Knowledge of Early Reading

State teacher preparation policy requirements for elementary, special education, and early childhood teachers

Excerpted from NCTQ’s State of the States 2021: Teacher Preparation Policy

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**CITATION:**
INTRODUCTION

Most states continue to lack a comprehensive set of policies to improve teacher knowledge of evidence-based early reading methods.

A third of the nation’s students reach fourth grade unable to read at even a basic level.¹ This problem is especially stark for students of color: Only about half of Black and Hispanic fourth grade students can read at a basic level.² As school expectations shift from students learning to read, to reading to learn, these students will fall further and further behind. However, providing students with instruction that follows the science of reading, established by a landmark analysis of decades of research, can slash the rate of reading failure from three in 10 children to one in 10.³

The most efficient way for states to determine that their programs are teaching essential content and that their teacher candidates are ready to teach children to read is to use a strong licensure test. Ideally, the test needs to be a stand-alone test or subtest so that high scores in other content areas cannot mask low scores in reading knowledge. NCTQ considers a test strong if it presents a faithful representation of the science of reading and fully assesses whether a teacher candidate has the knowledge to build the essential skills children need to learn how to successfully decode words and comprehend what they read.
Since 2015, six states (Alaska, Arkansas, Colorado, Maryland, Michigan, and Texas) have transitioned to a test that will more fully address teacher knowledge of how to build the essential skills of a successful reader. (In fact Texas contracted for a wholly new test, which our early review identified as arguably the strongest test on the market.)

State approaches to reading tests:

- **21 states fully measure knowledge in the science of reading for all elementary candidates:** Alabama, Alaska, Arkansas, California, Colorado, Connecticut, Florida, Maryland, Michigan, Minnesota, New Hampshire, New Mexico, North Carolina, Ohio, Oklahoma, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

- **2 states use a test that fully measures knowledge in the science of reading for all elementary candidates, but combines it with other subject matter:** Pennsylvania and Washington.

- **17 states use an inadequate test that omits some key aspects of the science of reading:** Delaware, District of Columbia, Idaho, Indiana, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Missouri, Nevada, New Jersey, Rhode Island, South Carolina, Utah, Vermont, Wyoming.

- **11 states do not measure the science of reading for all candidates:** Arizona, Georgia, Hawaii, Illinois, Iowa, Montana, Nebraska, New York, North Dakota, Oregon, South Dakota.
  - 2 states use an English language arts test that does not address the science of reading. (Georgia and New York)
  - 1 state does not require a test in English language arts. (Iowa)
  - 3 states allow an alternative to taking a reading test. (Arizona, Oregon, Hawaii)
  - 5 states combine all elementary subjects, including reading, under one test. (Illinois, Montana, Nebraska, North Dakota, South Dakota)
State licensure test requirements for elementary teachers on the science of reading

See state maps on page 11 of this document to see which category applies for each state.

<table>
<thead>
<tr>
<th>Number of States</th>
<th>Requirements</th>
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<tr>
<td>21</td>
<td>Requires a test that fully measures candidates' knowledge of the science of reading.</td>
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<tr>
<td>2</td>
<td>Requires a test that measures candidates' knowledge of the science of reading, but combines it with other core subject areas under the same score.</td>
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<td>17</td>
<td>Requires a test, but it does not measure candidates' knowledge of all components of the science of reading.</td>
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<td>11</td>
<td>Does not require a test that measures candidates' knowledge of the science of reading, or allows some candidates to bypass the test.</td>
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Evaluating licensure tests in early reading

NCTQ undertook a review of states’ teacher licensure exams to determine the degree to which each test aligns with the consensus scientific research about how a teacher can help the most students become successful readers.

Both commercial test publishers and states that create their own tests publish the tests’ content areas and objectives online. In the course of assessing the adequacy of exams, NCTQ accessed publicly available materials, including content outlines, test objectives, and the publisher’s candidate test prep materials. NCTQ has also been asked to review several commercially published licensure exams ahead of their release, gaining additional insight into their content.

Guiding questions include:

1. Are each of the five elements of the science of reading (phonemic awareness, fluency, phonics, vocabulary, and comprehension) adequately assessed in the test?

2. Are elements that are not supported by the science included in the test (e.g., three cueing system)?
Licensing tests that fully assess the science of reading

- Certification Examinations for Oklahoma Educators (CEOE): Elementary Education Subtest I, Oklahoma
- Florida Teacher Certification Examinations (FTCE) Elementary Education test
- Foundations of Reading (currently being renormed)
- KPEERI (Center for Effective Reading Instruction)
- Massachusetts Tests for Educator Licensure (MTEL) Foundations of Reading test
- Michigan Test for Teacher Certification (MTTC) Upper and Lower Elementary Education tests
- 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)

Licensing tests that address some but not all aspects of effective reading instruction

