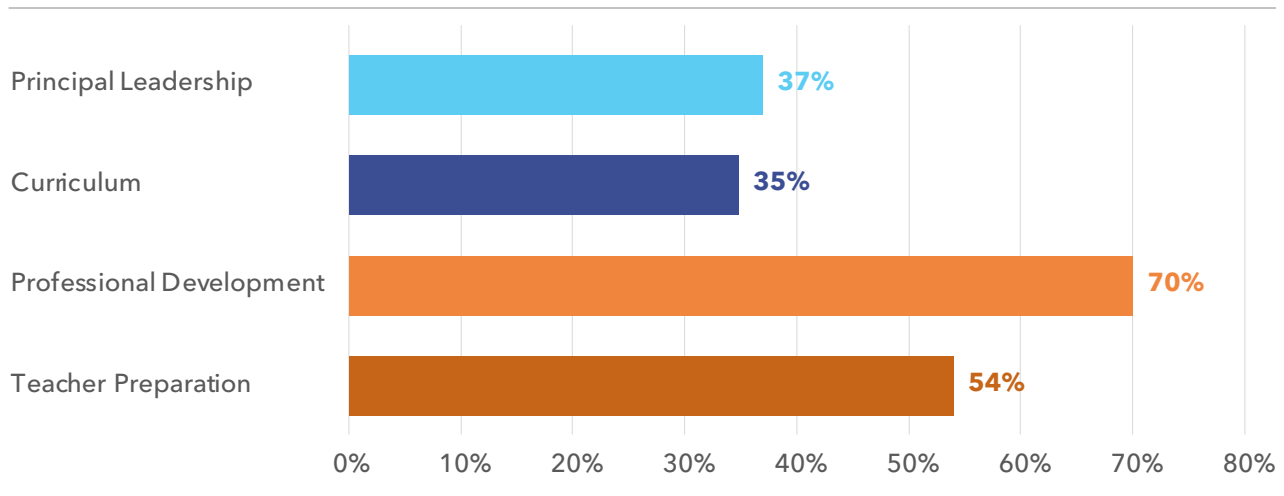
Yet the delivery mechanism for professional development may be less consequential than the

content it delivers.³⁹ Among the most important features of professional development may be its content focus and the degree to which it is tied to the student curriculum content that teachers are expected to teach. Previous research indicates that professional development focused on strategies associated with curriculum content can promote teacher learning within the classroom. For example, Mississippi’s noted gains in the 2019 NAEP report were supported by providing statewide professional development modules on the science of reading tied to evidence-based curricular materials with coaching support to ensure high fidelity in classroom practices.⁴⁰

Despite this evidence, most of the legislation does not make these connections. Delaware’s legislation stands out for acknowledging the need to align teachers’ training with the reading curriculum they will teach (see Box 3). Similarly, Texas’ legislation addresses the critical issue of vertical alignment in reading instruction (see Box 4), setting another good example.

Barring these examples, most descriptions of professional development in these bills make little mention of the need to align teacher training with the reading curriculum, across grades, or with teacher preparation.

FIGURE 4
PERCENT OF STATES WITH LEGISLATION EXTENSIVELY DISCUSSING INFRASTRUCTURAL SUPPORTS (2019-2022)



Source : Authors' Analysis

TABLE 4. NUMBER OF STATES THAT ENACTED LEGISLATION DISCUSSING INFRASTRUCTURAL SUPPORTS (2019-2022)

	Discussed Extensively	Mentioned	Not Mentioned
Teacher Preparation	25	13	8
Professional Development	32	8	6
Curriculum	16	20	10
Principal Leadership	17	13	16

Source : Authors' Analysis

BOX 4

Texas

An example of professional development across grade levels

Professional development in Texas addresses the important issue of vertical alignment in reading. The commissioner is charged with developing and making available literacy academies for teachers with appropriate professional development for each grade band. The academies are also required to create a specialized screening and training program for students who may have dyslexia.

For teachers in grades K-3, for example, professional development must include training in systematic instructional practices in the five pillars of reading, and the use of empirically validated instructional methods for struggling readers. In addition to those skills, the academies for teachers in grades 4-5 must provide training in comprehension, inferential and critical thinking. For teachers in grades 6-8, the academies must include strategies for multisyllabic word reading, vocabulary development, and comprehension of expository and narrative text. In addition, teachers must be trained in an adaptation framework that enables them to respond to differing student strengths and needs, and degrees of English proficiency for students receiving special education services. The academies will also focus on helping teachers develop collaborative strategies to active student involvement and motivation to read.

Furthermore, all teachers in these grades who provide instruction in content areas such as mathematics, science, or social studies must receive training in strategies for incorporating reading instruction into the curriculum for their subject area.

READING REFORM ACROSS AMERICA

TABLE 5. PRESENCE OF LANGUAGE ON TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, CURRICULUM AND PRINCIPAL LEADERSHIP IN LEGISLATION ENACTED BETWEEN 2019 AND 2022, BY STATE

State	Teacher Preparation	Professional Development	Curriculum	Principal
Alabama	✓	✓	✓	✓
Alaska	⊙	✓	✓	⊙
Arizona	✓	✓	✓	⊙
Arkansas	✓	✓	✓	-
California	✓	✓	✓	✓
Colorado	✓	✓	✓	✓
Connecticut	✓	✓	✓	✓
D.C.	⊙	✓	⊙	⊙
Delaware	✓	✓	✓	⊙
Florida	✓	✓	✓	✓
Georgia	✓	✓	⊙	-
Hawaii	-	-	-	-
Idaho	✓	✓	⊙	⊙
Illinois	✓	⊙	-	-
Indiana	⊙	⊙	-	-
Iowa	✓	✓	⊙	-
Kansas	-	⊙	⊙	-
Kentucky	✓	✓	✓	✓
Louisiana	✓	✓	⊙	✓
Maine	⊙	-	⊙	-
Maryland	⊙	✓	⊙	⊙
Massachusetts	-	-	⊙	-
Michigan	⊙	✓	✓	✓
Minnesota	✓	⊙	⊙	-
Mississippi	⊙	✓	-	-
Missouri	✓	✓	✓	⊙
Montana	⊙	⊙	-	-
Nebraska	-	-	-	⊙
Nevada	-	⊙	⊙	⊙
New Hampshire	-	-	-	-
New Jersey	-	-	-	-
New Mexico	⊙	✓	⊙	✓
New York	-	-	-	-
North Carolina	✓	✓	✓	✓
North Dakota	✓	✓	✓	✓
Ohio	⊙	✓	⊙	⊙
Oklahoma	✓	✓	⊙	⊙
Oregon	-	-	-	-
Pennsylvania	✓	✓	⊙	-
Rhode Island	✓	✓	-	✓
South Carolina	⊙	⊙	⊙	-
South Dakota	-	-	-	-
Tennessee	✓	✓	✓	✓
Texas	⊙	✓	⊙	✓
Utah	✓	✓	✓	✓
Vermont	⊙	✓	-	✓
Virginia	✓	✓	⊙	✓
Washington	-	⊙	⊙	⊙
West Virginia	-	-	-	-
Wisconsin	✓	-	-	⊙
Wyoming	-	✓	⊙	-

