

THE FOUR PILLARS TO READING SUCCESS

An Action Guide for States

Learning how to read is not something that comes naturally. Many children need instruction from their teachers that follows the research on the most effective and efficient methods of teaching reading (often referred to as the “science of reading”). The path to literacy is supported by many actors, but states have a role in these four essential pillars:

1

insisting that prep programs build teacher candidate knowledge

2

recommending to districts the best tools for assessing their students' reading proficiency

3

evaluating and recommending instructional materials

4

giving resources to districts so they can provide external supports for classroom teachers

Where, when, and how we teach reading says more about us than it does the students. Explicitly teaching and leveraging the science allows us to overcome our blind spots, assumptions, and biases which impact every aspect of instruction. In doing so, we save us from ourselves and avoid a permanent underclass filling our correctional institutions as prisoners of the ‘reading wars.’

—Kareem Weaver, member of the Oakland NAACP Education Committee and reading warrior

Insisting that prep programs build teacher candidate knowledge.

It is this pillar where states can make the most progress, as states have such clear oversight over teacher preparation programs through their program approval process, as well as by means of licensing tests.

- Before PK-5 and special education teacher candidates enter the classroom, ensure that they have essential knowledge needed (as defined below) to teach children both how to read and how to read to learn.
- As a condition of teacher preparation program approval, require that the reading courses for aspiring PK-5 teachers, *including special education teachers*, cover the knowledge and skills teachers should have mastered.

AVOID any program that includes drawing shapes around words, making alphabetic word walls, teaching the “cueing systems” approach of appealing to context to guess at unknown words, or that does not follow a clear scope and sequence where one skill is built upon another.

—Louisa Moats

What every elementary teacher should learn about reading instruction

This list highlights essential aspects of reading instruction, but is not intended to convey the breadth and depth of content that new teachers should have received in the course of their pre-service preparation. Much of the referenced practice can occur in classroom simulations.

- 1 Understanding the foundational skills of literacy that produce the highest yield of successful readers, progressing from phonemic awareness to phonics, with ample assignments and practice in how to develop each skill in new readers.
- 2 Appreciating the time and attention required to develop students’ fluency skills throughout the elementary grades in order to read text effortlessly, automatically, and, not to be overlooked, with expression, all of which are important for comprehension.
- 3 Knowing the differences between systematic, explicit instruction and implicit, less directed instruction; when and how to use each; as well as the hallmark signs of classroom practices that are aligned with research-based reading instruction (e.g., encouraging students to try to sound out unknown words) and the hallmark signs of practices that are not research-based (e.g., using context or pictures to make a guess when reading words).
- 4 Practicing how to administer and interpret the many ways to assess students’ progress in reading, and then learning how to act upon the results appropriately, particularly for students who struggle to read, including those who may have dyslexia.

- 5 Learning about both the effective and less effective ways to build vocabulary; and using word-learning strategies to decipher meanings of unfamiliar words through the use of context, the meanings of word parts, and appropriate dictionary use. Many languages, such as Spanish, are connected to English through their word origins. Studying the morphology, or structure, of words can help English learners identify cognates (words that are the same or similar in both English and their first language), making it easier for them to build their English vocabulary.
- 6 Understanding why accurate spelling and writing skills are important for equipping students to become better readers and critical thinkers, and what appropriate grade-level progression in each looks like.
- 7 Practicing leading high-quality discussions in actual classrooms or in settings designed to simulate an actual classroom, and an understanding of the components needed to have a high quality discussion.
- 8 Understanding research-based comprehension strategies described in the IES Practice Guides (as well as common strategies to avoid because they are not research-based), and their limitations, in that taught once, they do not need to be retaught year after year as many curricula expect, only practiced with increasingly complex texts.
- 9 Acquiring rudimentary knowledge in assessing the difficulty of a text, both from linguistic and content standpoints; learning how best to teach complex texts in actual classrooms and simulated practice.
- 10 Engaging with children’s literature from a variety of cultures to curate selections purposefully, engendering in students a love for good stories, a habit of recreational reading, and an appreciation for a variety of cultures.
- 11 Understanding the importance of building students’ broad academic knowledge through generous exposure to expository, non-fiction texts, in that it strengthens their vocabulary, reading comprehension, and critical thinking skills, including learning to be smart consumers of information.
- 12 Understanding the structure of the English language, including its speech sounds, spelling system, sentence patterns, and ways texts are organized.
- 13 Not to be overlooked, ensuring that teachers acquire their own broad academic knowledge, specifically in topics common to elementary curricula for social studies, science, and the arts. It is in the state’s interest to assess all of this fundamentally necessary knowledge as a condition of teacher licensure.

