

Teacher Preparation Policy

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EXECUTIVE SUMMARY

Children across the country face unprecedented levels of missed instruction as a result of the pandemic. As millions of students and teachers continue remote learning, experiment with hybrid models, and ultimately return to their classrooms, our nation has a greater need than ever for teachers who have the skills to address the challenges ahead.

Unfortunately, the COVID-19 pandemic has only further exacerbated the stark inequities of the American education system. The students whose education has been slowed the most by the pandemic have traditionally been and will likely continue to be assigned to classrooms led by the least effective and experienced teachers. With teacher quality as the most important in-school factor contributing to a child's academic success, policymakers simply cannot afford to ignore the critical issue of teacher preparation.

All of our children deserve access to well-prepared teachers with a strong foundation in their subject area, the instructional skills to accelerate learning, and the understanding to support and inspire.

It is incumbent upon teacher preparation programs, therefore, to deliver new teachers that can enter school districts and classrooms ready to provide an excellent education for their students. And, as the regulating

authority over teacher preparation, states play an essential role in ensuring that their teacher prep programs are delivering new teachers who meet state standards.

This analysis considers state trends in many of the most essential aspects of delivering classroom-ready teachers, including the qualifications for being admitted into teacher preparation and earning a teaching license, with a focus on states' shifting testing regimes. It also examines recent activity to diversify the teacher workforce as well as to improve the quality of clinical practice.

Notable trends in 2021:

- **Many states have lowered (or removed entirely) academic requirements for entry into teacher preparation.** Only 15 states now require candidates to pass a basic skills test for admission, down from 25 in 2015. While many states impose a minimum GPA, they also set a standard that almost always falls below the average college GPA of 3.0.
- **Half of states (25) now have initiatives to recruit and support individuals of color to enter the teacher pipeline.** This is a substantial increase from 2017, when only 19 states had such initiatives.
- **Most states still do not verify that elementary, early childhood, or special education teacher candidates know the most effective methods to teach their future students how to read.**
 - Only 20 states require a test that fully measures elementary candidates' knowledge of the science of reading.
 - Only 11 states require such a test of their special education teachers, even though difficulty reading is the primary reason students are assigned to special education.
 - About half of states (24) expect early childhood teachers to demonstrate their knowledge of emergent literacy, as communicated by licensure tests, state standards, or other state guidance.
- **Half of states (25) require elementary teachers to pass a content licensure test that separately scores each core area.**
 - Eight states do not require all elementary candidates to take a content knowledge exam.
 - The number of states that have strengthened their elementary content testing requirements equals the number of states that have backtracked.
- **While quite a few states have enacted new policies to strengthen clinical practice, the net effect is virtually unchanged since 2015.** In total, 16 states now restrict who can mentor a student teacher to classroom teachers who meet some measure of effectiveness.

For additional information, including the state policy citations underpinning this analysis, visit the [State Teacher Policy Database](#).

Note: In response to the pandemic, many states modified admissions, testing, and licensure requirements. Data for this report was collected prior to the pandemic and therefore does not reflect COVID-related policy changes. For more information on how states are addressing the impact of COVID on the teaching profession, visit our [COVID-19 response hub](#).

INTRODUCTION

Now more than ever, as children face so much disruption and missed learning, they need teachers who have the knowledge, skills, and experience to surmount these challenges. The students most affected by the pandemic are those who already face the greatest opportunity gaps, including the likelihood of being assigned to a novice teacher, not just once but many times over the course of their education.¹

The quality of teacher preparation greatly determines how well a novice teacher will manage in that first year—pandemic or not. Good preparation makes a huge difference. For example, a novice teacher who trained under a first-rate mentor teacher learns so much that she is able to avoid many beginner mistakes, producing student gains normally not seen until teachers have three years of experience.²

State policies play a determinative role here as well. States' regulation of teacher preparation programs establishes essential parameters, guiding teacher prep programs to provide the skills and knowledge public school teachers need. States also set the criteria that teachers must satisfy to earn a teaching license, but the particular criteria vary quite a bit from state to state.

This analysis considers states' requirements for who is admitted into teacher preparation programs, as well as efforts to diversify the teacher candidate pool; licensure tests that measure teacher candidates' academic skills, core content knowledge, and knowledge of essential teaching practices; and requirements for clinical practice. These data are based on policy information that was collected and confirmed in spring 2020.