LEGEND

- ✓ Discussed Extensively
- ⊙ Mentioned
- Not discussed

States marked in red passed no legislation in the study period

LEADERSHIP

It is hard to overstate the importance of school leadership in educational improvement. Research suggests that administrators play an important role as instructional leaders, setting high expectations for student achievement.⁴¹ A recent report⁴² summarizing the last two decades of research on school leadership concludes that principals have substantive effects beyond student achievement: “Effective principals orient their practice toward instructionally focused interactions with teachers, building a productive school climate, facilitating collaboration and professional learning communities, and strategic personnel and resource management processes.” (p. xviii) Effective school leadership plays a vital role in improving students’ reading skills. A competent leader should possess several key qualities, such as the ability to articulate a clear vision for reading instruction based on research-backed

best practices; to prioritize skill development; to monitor students’ progress; and to continuously seek ways to improve teaching practices.

Despite the critical role that school administrators can play in enhancing reading outcomes, they are often overlooked in this legislation. In 13 states, laws describe principals’ role in the creation of reading plans for struggling students; making decisions regarding student promotion and retention; and providing progress reports to the district.

Only about a third of states (17; see Table 4) enacted legislation containing a more substantive discussion about principals’ role in reading improvement. These states require principals to participate in professional development programs with teachers (see Box 5), an important provision to promote more knowledgeable and coherent leadership.

BOX 5

Utah

An example of capacity-building leadership promoting the science of reading

In Utah, the administrative team takes on an important role in promoting educational improvement and the science of reading. Specifically, the law states that leaders should “develop capacity, advocate, and create support systems” for teachers’ professional learning. The law requires all principals, supervisors, local educational district leaders and literacy specialists to complete professional learning on the science of reading within a specified time period. School leaders and literacy coaches are then required to work in partnership to ensure that all teachers have a team of support for improving literacy instruction.

In addition to the school leadership team, the legislation calls for a statewide literacy panel. This panel is designed to work with educator preparation programs, university teacher preparation program faculty, deans of education and literacy leadership fellows to advance the science of reading and the science of reading instruction.

03.5 STUDENT SUPPORTS IN & BEYOND THE CLASSROOM

- Most states' legislation falls short in describing a comprehensive set of in-school supports for students. Laws in only 15 states offer detailed provisions for two or more types of support.
- Family engagement is an important feature of this legislation. Thirty-eight states discuss it; 21 of them do so extensively.

IN-SCHOOL SUPPORTS

Teachers need access to suitable reading assessment tools to tailor instruction to each student's needs. These tools should include screenings to identify students at risk of reading failure, progress-mon-

itoring instruments and diagnostic assessments to identify special needs. Forty-five states discuss assessment and screening in their legislation; 35 of them do so extensively.

Assessment data should guide instruction, the selection of intervention strategies and referrals for special services. Yet our analysis found that the legislation pays much less attention to addressing students' needs through services and interventions.

Twenty states (see Table 6) enacted bills including language on reading plans, which are separate from Individual Education Plans (IEPs) and may call for a wide variety of supports such as supplemental instructional services, multi-tiered systems of



support (MTSS), notifications to parents, or recommendations to other specialists for further diagnosis and services.

AL HB 388, for example, calls for teachers or other school personnel to develop an individual reading improvement plan “no later than 30 days after the identification of the reading deficiency.” Promotion to the 4th grade “with a good cause exemption” is contingent on the child continuing to receive intensive reading support.

As shown in Table 6, the bills we analyzed pay limited attention to student supports. Even multi-tiered systems of support, one of the most mentioned, are absent from legislation in 18 states. Of the 27 states that mention MTSS, only 12 describe these systems extensively. Summer school, and especially tutoring and after-school programs, also receive limited attention in the legislation. Although both summer school and after-school programs have shown mixed results in helping children make significant reading improvements,⁴³ tutoring is considered to have robust evidence behind it. A recent meta-analysis showed a combined effect size of 0.37 in 97 reported tutoring studies, yielding even higher effect sizes in earlier grades.⁴⁴ Yet tutoring remains one of the least discussed interventions in our dataset, with only eight states describing it extensively.

This analysis suggests that certain areas of the legislation, such as those related to student supports, seem less reliant on evidence than others. Grade retention is another case in point; despite of the mixed evidence for its effectiveness, it is still a widespread practice across states.⁴⁵ While some studies have found short-term academic benefits to retaining students in early elementary grades,⁴⁶ many studies have identified negative outcomes.⁴⁷ Few studies have looked at the long-term consequences of being retained in the early grades. Moreover, much of the literature on retention has confounded the policy with additional comprehensive student support systems that often accompany retention policies, suggesting that it may not be retention (or retention alone) that produces the desired outcomes. Consequently, there are reasons to be cautious about the policy.

Even though no state introduced new retention laws from 2019 to 2022, 12 followed up on existing legislation related to student retention/promotion based on reading results. Nine of these states describe specific exemptions for students: good-cause exemptions (Nevada), COVID-19 related (Ohio), and for English learners and students with disabilities (Alabama, Arkansas, Arizona, Florida, North Carolina, Oklahoma, Tennessee).