- Idaho Comprehensive Literacy Assessment
- Massachusetts Tests for Educator Licensure (MTEL) Reading Specialist (08) Test
- Missouri Educator Gateway Assessment (MEGA): Elementary Education Multi-Content test
- Praxis Early Childhood Assessment (5026) test
- Praxis Elementary Education Assessment (5006) test
- Praxis Elementary Education: Content Knowledge for Teaching (7811) test
- Praxis Elementary Education: Multiple Subjects (5001) test
- Praxis Teaching Reading: Elementary Education (5203) test

Licensing tests that do not address any aspect of effective reading instruction

- Georgia Assessments for the Certification of Educators (GAÇE) Elementary Education Assessment
- Illinois Licensure Testing System (ILTS) Elementary Education (Grades 1–6)[*197-200*] test
- New York State Teacher Certification Exams (NYSTCE) Multi-Subject: Teachers of Childhood (Grades 1–6) test

Some teachers of elementary grades may still bypass strong test requirements. In some states, teachers with an early childhood license can also teach some younger elementary grades (e.g., an early childhood license may span preschool through third grade). Because these early childhood teachers are licensed to teach elementary grades, they should be held to the same expectations as all elementary teachers, and so should also pass a test on the science of reading (in addition to meeting other requirements expected of elementary teachers). Only 14 of the 41 states in which early childhood teachers are certified to teach elementary grades require early childhood teachers to pass a test that addresses the science of reading.
A majority of states have standards that require approved teacher preparation programs to provide scientifically-based reading instruction.

In addition to setting licensure test requirements, states can also set standards for preparation programs, requiring prep programs to address the science of reading instruction. Even in states that have a licensure test, program standards are generally enforced in the re-approval process, occurring approximately every five to seven years. The program must provide evidence to the state that it continues to meet all of the standards.

In 2020, 32 states required their approved preparation programs to address the science of reading, while 19 states did not. Of the 19 states without requirements for preparation programs, eight also did not require a test of the science of reading or allow some candidates to bypass this test.

**State requirements for elementary teacher preparation programs to address the science of reading**

See state maps on page 11 of this document to see which category applies for each state.

**ALTERNATIVE ROUTE PROGRAMS AND EARLY READING REQUIREMENTS**

States often set different requirements for alternative route programs. Of the 42 states that allow alternate route programs for elementary certification, only two (Mississippi and Texas) require that all alternate route teachers pass a test that fully measures the science of reading before becoming a teacher of record. Another nine states delay the requirement until the teacher has formally completed the program, often a year or two after they start teaching. For more information, see NCTQ’s Databurst on state oversight of alternative routes into teaching.
Most state policies overlook the critical need for special education teachers to know how to teach children to read.

Effective early reading instruction is especially important for teachers of special education students. By far, the largest classification of students receiving special education services are those with learning disabilities, and, based on data from the U.S. Department of Education, it is estimated that reading disabilities account for about 80% of learning disabilities.⁸ While early childhood and elementary teachers must know the reading science to prevent reading difficulties, special education teachers, and especially elementary special education teachers, must know how to support students who have already fallen behind and struggle with reading and literacy skills.⁹ States should require no less from special education teachers in terms of preparation to teach reading than they require from general education teachers.¹⁰

Only 12 states require special education teachers to take a test of their knowledge of reading instruction.
Nearly half of states have expectations in emergent literacy instruction for early childhood teachers.

To lay children’s foundation for learning to read, and to open the door to other areas of learning, early childhood teachers must understand how to develop children’s oral language skills and build children’s emergent literacy. Especially for young children who are already behind, preschool teachers can play a critical role in language development. Emergent literacy encompasses a range of skills that are essential to reading but that may not come naturally to all children. These skills include phonological awareness, phonemic awareness, learning the alphabet, and concepts of print. Teacher training in these areas can translate into substantial gains for children in alphabet knowledge, vocabulary, and language skills. The early introduction of language and literacy can make a lasting difference for children. Unsurprisingly, children with low language and literacy skills in preschool demonstrate lower reading skills in kindergarten. However, not all approaches to teaching emergent literacy are equally effective, and the quality of preschool curricula varies, making it that much more important that preschool teachers have ample training in how to develop their preschoolers’ emergent literacy skills.

As communicated via a licensure test, standards, or other state guidance, 24 states expect preparation programs for early childhood teachers to address emergent literacy.

State requirements for early childhood teacher preparation programs in emergent literacy

See state maps on page 11 of this document to see which category applies for each state.

For more data on states’ policies around the science of reading for elementary, special education, and early childhood teachers, visit the State Teacher Policy Database.
RECOMMENDATIONS FOR IMPROVING TEACHER KNOWLEDGE OF EFFECTIVE READING METHODS

Fortunately, the need for teachers to know how to teach children to read has become a topic of urgent concern in many states. Six states (Alaska, Arkansas, Colorado, Maryland, Michigan and Texas) serve as bright spots with their decisions to transition to licensure tests that are more reflective of the knowledge teachers need. Twenty-one states currently require elementary teachers to pass what we identify as high-quality tests. Only 12 states require high-quality tests of special education teachers.