What states can do for teacher educators who teach reading instruction

- Help teacher preparation programs ‘own’ the importance of teaching reading. Discourage the use of ‘test cramming’ materials in lieu of altering their coursework. In addition, states should publish teacher preparation programs’ first time pass rates of their candidates on a respected test of reading instruction (see below).
- For teacher educators whose own advanced degrees likely did not address the science of reading, provide the funds and training to fill those knowledge gaps. Even consider requiring program faculty teaching reading to achieve an exemplary score on a respected reading test (see below).

Tests that do a good job measuring teacher knowledge of reading instruction

Certification Examinations for Oklahoma Educators (CEOE): Elementary Education Subtest I, Oklahoma

Foundations of Reading

Indiana CORE Assessment Early Childhood Generalist test

Indiana CORE Elementary Education Generalist Test

Indiana CORE Exceptional Needs- Mild Intervention: Reading Instruction

KPEERI (Center for Effective Reading Instruction)

Massachusetts Tests for Educator Licensure (MTEL) Foundations of Reading test

Minnesota Teacher Licensure Examinations (MTLE) Early Childhood Education

Minnesota Teacher Licensure Examinations (MTLE) Elementary Education test, Subtest I

Minnesota Teacher Licensure Examinations (MTLE) Special Education Core Skills (Birth to Age 21)

National Evaluations Series Elementary Education Subtest I

Pennsylvania Educator Certification Test (PECT) PreK-4

Praxis Reading for Virginia Educators (5306)

Praxis Teaching Reading: Elementary Education (5204)

Praxis Teaching Reading: Elementary Education (5205)

RICA (Reading Instruction Competence Assessment), California

Texas Educator Certification Examination, Science of Teaching Reading (293) (scheduled January 1, 2021)

Tests that do not do a good job measuring teacher knowledge of reading instruction

Florida Teacher Certification Examinations (FTCE) Elementary Education test

Georgia's Assessments for the Certification of Educators (GACE) Early Childhood Education Assessment

Idaho's Comprehensive Literacy Assessment

Illinois Licensure Testing System (ILTS) Elementary Education (grades 1-6) test

Missouri's Educator Gateway Assessment (MEGA): Elementary Education Multi-Content test

New York State Teacher Certification Exams (NYSTCE) Multi-Subject (Grades 1-6), Part One: Literacy and English Language Arts

New York State Teacher Certification Exams (NYSTCE) Teachers of Early Childhood (Birth-Grade 2)

Praxis Content Knowledge for Teaching (7801): Reading and Language Arts subtest (7802)

Praxis Early Childhood Education (5025) test

Praxis Elementary Education: Content Knowledge (5018)

Praxis Multiple Subjects (5001): Reading and Language Arts subtest (5002)

Praxis (5203) Teaching Reading: Elementary Education test

Texas Examinations for Educator Standards (TExES) Core Subjects EC-6 (291) test

Recommend to school districts the best tools for assessing their students' reading skills.

States are in an ideal position to recommend to their districts high quality validated **assessment tools** as well as validated **diagnostic surveys** for use throughout elementary grades. External tests will help school districts determine how best to support their teachers and if the curriculum is itself sufficient. In addition to curriculum-based assessments, these tools will help teachers to assess reading skills and better plan instruction.

Assessments can serve a number of purposes: screening, diagnostic, progress monitoring, and outcome evaluation.

Screening assessments provide information about the knowledge and skills base of the student. They are useful for determining the most appropriate starting point for instruction and for planning instructional groups. A number of states mandate them at the beginning, middle, and end of the year as part of their multi-tiered system of support procedures to identify those students who are at the most risk of reading failure.

Diagnostic assessments identify a student's strengths or weaknesses in specific skills. Diagnostics are the next logical step if a student is identified by the screener for being at risk of reading failure. They help in pinpointing the lowest deficit skill and the starting place for intervention.

Progress monitoring tools serve to guide the specific focus of instruction by periodically checking to see if progress toward mastery is being made as a result of the instruction or intervention. There are different frequencies for administering a progress monitor, depending on the type and frequency of the intervention itself.

Outcome evaluation is often used at the end of a unit of study. It is a form of summative assessment to gauge whether students have met learning objectives for a specific content area. State end-of-year tests are a type of outcome evaluation. Outcome assessments may be useful in guiding teachers and school leaders in evaluating effectiveness of instruction and curriculum.