We know that students who struggle with reading need well-structured programs that provide extra instructional time to target high-priority skill gaps, along with frequent and guided practice.⁴⁸ Michigan (see Box 6) stands out in providing multiple supports for struggling readers, including MTSS, summer school, after-school programs and tutoring. Florida also deserves to be recognized for including provisions for multiple supports for students.

Our analysis also examined the extent of support and focus the legislation offers to special student populations such as English learners and students with dyslexia.

An estimated 5 percent to 10 percent of the U.S. student population is believed to have dyslexia, according to the International Dyslexia Association. Dyslexia is prominently addressed in the legislation we studied, with 40 states incorporating language related to dyslexia in their laws. Although we intend to publish a dyslexia-specific brief later this year, our initial analysis suggests states are earnestly considering this student population. Dyslexia is mentioned in relation to teacher preparation programs in 17 states. Additionally, many states are focusing on dyslexia screening for students, teacher training and the creation of dyslexia handbooks for diverse stakeholders.

English language learners (ELLs) are a growing demographic in the United States. According to the National Center for Education Statistics, they made up over 10 percent of K-12 students in 2019, up 2 percentage points since 2000. While most states (32) mention ELLs, only about a third of them discuss these students’ needs more extensively in their legislation (Tables 7 and 8).

Specifically, 13 states enacted legislation outlining reading support or interventions for English learners, typically involving specific strategies or employing additional personnel like reading coaches or specialists. However, only three states (Alabama, California, Florida) mandate that ELL supports be evidence-based. Seven states describe in-service training, and eight states mention pre-service training related to literacy and English learners. Legislation from 13 states addresses English learner assessment, often in relation to providing testing accommodations or exemptions. However, only four states (California, Florida, Nevada, Oklahoma) connect these assessments with supports and interventions for these students.

California stands out in offering comprehensive support for English learners (Box 7). Its legislation (along with Connecticut’s) highlights the importance of diverse book collections and culturally relevant curricula for students. In addition, both California and Nevada advocate for family engagement in supporting English learners.

While it is possible that other state legislation unrelated to reading addresses the needs of English learners, we found this discussion limited in reading legislation. Furthermore, research indicates that

home languages can be lost rapidly, highlighting the need for bilingual education programs.⁴⁹ However, we observed that most of the bills we analyzed provide limited recognition of these students as possessing valuable assets that warrant protection and cultivation.

We also looked at whether the legislation might contain language about culturally relevant and sustaining practices and instructional materials. Twenty-nine states include this language in their legislation (17 of them contain more extensive descriptions; see Table 8), sometimes in connection to curricula (California, Colorado, Connecticut) or professional development (Alaska, New Mexico, California, Florida), and others in relation to student supports and family engagement (Alaska, Arizona).

Lastly, we started to investigate how the legislation tackled literacy achievement disparities among different student groups, categorized by factors such as socioeconomic status, race/ethnicity, and language background. Most of the laws that referenced 'achievement' or 'opportunity' gaps did so primarily in the context of funding or grants, with examples from states like California, Michigan, and Utah.

TABLE 6. NUMBER OF STATES THAT ENACTED LEGISLATION DISCUSSING ASSESSMENT AND STUDENT SUPPORTS (2019-2022)

	Discussed Extensively	Mentioned	Not Mentioned
Assessment	35	10	1
Reading Plan	16	4	26
Multi-Tiered Systems of Support	12	15	19
Summer School	12	16	18
After School	5	22	19
Tutoring	8	18	20

Note: The five states that did not enact any reading-related legislation during our study period are excluded from this table.
Source : Authors' Analysis

Connecticut offers a potential model with its legislation, SB 1202, stating that “the Center for Literacy Research and Reading Success shall oversee an intensive reading instruction program to improve student literacy from kindergarten to third grade and close the achievement gaps resulting from

opportunity gaps.” The bill also assigns the responsibility of managing this reading program to a “director of reading initiatives” within the Department of Education. This approach suggests ways states might begin to address these issues.

BOX 6

Michigan

An example of a comprehensive set of services for students

Through several bills, Michigan has created a set of interventions designed to address the needs of students who may need additional support in reading. Five different support programs have been developed under this legislation: (1) tutoring, (2) summer programs, (3) before- and after-school programs, (4) multi-tiered systems of support and (5) parent involvement and support programs.

The state has partnered with the Michigan Education Corps to provide tutoring in pre-K through 3rd grade. The tutors will be trained in a multisensory, sequential, systematic education approach to reading. The impact of the tutoring program will be measured by recording the number of tutors, the number of children tutored and their demographic information, whether interventions are implemented with fidelity, whether children’s improvement in math or literacy is consistent with expectations, and the impact of the programs on organizations and stakeholders.

Furthermore, Grand Valley State University will work with families and districts to provide services such as after-school education and specialized summer education programming designed to improve reading and literacy using a multisensory approach. Moreover, Michigan is adopting a multi-tiered system of supports model to track pre-K to 3rd grade students’ progress, aiming for them to read at grade level by the end of 3rd grade. The multi-tiered system of supports must include (i) team-based leadership, (ii) a tiered delivery system; (iii) selection and implementation of instruction, interventions, and supports; (iv) a comprehensive screening and assessment system; and (v) continuous data-based decision making.

Finally, Michigan’s state-funded preschool program, The Great Start Readiness Program, will partner with local parent coalitions to coordinate home visits for at-risk children and their families. The home visits must be conducted as part of a locally coordinated, family-centered, data-driven strategic plan. One of the goals of the home visits is to improve school readiness using evidence-based methods, including a focus on developmentally appropriate outcomes for early literacy so that children have the reading proficiency they need to succeed in 4th grade and beyond. reading instruction into the curriculum for their subject area.