This report is the second in a series from the National Council on Teacher Quality (NCTQ) examining the current status of states' teacher policies. In this report we focus on state oversight of **teacher preparation programs** and **licensure test requirements**, particularly traditional preparation programs.³

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](#), which covers the many areas of state policy affecting the lives of teachers. Users can also learn more about how we arrived at our conclusions and read responses 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.

REQUIREMENTS FOR ADMISSION INTO TEACHER PREP PROGRAMS

Since 2015, 10 states have scaled back entry test requirements.

Many important attributes contribute to the effectiveness of a teacher, but academic aptitude stands out as particularly important and it has been studied extensively. Academic aptitude has been measured in a number of different ways, including the SAT, ACT, GRE, and the Praxis Core Academic Skills for Educators. Grades, too, are often used as a measure of not just an aspiring teacher's academic aptitude but their persistence.

Decades of research and lessons learned from high-performing countries support the importance of determining whether teacher candidates possess a sufficient level of academic aptitude to teach.⁴ What is less clear is the line separating sufficient from insufficient, a problem resulting from too little research into the specific measures used to assess academic aptitude, both licensure tests and proxy measures states might consider.

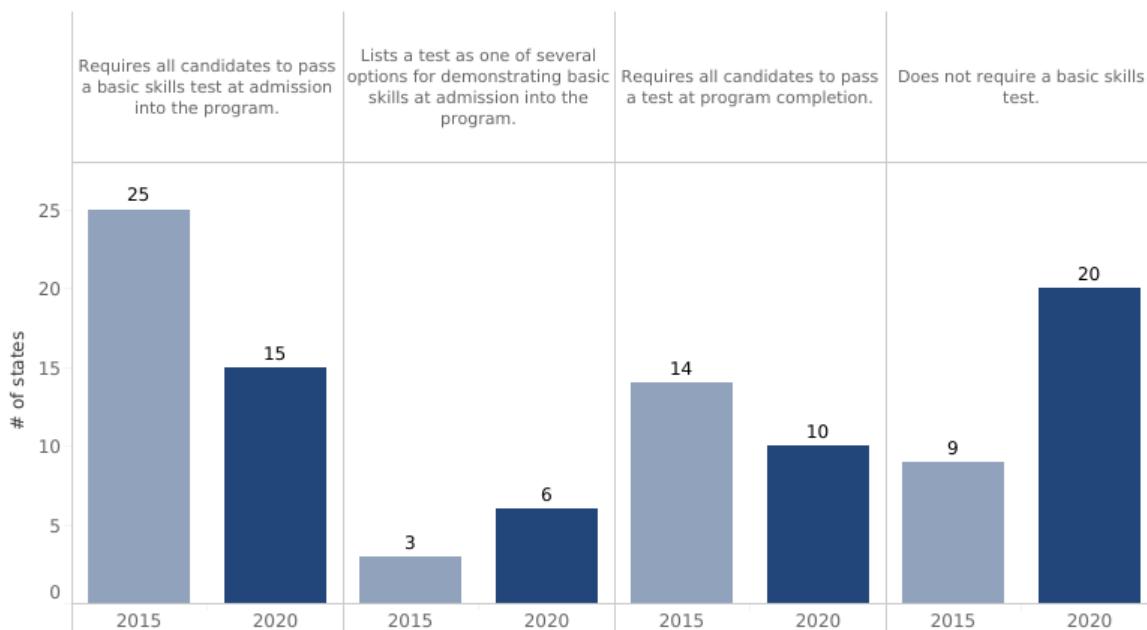
The latest research on this front is particularly relevant. A team of researchers looked at the Massachusetts licensure tests and found that first-attempt scores on licensure tests (including the Communication and Literacy Skills test that serves as a basic skills test) predicted teachers' effectiveness in the classroom.⁵

In terms of entry test requirements, 15 states still require candidates to pass a basic skills test that generally measures the reading, writing, and mathematics skills of an aspiring teacher candidate (or comparable scores on the SAT or ACT) in order to earn admission into a teacher preparation program. This is a decline from 25 states in 2015.⁶