The following are recommended assessment tools and surveys for these different purposes:

✓ Recommended assessment tools and surveys

These recommended tools are commonly used; address the relevant grade spans; and receive generally high marks in classification accuracy, technical standards (e.g., reliability and validity), and usability features from the National Center on Intensive Intervention at American Institutes for Research (NCII). Note that this rating source provides useful insight, but requires some in-depth exploration, as not every test adequately addresses every skill or grade span. NCII's tools charts can be a useful resource for examining the quality of assessment tools.

Assessment	Source	Administration Format	Screening Assessments	Diagnostic Assessments	Progress Monitoring	Outcome Evaluations
Individual Growth & Development Indicators (IDGI); primarily for infants and toddlers	Renaissance	teacher directed	X		X	

Assessment	Source	Administration Format	Screening Assessments	Diagnostic Assessments	Progress Monitoring	Outcome Evaluations
Preschool Early Literacy Indicators (PELI)	Acadience	teacher directed	X			
Rapid Automatized Naming (RAN)	multiple sources	teacher directed	X	may be part of a bigger diagnostic battery	X	
Acadience (aka DIBELSNext)	Acadience	teacher directed	X		X	
AIMSweb (Spanish version available)	Pearson Assessments	teacher directed	X		X	
DIBELS 8 (Spanish version available)	University of Oregon	teacher directed	X		X	
easy CBM	University of Oregon	teacher directed	X			
Fastbridge (also called FAST)	Illuminate Education	computer, adaptive	X		X	
iReady (grades 3-4)	Curriculum & Associates	computer, adaptive	X	X	X	X
Letter Sound Fluency		teacher directed	X		X	
LETRS Spelling Inventory	Voyager Sopris-West	teacher directed		X		might be used to assess mastery of phonics skill sequence
Beginning and Advanced Decoding Surveys (intended for middle of 2nd grade through adults)	Really Great Reading	teacher directed	not normed for screening	X	X	
PAST (Phonological Awareness Screening Test)	David Kilpatrick	teacher directed		X	X	
Assessing Reading: Multiple Measures (reference for various assessments, primary, upper elementary, and some through grade 10)	Consortium On Reaching Excellence in Education, Inc. (CORE)	both	X	X	X (Phonics Survey only)	X
Comprehensive Test of Phonological Processing (CTOPP-2) (ages 4-24)	WPS Publishing Pro-Ed Pearson Clinical	teacher directed		X		
Acadience Reading Diagnostic (formerly DIBELS deep)	Acadience	teacher directed		X		
State or District Assessments		computer and/or pencil-paper				X

X Not recommended

There are a number of tools which do not align with the principles of the science of reading. The tools in this list, while popular in many schools, rely on the three-cuing system of reading words, a method that is not supported by consensus research. Most notable of these are **Running Records, Fountas and Pinnell, Benchmark Assessment System (BAS)**, and the **Developmental Reading Assessment (DRA)**.

Evaluate and recommend effective instructional materials.

Teachers should not be expected to implement their own approach to teaching reading. They need experts to curate approaches, curricula, and materials that are research based, field-tested, and revised based on student performance. States and their school districts are in a good position to enter into this work, but it may be most efficient for a state to set up a committee to conduct a full review of the available materials.

An ideal panel should not only include educators, but also reviewers who have a strong background in reading research and who can keep the process faithful to the research, as well as practitioners more likely to be familiar with a broad array of materials on the market.

As a starting point, it is worth checking out independent reviews of materials. No organization has reviewed all available programs and there can be considerable debate as to the conclusions of some reviews (e.g., a study by What Works Clearinghouse finding positive impacts from Reading Recovery [set off a firestorm](#)). Keep in mind that the reviews consider different elements associated with quality.

- The [What Works Clearinghouse](#) (WWC)—part of the [Institute of Education Sciences](#) (IES)—gives effectiveness ratings to interventions, such as reading programs, based on the number of high-quality studies such as randomized controlled trials and those with a treatment and comparison group, and the findings from those studies. WWC [intervention reports](#) document the cost of commercial products, if known, but do not discuss their alignment with scientific research on early reading.
- [EdReports](#) (a nonprofit which trains classroom teachers to conduct comprehensive reviews of materials) approaches its reviews from the perspective of alignment and fidelity to College and Career Ready standards, with reviews specific to each grade level. On the topic of early reading, EdReports considers a program's adherence to foundational skills as well as the capacity of materials to build knowledge in young readers, a reasonable proxy for efficiency and effectiveness. It does not consider cost or the academic outcomes reported by various studies.
- [Student Achievement Partners](#) (a nonprofit that is new to the review process) has only recently started reviews of curricula. It specifically examines materials for their alignment and fidelity to the scientific research on reading, as a proxy for efficiency and effectiveness, but like EdReports does not look at cost or the academic outcomes reported by various studies.