TABLE 7. PRESENCE OF LANGUAGE ON ASSESSMENT, STUDENT SUPPORTS, SPECIAL POPULATIONS AND CULTURAL RELEVANCY IN LEGISLATION (2019-2022), BY STATE

State	Assessment	Reading Plan	MTSS	Summer School	After School	Tutoring	Students with Dyslexia	English Learners	Culturally Relevant
AL	✓	✓	⊙	✓	⊙	⊙	✓	⊙	✓
AK	✓	✓	⊙	⊙	⊙	⊙	✓	✓	✓
AZ	✓	-	⊙	⊙	⊙	⊙	✓	✓	⊙
AR	✓	-	-	⊙	⊙	✓	✓	-	-
CA	✓	-	✓	✓	✓	⊙	✓	✓	✓
CO	✓	✓	✓	⊙	-	⊙	✓	⊙	✓
CT	✓	✓	✓	✓	⊙	-	✓	✓	✓
DE	✓	-	⊙	⊙	⊙	-	⊙	✓	⊙
DC	✓	-	⊙	-	-	-	✓	⊙	⊙
FL	✓	✓	✓	✓	✓	✓	✓	✓	✓
FA	✓	⊙	✓	-	-	-	✓	⊙	-
HI	—	—	—	—	—	—	—	—	—
ID	✓	✓	✓	-	-	-	✓	⊙	-
IL	⊙	-	-	-	-	⊙	✓	⊙	✓
IN	⊙	-	-	-	-	-	⊙	✓	⊙
IA	✓	-	-	-	-	-	✓	⊙	✓
KS	✓	-	⊙	⊙	⊙	⊙	✓	⊙	✓
KY	✓	✓	✓	⊙	⊙	-	⊙	⊙	✓
LA	✓	✓	-	✓	✓	⊙	✓	-	⊙
ME	⊙	-	-	-	-	-	-	-	-
MD	✓	-	-	-	-	⊙	⊙	-	⊙
MS	✓	-	-	⊙	⊙	⊙	-	⊙	✓
MI	✓	✓	✓	✓	✓	✓	✓	⊙	✓
MN	✓	-	-	-	-	-	✓	⊙	✓
MS	⊙	-	⊙	-	-	-	✓	-	⊙
MO	✓	✓	⊙	✓	⊙	-	✓	-	-
MT	✓	-	-	-	-	-	✓	-	-
NE	✓	✓	-	✓	⊙	⊙	-	⊙	✓
NV	✓	✓	⊙	⊙	⊙	⊙	⊙	✓	⊙
NH	—	—	—	—	—	—	—	—	—
NJ	—	—	—	—	—	—	—	—	—
NM	✓	-	✓	-	⊙	⊙	✓	⊙	✓
NY	—	—	—	—	—	—	—	—	—
NC	✓	✓	⊙	✓	⊙	⊙	-	⊙	-
ND	✓	-	-	-	-	-	✓	-	-
OH	✓	✓	✓	⊙	⊙	✓	✓	✓	⊙
OK	✓	⊙	⊙	⊙	⊙	✓	✓	⊙	⊙
OR	⊙	-	-	⊙	-	-	-	⊙	✓
PA	⊙	-	-	-	-	-	✓	⊙	-
RI	⊙	-	-	-	-	-	✓	-	-
SC	✓	-	-	✓	⊙	⊙	-	⊙	-
SD	-	-	-	-	-	-	✓	-	-
TN	✓	-	✓	✓	✓	✓	✓	⊙	-
TX	✓	⊙	⊙	⊙	⊙	⊙	✓	✓	-
UT	✓	⊙	✓	⊙	⊙	✓	✓	⊙	⊙
VT	⊙	-	⊙	⊙	⊙	-	⊙	-	-
VA	✓	✓	⊙	✓	⊙	⊙	✓	⊙	⊙
WA	⊙	-	-	⊙	⊙	✓	⊙	⊙	✓
WV	—	—	—	—	—	—	—	—	—
WI	⊙	-	-	-	-	-	✓	-	-
WY	✓	✓	⊙	-	-	⊙	✓	-	-

Source : Authors' Analysis

LEGEND
 ✓ Discussed Extensively ⊙ Mentioned - Not discussed
 States marked in red passed no legislation in the study period

TABLE 8. NUMBER OF STATES THAT ENACTED READING LEGISLATION DISCUSSING ENGLISH LEARNERS, STUDENTS WITH DYSLEXIA AND CULTURAL RELEVANCY BETWEEN 2019 AND 2022

	Discussed Extensively	Mentioned	Not Mentioned
English Learners	10	23	13
Students with Dyslexia	33	7	6
Culturally Relevant	17	12	17

Note: The five states that enacted no reading-related legislation during our study period are excluded from this table.
Source : Authors' Analysis

BOX 7

California

An example of legislation that recognizes and responds to the literacy needs of bilingual and multilingual students

First, CA AB 130 is committed to “building and strengthening capacity to increase bilingual and biliteracy proficiency” by implementing effective language acquisition programs and interventions. Through CA AB 320, educators will utilize “ongoing and diagnostic techniques that inform teaching, assessment, and early interventions.” Such interventions include, the hiring of literacy coaches to support struggling students and establishing biliteracy support programs during after school, weekend, and summer hours. Additionally, California will provide professional development to principals and teacher leaders to lead evidence-based reading instruction for English learners. Furthermore, bilingual reading specialists will be utilized to support English learner programs.

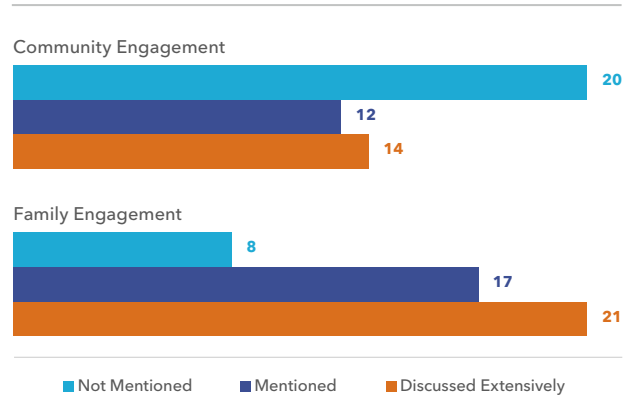
Next, CA AB 181 is dedicated to family engagement and has created different programs to support this desire. The literacy and biliteracy home visiting program allows “promotora” or family literacy outreach specialists to engage with families to “best support their pupils and every family member in reaching their literacy goals.” Family literacy plans are another tool used to create biliteracy goals, benchmarks, and roles for all family members.

Finally, CA AB 181 addresses the significance of culturally relevant texts. The state’s goal is to establish school and classroom libraries that include diverse book collections in English and other languages.