A licensure test that fully and faithfully measures knowledge of the science of reading offers the best leverage a state has regarding what their approved teacher preparation programs teach about reading instruction. However, few states use that leverage effectively—even some states that have adopted a high-quality test—because states often compromise on the minimum passing scores so that more candidates will pass, thus diluting the purpose of the assessment in the first place. For example, eight states use the Foundations of Reading test, but states’ required minimum passing scores range from 220 to 240. Some states offer candidates alternatives to having to pass the test or they do not hold programs accountable for what is arguably the most important aspect of preparation there is.

We identify four essential steps to ensure that licensure tests of reading knowledge produce the outcomes states seek:

1. Select a strong, standalone licensure test (or subtest) in reading instruction. This report lists the tests currently available to states that our review has determined are suitable as licensure tests of reading knowledge.

2. Require a reading test of any teacher who is likely to have students who do not yet know how to read. This includes not only elementary teachers but also special education and early childhood teachers who can teach elementary grades.

3. Resist lowering the recommended cut score. States often lower the recommended cut score needed to pass a test to prevent teacher shortages if unacceptably high numbers of teacher candidates appear likely to fail. An alternative strategy would be to require teacher preparation programs to do a better job of preparing their candidates for the test. States should consider reviewing the reading courses of their programs to ensure alignment with reading science.

4. States’ strongest tool is to make first-time pass rates on licensure tests public. If programs are genuinely providing the content teacher candidates need, the pass rates on these tests will be high and the need for multiple attempts will be minimized. This is what is being done in Florida, where both first-attempt and best-attempt pass rates on licensure exams by all test takers are published.
State licensure test requirements for elementary teachers on the science of reading

- Requires a test that fully measures candidates’ knowledge of the science of reading.
- Requires a test that measures candidates’ knowledge of the science of reading but combines it with other core subject areas under the same score.
- Requires a test, but it does not measure candidates’ knowledge of all components of the science of reading.
- Does not require a test that measures candidates’ knowledge of the science of reading, or allows some candidates to bypass the test.

State requirements for elementary teacher preparation programs to address the science of reading

- Requires elementary preparation programs standards to address the components of the science of reading instruction.
- Does not require elementary preparation programs standards to address the components of the science of reading instruction.
State licensure test requirements for special education teachers on the science of reading

- Requires a test that fully measures candidates' knowledge of the science of reading for licensure.
- Requires a test, but it does not measure candidates' knowledge of all components of the science of reading for licensure.
- Does not require a test that measures candidates' knowledge of the science of reading, or allows some candidates to bypass the test.

State requirements for early childhood teacher preparation programs in emergent literacy

- Requires all programs preparing early childhood candidates to address emergent literacy and oral language.
- Does not require all programs preparing early childhood candidates to address emergent literacy and oral language.
This brief is an excerpt of the *State of the States 2021: Teacher Preparation Policy* report, the second in a series from the National Council on Teacher Quality (NCTQ) examining the current status of states’ teacher policies. With this report we focus state oversight of teacher preparation programs and licensure test requirements.

In addition to the findings and trends presented here, users can access the raw data that makes our analysis possible, including all state policy citations. Data for this report can be retrieved from NCTQ’s [State Teacher Policy Database](https://www.nctq.org/policydatabase), which covers the many areas of state policy impacting the lives of teachers. Users can also learn more about how we arrive at our conclusions, read a response from states about the conclusions we reached, as well as our specific recommendations customized to each state.

NCTQ is grateful to state education agencies for their gracious cooperation in this work, both recently and over the past dozen years. These partnerships have been critical in helping to ensure the accuracy of this final product.
ENDNOTES


4. Because the contents of tests change over time, NCTQ recently reviewed all reading tests to confirm their assessment of the science of reading. This new analysis complicates a direct comparison between state requirements in 2015 and 2020, as states do not always date their tests’ technical manuals or note when an older version of the test is replaced by a newer version. As a result, we can only highlight which states moved from a weak test to a strong one based upon information that is publicly available.

5. When the science of reading falls under the same score or subscore as other core content areas, such as social studies, the test is less effective at discerning whether a teacher knows the science of reading. In the cases where all core subjects are combined, this analysis does not investigate whether the test adequately addresses the science of reading because this test could give little information about candidates’ knowledge of any area. A test that combines reading and content areas was only evaluated if it had at least two separate subtests.

6. NCTQ did not evaluate the following tests for coverage of scientifically based reading instruction because they did not provide any separate subscores to better discern teachers’ knowledge of reading: Praxis Curriculum, Instruction and Assessment (5017) test (Nebraska, North Dakota), Praxis Elementary Education: Content Knowledge (5018) test (Iowa, Montana), California Subject Examinations for Teachers (CSET): Multiple Subjects Test (K–12), Illinois Licensure Testing System (ILTS) Elementary Education (Grades 1–6) [+306].

7. Arizona, Hawaii, Montana, Nebraska, New York, North Dakota, Oregon, South Dakota