It may be necessary to recommend a group of programs in order to meet all of the instructional needs, combining a program for building foundational skills with one for building vocabulary, knowledge, and comprehension. There may also need to be programs to supplement instruction in spelling, grammar, and writing instruction.

Remember, no matter how good a program is, it will still need to be delivered by a knowledgeable teacher (Pillar 1!), who in turn will require external support (Pillar 4!).

Helpful resources that outline the parameters of effective reading instruction include:

[Put reading first: The research building blocks for teaching children to read.](#) This booklet from the National Institute for Literacy, the U.S. Department of Education, and the National Institute of Child Health and Human Development offers teachers a summary of the 2000 National Reading Panel's findings and recommendations on how to implement them in the classroom.

[Foundational skills to support reading for understanding in kindergarten through 3rd grade.](#) This IES Practice Guide is based on a review of research picking up where the National Reading Panel (NRP) left off. In addition to affirming the NRP's findings, this guide highlights the importance of academic language and other essential components. Its recommendations, paired with the key components of literacy identified by the National Reading Panel, can provide a useful framework for evaluating whether reading and language arts instructional materials align with the hallmarks of effective reading instruction.

[Structured literacy and typical literacy practices: Understanding differences to create instructional opportunities.](#) This guide by Dr. Louise Spear-Swerling provides sample activities for specific literacy components, such as phonemic awareness.

[Reading program and lesson checklist.](#) This checklist from Dr. Deborah Glaser identifies specific content that should be included in reading program lessons including phoneme awareness, decoding, fluency, vocabulary, and comprehension.

[The science of reading.](#) This guide by Tennessee Score offers guidelines around the components of reading instruction, and makes the case for why instruction steeped in the science of reading matters.

Curriculum Review Protocols

Consider these protocols and tips to guide reviews of curricula for their instruction on foundational skills. NCTQ will be providing a protocol for assessing curricula on vocabulary, comprehension, and knowledge building.

+ Materials from EdReports

- **[Quality Instructional Materials Tool: English Language Arts K-2 Review Tool](#)**
- **[4 ways to know if you're using quality foundational skills materials](#)**

+ Webinar from Student Achievement Partners

- **[Comparing Reading Research to Program Design](#)**

+ Materials from the University of Oregon's Center on Teaching and Learning

- Core Reading Programs
 - **[REVISED Consumer's Guide to Evaluating a Core Reading Program Grades K-3: A Critical Elements Analysis](#)**
 - **[REVISED Skills Trace](#)**
- Supplemental and Intervention Programs
 - **[Consumer's Guide to Evaluating Supplemental and Intervention Reading Programs Grades K-3: A Critical Elements Analysis](#)**
 - **[Items for Analysis of K-3 Intervention Programs](#)**
 - **[Skills Trace](#)**

Give resources to districts that allow them to provide external supports to their classroom teachers in reading.

Teachers need extra support to meet the needs of children who are learning to read, particularly for students who are really struggling or who may be dyslexic. Here are smart ways for states to play a role:

- Provide resources for job-embedded support from state-approved organizations trained to deliver the science of reading to classroom teachers (e.g., **CORE/Pivot**, **LiteracyHow**, and **95 Percent Group**)
- Launch a state-based organization to provide training and oversee reading progress (e.g. **California Reading and Literature Project**, **Project R.I.S.E** in Arkansas, **Tennessee SCORE**, **Ohio's Literacy Academies**). These state-run programs are particularly helpful for building internal systems-wide knowledge and support that includes administrators and principals.
- Provide resources for school-based, well trained reading coaches.
- Provide resources for teachers to understand how to interpret data, and then encourage regularly scheduled data meetings (e.g., Professional Learning Communities) and other data-driven processes.
- Establish a list of acceptable vendors whom districts can use to provide comprehensive professional development in reading science to already licensed pre-K, elementary, and special education teachers.

The following professional development resources are recommended by this guide's Expert Panel. This list (a mixture of print, online, and face-to-face) is not intended to be comprehensive, but it should give states a place to start:

AIM Academy

CORE (Consortium on Reaching Excellence in Education)

Elementary Reading Academy

Essential Actions: A Handbook for Implementing WIDA's Framework for English Language Development Standards

FreeReading

Keys to Literacy

LETRS

Lexia Academy

Literacy How

Neuhaus Education Center

Sedita

Teaching Reading Sourcebook

Top Ten Reading Tools

Want to learn more about the push for better reading instruction?