FAMILY AND COMMUNITY SUPPORTS

Engaging families in their children’s education is known to have a positive effect on their school readiness and later academic outcomes.⁵⁰ In a groundbreaking longitudinal investigation of the internal and external conditions that impact elementary school performance, researchers with the Consortium on Chicago School research identified strong parent and community ties as one of the five essential supports for school improvement.⁵¹ Schools with strong family engagement programs were four times as likely to improve students’ reading over time. Engagement strategies that are designed as a core component of an improvement plan and focused on improving

FIGURE 5
Number of States that Enacted Reading Legislation Discussing Family and Community Engagement (2019-2022)



BOX 8

Alaska

An example of giving parents a voice in their children’s literacy education

Alaska HB 114 requires that each public school in the state annually provides to parents and guardians of K-3 students current information on the importance of literacy and early reading. This includes: (1) culturally responsive intervention strategies and reading intervention services; (2) home reading plans; (3) grade progression standards and policies for the elementary school attended; (4) strategies and resources to help children learn to read; and (5) a list of resources and organizations that specialize in improving adult literacy.

The state establishes a partnership with parents and guardians to support their child’s literacy development through intervention services. This entails offering a “list of adult literacy resources and organizations, providing opportunities for parent or guardian participation in training workshops, and encouraging regular parent or guardian-guided home reading activities.”

Additionally, the law requires that parents and guardians be an active participant in creating their child’s literacy improvement plan. This involves the development of a plan in consultation with the reading teacher, school principal, and other pertinent district staff; receiving reading progress updates each year; and acquiring strategies to use at home to help their children succeed in reading.

Finally, the law promotes a statewide “parents as teachers” program for the benefit of children who are under 5 years of age. This home-based program includes a curriculum on early language and literacy development along with ongoing coaching to enhance parents’ understanding of important child development principles and developmental milestones.

educational outcomes for all children are most effective, helping to mobilize families and others in the community to share the responsibility.⁵²

Thirty-eight states include at least some language on family engagement; eight do not. Family support and engagement appears more extensively in legislation from 21 states (Figure 5 and Table 9). For example, tapping into the essential role that parents might play in the schools, Idaho’s “comprehensive literacy plan” (ID SB 1006) seeks to create a partnership between families and schools, including a review of the state’s comprehensive literacy plan; resources for families to determine appropriate strategies to engage children at home; a voice for families in determining any adaptive learning technology for literacy interventions their children may use; a resource center with materials for parents and training for using technology in the home; and a comprehensive statewide dashboard for parents to view children’s progress toward the school’s literacy proficiency and growth targets. Alaska’s legislation is another example of taking family engagement seriously (see Box 8).

Community initiatives are given less attention than family engagement, with only half of the states mentioning community initiatives in their legislation. Only 14 states discuss community engagement more extensively, as shown in Figure 5.

UT SB 127, for example, describes how the state board should “partner with a private businesses or nonprofit organization to provide age-appropriate books or digital books with accompanying electronic reading devices,” and “provide training and coaching to community, school, and parent engagement coordinators.” Colorado’s legislation is exemplary in demonstrating a commitment to community engagement around literacy, as high-

TABLE 9. PRESENCE OF LANGUAGE ON PARENT NOTIFICATION, FAMILY ENGAGEMENT, AND COMMUNITY ENGAGEMENT IN LEGISLATION (2019-2022), BY STATE

	Parent Notification	Family Engagement	Community Engagement
AL	★	✓	⊙
AK	★	✓	✓
AZ	★	⊙	-
AR	★	⊙	-
CA	-	✓	✓
CO	-	✓	✓
CT	★	⊙	⊙
DE	★	-	-
DC	★	-	⊙
FL	★	✓	✓
GA	★	⊙	-
HI	—	—	—
ID	★	✓	-
IL	-	✓	-
IN	-	-	-
IA	-	-	⊙
KS	★	✓	-
KY	★	✓	✓
LA	★	✓	-
ME	-	-	-
MD	★	⊙	✓
MA	-	✓	✓
MI	★	✓	✓
MN	-	⊙	✓
MS	-	⊙	-
MO	★	✓	⊙
MT	-	⊙	-
NE	★	✓	-
NV	★	✓	⊙
NH	—	—	—
NJ	—	—	—
NM	★	✓	⊙
NY	—	—	—
NC	★	⊙	⊙
ND	-	⊙	-
OH	★	✓	✓
OK	★	✓	-
OR	-	⊙	⊙
PA	-	⊙	⊙
RI	★	✓	-
SC	★	⊙	✓
SD	-	-	-
TN	★	✓	✓
TX	★	⊙	-
UT	★	✓	✓
VT	-	-	⊙
VA	★	⊙	⊙
WA	-	⊙	✓
WV	—	—	—
WI	-	⊙	-
WY	★	-	-

LEGEND

- ✓ Discussed extensively
- ⊙ Mentioned
- ★ Present
- Not discussed

States marked in red passed no legislation in the study period

Source : Authors' Analysis

lighted in Box 9. Through a content analysis of 223 bills enacted between 2019 and 2022, our goal was to look inside the massive effort among states to change the way children are taught to read. Our hope is that by understanding and leveraging credible knowledge about these current state ini-

tiatives, we can change the tenor of our dialogue from confrontation to collaboration, recognizing that our shared goal of ensuring that all children have the greatest opportunity to learn how to read will need our best collective effort.

BOX 9

Colorado

An example of a commitment to community engagement

Recognizing the lack of progress in literacy for historically underserved students, Colorado has created a set of guidelines that support children from the start. The state's law highlights the pivotal role that the early years play in a child's literacy development, noting that "children who struggle with literacy in kindergarten through third grade are unlikely to catch up to their peers." Among its features, the law provides funding for Dolly Parton's Imagination Library Program to work with community partners in a book distribution effort designed to inspire a love of reading by giving books to children every month, starting from birth and continuing to age 5.

The presiding state librarian in the Department of Education plays an important role according to the law. They will support efforts to provide access to books in Colorado's rural areas and to establish a detailed plan with local nonprofit organizations to provide greater access to age-appropriate, high-quality books each month. Other specific duties include managing the daily operations of the program, and developing, promoting and coordinating a public awareness campaign.

Finally, the law requires examining the success of the program. Yearly reports to the Department of Education and the education committees of the legislature are required to determine the total number of eligible children who will continue to be served by the program.

04. CONCLUSIONS AND RECOMMENDATIONS

Our analysis indicates that states are envisioning a pivot in their approach to reading, taking a deliberate turn toward the science of reading to guide instruction. Virtually every state bill requires local districts to adopt a systematic, rigorous and evidence-based approach to reading instruction, generally supporting the five pillars.

However, states fall short in foregrounding the role of additional skills like oral language development and writing, which are mentioned with less frequency. Building content and background knowledge as a foundation for reading comprehension are almost completely absent from this legislation.

Taken together, this legislation has wide scope. Laws in 42 states target students beyond 3rd grade and preschoolers are included legislation from 31 states. Legislation in only 12 states is aimed exclusively at Title I schools, and 37 states explicitly include charter schools in their efforts. There's an implicit recognition that reading improvement needs to address a greater span of grades, and that reading difficulties do not necessarily end in 3rd grade.

Student monitoring through screening and assessment is a central aspect of the legislation, with almost all states discussing it extensively in their laws. Yet the legislation is more limited when it comes to describing student supports and interventions to address the identified needs. Reading plans, as well as multi-tiered systems and summer school are the supports that are most frequently described extensively (in 16, 12 and 12 states, respectively), followed by tutoring and after-school programs.

While parent notification of reading difficulties has long been a standard practice, there is now a growing emphasis on involving parents and guardians in their children's literacy development. This includes soliciting their input in the selection of materials and resources as well as strategies for providing home-based support. Most states (38) have made

family engagement in students' literacy a priority, which is a positive step. In eight states, libraries are also taking on a more prominent role in communities, establishing partnerships with schools that leverage their talents and resources for improving students' information literacy.

There is much for which to commend states in their designs for increasing reading achievement. While advancing the science of reading, these bills provide a road map but give flexibility, leaving implementation largely in the hands of local districts. And while high-quality core instruction in classrooms represents where reading improvement is to happen, these bills acknowledge that additional resources and programs will be needed to ensure students' proficiency.

STUDY LIMITATIONS

- Our analysis provides a **snapshot of reading legislation over the past four years**, excluding legislation enacted before 2019 or new laws enacted after December 2022. We continue to track and code new legislation, updating our data annually, which partially addresses this shortcoming.
- Our initial round of **coding relies on frequency counts**. Future topical briefs will rely on a more granular content analysis, delving more deeply into each of our broad categories (e.g., professional development, assessments). Details about these briefs can be found in the report's [web page](#).
- Our study does **not track funding provisions or supplementary guidance** that often accompanies legislation, both of which are crucial to successful implementation. Relatedly, this report does not examine how these policies are perceived and received by educators on the ground, another important consideration for effective reform.

This report spotlights nine states that stand out in at least one area (e.g., family engagement, teacher preparation). In addition, about a dozen states enacted legislation with extensive provisions about 10 or more areas tracked by our analysis. These states are Alabama, Alaska, California, Colorado, Connecticut, Florida, Kentucky, Louisiana, Michigan, Tennessee and Utah.

Our analysis found that much of this legislation relies on increasing teachers' knowledge about the science of reading through teacher preparation and professional development. However, far less attention is placed on other infrastructural features that are needed to ensure that teachers can teach in accord with the science. For example, if a new, high-quality curriculum is adopted, then teachers will need professional development not only in the science of reading but also in how to implement that specific curriculum. Similarly, if we hope to engage principals as instructional leaders to support these new efforts, they will need far more than a generalized familiarity with the science of reading. Without this sort of interconnected, coherent infrastructure, teachers will be in the hot seat, potentially made to feel solely responsible for this whole improvement process.

STUDY STRENGTHS

- Drawing on the scholarly literature on organization and improvement science, our report examines the **organizational features** that need to be in place to support reading reform. Our emphasis on these features, and the need for **system coherence** are often missed in discussions of reading improvement. Our study analyzes the **in-school supports** that may be necessary to ensure success in reading.
- Additionally, our report includes **community and family supports**, recognizing their critical role in reading reform.
- We **share our methods and data** openly, allowing others to check our results and further this work. Our website offers easy-to-use tools for data exploration and visualization.

Other issues need to be addressed as well. Much of the legislation identifies the science of reading to include five pillars from an extensive analysis by a report that is now more than 20 years old. Since then, a substantial amount of evidence has accumulated to suggest that other skills are critically important to improve reading proficiency. There is now an established link between oral vocabulary and word reading, such that children who are taught the spoken form of novel words before encountering them in print read them more easily.⁵³ There is also a substantial body of evidence to suggest that instruction in writing impacts reading fluency and comprehension.⁵⁴ Recognizing that literacy is a social process, studies have shown that culturally and linguistically responsive interventions⁵⁵ contribute to substantial gains for children who speak a language other than General American English,⁵⁶ and/or whose families members identify with a minoritized ethnicity or cultural heritage.^{57, 58} Moreover, recent studies have reported on the importance of developing background knowledge for improving vocabulary, concepts and comprehension.⁵⁹ Nevertheless, responsiveness to cultural and linguistic variations, oral language, writing development and background knowledge are all given much shorter shrift in this legislation.

These concerns are not meant to diminish or derail the substantial efforts that states are currently undertaking to ensure that all students become confident readers. We recognize that nothing may be more anti-scientific than to consider the science of reading as settled, static and impervious to further development. Instead, the concerns are meant to encourage the educational community to contribute to an ongoing collaboration among all concerned citizens using their knowledge of how schools work to ensure a broader and deeper understanding of literacy. No matter how well-intentioned, carefully planned or research-based these initiatives are, they will not succeed if not grounded in practice.

As states continue their own reading policy journey, these are some recommendations that follow from our analysis.