Check out these lists of articles.

- + [Emily Hanford's stories on reading](#)
- + [Contemporary Pieces Contributing to a Ray of Sunshine for Improved Reading Outcomes](#)

Behind this guide

The following researchers and practitioners helped produce this guide:



Claude Goldenberg, Ph.D., is the Nomellini & Olivier Professor of Education, emeritus, at Stanford University. He is a former junior high and first grade teacher. Dr. Goldenberg has conducted research and published articles and books on the academic achievement of English learners, especially their literacy development.



Deborah R. Glaser, Ed.D., received her doctorate in Curriculum and Instruction with a specific focus on reading and school reform from Boise State University. During Dr. Glaser's 40 years in education she has been a classroom and learning disability instructor and administrator, and has assisted universities with the development of research-based reading curriculum and established training and consultation programs to support the success of state and local reading initiatives. Dr. Glaser's publications include LETRS Foundations: Introduction to Language and Literacy (coauthored with Louisa Moats), and the online reading course The Reading Teacher's Top Ten Tools, among others.



Edward J. Kame'enui, Ph.D., is Dean-Knight Professor Emeritus and Founding Director of the Center on Teaching and Learning (CTL) at the University of Oregon. He is a former special education teacher. Dr. Kame'enui served as the Founding Commissioner of the National Center for Special Education Research (NCSE) at the Institute of Education Sciences (IES), co-authored the 1998 Reading/Language Arts K-12 Curriculum Framework for the California Department of Education, directed several national federal reading research initiatives, spoke at the White House, and served on the original advisory boards for the PBS television shows "Between the Lions" and WETA's "Reading Rockets."



Kelly Butler is the Chief Executive Officer of The Barksdale Reading Institute (BRI). Kelly spearheaded BRI's development of The Reading Universe®, a detailed scope and sequence for training teachers on how to deliver sequential, systemic, explicit reading instruction. Ms. Butler is the author of two statewide studies and developed a subsequent statewide initiative to improve teacher preparation programs focused on early literacy instruction in Mississippi's 15 public and private universities. A former high school teacher in the Greenwich, Connecticut Public Schools, Ms. Butler holds a bachelor's degree in Special Education from The University of Alabama and a master's degree in Administration, Planning, and Social Policy from Harvard University.



Linda Diamond is the author of Teaching Reading Sourcebook used in university teacher preparation courses and K-12 professional development. She is president and founder of Consortium on Reaching Excellence in Education (CORE), a professional learning organization that serves schools, districts, and state agencies to improve literacy and math achievement for all students. Previously, Ms. Diamond served as a K-12 district administrator, a middle school and elementary principal, and a high school teacher.



Louisa Moats, Ed.D., has been a teacher, psychologist, researcher, graduate school faculty member, and author of many influential scientific journal articles, books, and policy papers on the topics of reading, spelling, language, and teacher preparation. She received her doctorate in Reading and Human Development from the Harvard Graduate School of Education. She was Co-Principal Investigator of the NICHD Early Interventions Project in Washington, D.C., public schools and Principal Investigator on two small business innovation research (SBIR) grants from the National Institutes of Health.



Louise Spear-Swerling, Ph.D., is Professor Emerita at Southern Connecticut State University in New Haven, CT. Her research interests focus on children's reading development and literacy difficulties, as well as teacher knowledge for reading instruction; she has presented and published widely on these topics. Dr. Spear-Swerling's most recent book is *The power of RTI and reading profiles: A blueprint for solving reading problems*, published by Brookes. Dr. Spear-Swerling has prepared both general and special educators to teach reading using Structured Literacy approaches for many years.



Margaret Goldberg works in Oakland Unified, where she leads a grant-funded project dedicated to implementing evidence-based reading instruction in primary grade classrooms. Previously, she was a classroom teacher, curriculum developer, reading interventionist, and literacy coach. Ms. Goldberg is the co-founder of Right to Read Project, a group of teachers, researchers, and activists committed to the pursuit of equity through literacy.



Sally C. Grimes has provided professional development to teachers and administrators as an independent consultant in the areas of language and literacy PreK-5 for the last 25 years. She served as Admissions Director at Landmark School, taught Special Education in public schools, taught migrant Mexicans, and has done several years of diagnostic testing. She has served on several state reading committees and was a Lead Trainer for Reading First. Ms. Grimes has written and taught graduate courses. She received her Masters Degrees in Reading and in Human Development from the Harvard Graduate School of Education.



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