	WHAT <u>MOST</u> STATES ARE GETTING RIGHT AND SHOULD CONTINUE DOING	WHAT <u>ELSE</u> STATES MAY CONSIDER
<p>DEFINING READING</p> <p>Developing effective literacy policy requires reaching agreement on the knowledge, skills and dispositions that are necessary for learning to read and becoming a confident reader.</p>	<p>✓ Grounding reading policy on the five pillars identified by the National Reading Panel:</p> <ul style="list-style-type: none"> • phonemic awareness • phonics • vocabulary • fluency • comprehension 	<p>These five pillars, however, should be a starting point.</p> <ul style="list-style-type: none"> ■ Oral language and writing take a back seat in the legislation but are as essential as the other five. Lawmakers should ensure that they receive the same degree of attention. <i>MODEL STATE: KENTUCKY</i> ■ Background knowledge receives very limited attention in the law. It is crucial that legislators recognize its importance and ensure that it has a prominent role in reading instruction. <i>RESOURCE: KNOWLEDGE MATTERS CAMPAIGN</i> ■ More states could craft legislation that espouses a holistic view of reading, including its socio-affective aspects like motivation, engagement, preferences etc. <i>MODEL STATE: ARIZONA</i>
<p>SCIENCE-BASED POLICY</p> <p>Adhering to scientific findings is essential, but it's important to acknowledge that science is dynamic and that it encompasses varying degrees of certainty. Legislators should approach reading science with educated skepticism, able to discern between established and emerging evidence.</p>	<p>✓ Prioritizing the role of science and research evidence in reading legislation. Allow the best evidence to guide decision-making about curricula and programs.</p>	<ul style="list-style-type: none"> ■ Legislators should become knowledgeable about reading science and understand common misconceptions. <i>RESOURCE: AMERICAN EDUCATOR</i> ■ As lawmakers attend to reading science, they should also consider education science more broadly to guide reading policy — prioritizing evidence-based interventions, such as tutoring, and phasing out policies with mixed evidence, such as grade retention. <i>MODEL STATE: MICHIGAN</i>

	WHAT MOST STATES ARE GETTING RIGHT AND SHOULD CONTINUE DOING	WHAT ELSE STATES MAY CONSIDER
<p>TEACHER SUPPORTS</p> <p>Effectively supporting teachers involves more than directly investing in their development. Teachers need instructional materials that support their practice as well as school leaders capable of creating the conditions for change. When all these components work together, they lay a robust foundation for improvement.</p>	<ul style="list-style-type: none"> ✓ Allowing flexibility in implementation, but pairing it with support — e.g., professional development or curriculum lists — so that districts can more efficiently select high-quality programs and instructional materials. ✓ Supporting existing teachers by offering professional development opportunities that are grounded in reading science. ✓ Developing an effective teacher workforce by prioritizing teacher education programs rooted in evidence-based reading instruction. 	<ul style="list-style-type: none"> ■ A high-quality curriculum not only provides a clear framework for teachers, but also ensures coherence across grades and schools. It is essential that legislators promote the selection and periodic review of evidence-based instructional materials and resources in districts. This will help determine if they meet students’ needs or if additional materials and supports are necessary. Don’t remove resources, even flawed ones, without providing educators with effective alternatives first. MODEL STATE: DELAWARE ■ Without the support and commitment of school leaders, teachers might struggle to implement reforms. Therefore, legislators should consider policies that educate and empower school administrators with knowledge of the science of reading. Such enlightened leadership is crucial for ensuring that teachers’ varied professional needs are met and that professional learning demands are sustainable, appropriately compensated, and come with ample opportunities for practical application. MODEL STATE: UTAH

	WHAT <u>MOST</u> STATES ARE GETTING RIGHT AND SHOULD CONTINUE DOING	WHAT <u>ELSE</u> STATES MAY CONSIDER
<p>STUDENT SUPPORTS</p> <p>Identifying the needs of a range of student populations is just the start; states must also provide support for all students.</p>	<ul style="list-style-type: none">✓ Maintaining a broad scope that encompasses all students - from preschoolers to those beyond the 3rd grade and across all school types, including charter and non-Title I schools.✓ Keeping a strong focus on progress monitoring through valid and reliable assessments.✓ Maintaining legislation that provides support and resources for students with dyslexia.	<ul style="list-style-type: none">■ Legislators should support inclusive, explicit and systematic reading instruction that values students' diverse backgrounds, languages, and knowledge. <i>RESOURCE: READING ROCKETS</i>■ Legislators should strive to address students' literacy needs comprehensively by developing a suite of interventions, instead of relying on isolated initiatives. <i>MODEL STATE: MICHIGAN</i>■ Lawmakers should strive for equitable support for all students, including students experiencing poverty, English learners or students with dyslexia. Given the persistent and predictable disparities in reading proficiency across racial and ethnic lines, we urge legislators to craft language that deliberately targets the needs of black, brown, and indigenous students. <i>MODEL STATE: CALIFORNIA</i>

	<p>WHAT <u>MOST</u> STATES ARE GETTING RIGHT AND SHOULD CONTINUE DOING</p>	<p>WHAT <u>ELSE</u> STATES MAY CONSIDER</p>
<p>BEYOND THE CLASSROOM</p> <p>Achieving desired reading outcomes hinges not only on the individual efforts of schools and families, but most importantly on the two working together while also incorporating community-based assets and supports.</p>	<ul style="list-style-type: none"> ✓ Keep prioritizing legislation that supports authentic school-home-community collaboration to improve children's reading. 	<ul style="list-style-type: none"> ■ States that currently inform parents about their children's reading performance should consider modeling after states that are trying to foster genuine school-family partnerships around literacy. MODEL STATE: ALASKA ■ Legislation in many more states could leverage libraries and other community assets to promote students' reading development. MODEL STATE: COLORADO
<p>FINAL RECOMMENDATIONS</p>	<ul style="list-style-type: none"> ■ Building a strong foundation for reading improvement requires a comprehensive array of supports for both teachers and students. We urge states to guarantee that their laws address all these aspects, building a solid foundation for literacy improvement. ■ Moreover, we advise lawmakers to prioritize establishing system alignment and coherence, which is arguably the most vital objective moving forward. ■ Finally, legislators should ensure that parents and teachers have a voice in policy decisions. This could involve their participation in literacy committees or input through surveys or interviews. Laws should embody a spirit of collaboration; excessive prescriptiveness and rigidity, such as outright bans on practices, hinder this and can prove impractical. The emphasis should be on adaptability, respect, and positive interactions with educators and families, who are critical for the success of reading reform. Ultimately, it's parents and teachers, with their direct connection to students, who support everyday learning and bring these reforms to life. 	

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APPENDIX

CODE 1 VS. 2 DECISIONS

To illustrate how we went about making 1 vs. 2 decisions, we describe our process for leadership, professional development, tutoring and family engagement.

LEADERSHIP

We assigned a 2 in "school leadership" when the bill discussed at least one of the following:

- Current school leaders receive training in scientifically based reading instruction.
- Leadership preparation programs provide training in scientifically based reading instruction.
- School leaders act as a support system for teachers regarding reading instruction.
- School leaders work with coaches or specialists to improve reading instruction.

All other mentions of school leadership (e.g., school leaders notify parents about reading-related topics such as grade retention, test scores) received a 1.

PROFESSIONAL DEVELOPMENT

Mentions of professional development received a 1 unless the bill addressed one or more of the following, in which case the bill was assigned a 2:

- Detailed description of the reading PD content.
- Description of who would be receiving the reading PD.
- Description of when the PD would take place, its format and other details.
- Whether the PD is aligned to standards, curriculum or assessments.

TUTORING

Mentions of tutoring received a 1 unless the bill addressed one or more of the following, in which case the bill would be assigned a 2:

- Description of which students will receive reading tutoring.
- Requirements and qualifications for who can serve as a reading tutor.
- Description of the training that reading tutors will receive.
- Specific locations/times for tutoring are listed.

FAMILY ENGAGEMENT

Mentions of family engagement received a 1 unless the bill addressed one or more of the following, in which case the bill was assigned a 2:

- Description of specific reading strategies families can use with their child.
- The creation of family or home literacy plans to support reading.
- The creation of family events or services to support reading.
- Specific training for families to support their child's reading.
- Home visits to support family reading efforts.

SUMMARY OF CODES

GENERAL INFORMATION

Basic descriptors: Bill name | Date introduced | Date enacted | State | Summary | COVID-19 framing

TARGET SCHOOLS/GRADES

Title I	Targets Title I schools.
Charter	Are charter schools exempted from any part of the bill?
Grades targeted	The grades of students who are the focus of the bill.

APPROACH TO LITERACY IMPROVEMENT

Research/evidence-based	References the expressions: evidence, evidence-based, research, research-based Related terms: evidence-informed, science of learning, research-informed, science-based.
Research mentions	Counts the number of times the words "research" or "evidence" appear in the bill.
Science of reading	References the science of reading.
Science of reading mentions	Counts the number of times the expression appears in the bill text.
Science of reading definition	Provides a definition for the science of reading.

READING SKILLS

Phonics	References phonics as a component of skilled reading. Related terms: decoding.
Phonemic awareness	References phonemic awareness as a component of skilled reading. Related terms: phoneme.
Phonological awareness	References phonological awareness as a component of skilled reading.
Fluency	References fluency as a component of skilled reading.
Vocabulary	References vocabulary as a component of skilled reading.
Comprehension	References comprehension as a component of skilled reading.
Background knowledge	References developing knowledge and content domain as a component of skilled reading or disciplinary literacy Related terms: content knowledge, background knowledge, content-rich.
Writing	References writing as a component of skilled reading. Related terms: written expression.
Oral language	References oral language as a component of skilled reading. Related terms: oral expression, speaking, listening.

INFRASTRUCTURE	
Curriculum	References specific and/or approved curricula, instructional materials, or resources.
Curriculum provider	References specific companies/providers of curricula, instructional materials, or resources.
Teacher preparation	References requirements for pre-service teachers and teacher preparation programs Related terms: pre-service, educator preparation program, required coursework, certification exams, field experience, student teaching.
Professional development (PD)	References professional development for school staff. Related terms: professional learning, teacher training.
PD provider	References that PD be required by a specific provider or approved list.
Coaching	References literacy or reading coaches for school staff. Related terms: literacy coach, reading coach.
Principal	References principals and their roles in literacy. Related terms: assistant principal, vice principal, school leader, administrator.
Supervisor	References reading coordinators or supervisors, reading specialists and their roles in literacy development. Related terms: literacy coordinator, literacy specialist, literacy supervisor, literacy interventionist.

SPECIAL POPULATIONS	
Dyslexia	References dyslexia. Related terms: Dyslexia handbook, dyslexia specialist.
Culturally relevant	References materials or approaches that reflect or incorporate a variety of students' identities, cultures, mindsets, language and personal experiences. Related terms: diverse, diversity multicultural.
English Learners/Multilingual	References specific literacy instruction or strategies for students whose home language is not English Related terms: biliteracy, English Language Learners - ELLs, English Learners - ELs, Limited English Proficient.

ASSESSMENT AND STUDENT SUPPORTS	
Assessment	References any kind of progress monitoring or diagnostic assessment/test and/or screening excluding state assessments which are required by federal law. Related terms: diagnostic.
Tiered System of Supports	References multi-tiered systems of support for reading/literacy. Related terms: tier 1, tier 2, tier 3, Response to Intervention – RTI, Multi-Tiered System of Supports - MTSS.
Tutoring	References tutoring as a specific intervention/support for students.
After school programs	References after school programs to help students with reading skills. Related terms: after school activity, after hours.
Summer programs	References literacy summer/camp programs available for all or some students.
Reading plan	References some type of reading plan for students. Related terms: individual reading plan, reading recovery plan, intervention reading plan.
Grade retention	References retaining students in a given grade. Related terms: 3rd grade reading legislation, 3rd grade guarantee, retain.

FAMILY AND COMMUNITY ENGAGEMENT

Parent Notification	References notifying parents, guardians, or families of assessments/screening results or other literacy interventions.
Family Engagement	References engaging parents and families in their child's literacy development materials, sources to use at home Related terms: family involvement, family/parent questionnaire, family/parent survey.
Community Engagement	References community initiatives around literacy that support or complement in-school efforts. Related terms: libraries, nonprofits, local businesses/companies/organizations, Reading Corps, etc.

OTHER

Study/panel	References the creation of research groups to study literacy and develop context-specific recommendations to improve literacy levels. Related terms: commission, committee, task force, team.
Technology	References utilizing technology to assist with literacy instruction at home or at district/school. Related terms: website, digital tools, digital literacy, online reading, computer-based reading, internet site.



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