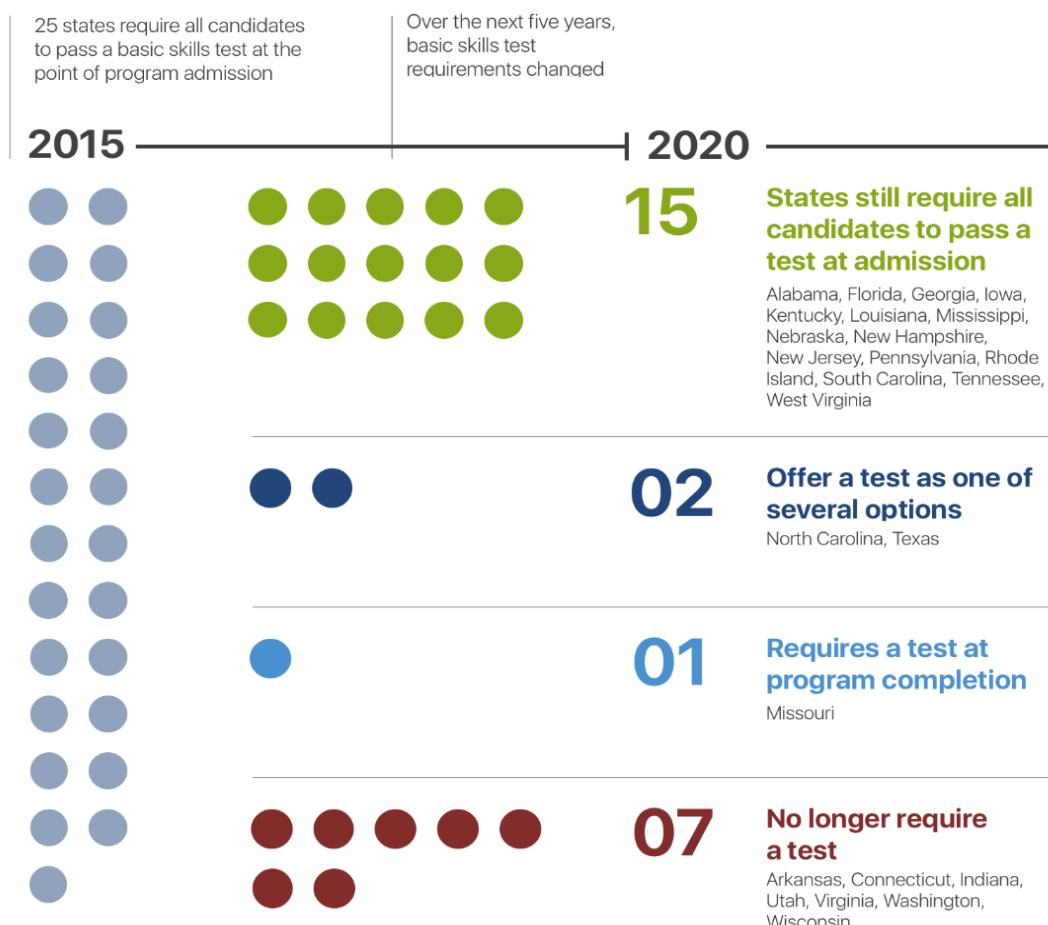
Of the 10 states that no longer require all candidates to pass the test for admission,⁷ seven have dropped the test entirely (**Arkansas, Connecticut, Indiana, Utah, Virginia, Washington, Wisconsin**), one (**Missouri**) has shifted the requirement to program completion, and two (**North Carolina, Texas**) now make the test optional by allowing other measures to serve as proxies (see box). Of the remaining 15 states still requiring a test for admission, three (**Florida, Rhode Island, West Virginia**) now allow programs to admit candidates based on a cohort average (rather than require each individual to pass the test), or to otherwise waive requirements for a small portion of candidates.

Figure 1.

State basic skills test requirements for admission into teacher prep programs

**Figure 2.**

Changes to basic skills test requirements from 2015 to 2020



State-approved alternatives to basic skills tests

Six states offer candidates alternative ways to demonstrate academic skills other than passing a test, although it is not always clear whether states reviewed evidence on the validity of these proxy measures:

- Meeting a GPA requirement (**Delaware, Maryland, Oklahoma**)
- Having a bachelor's degree (**Hawaii, North Carolina, Texas**)
- Having an associate's degree (**Texas**)
- Being enrolled in an accredited institution (**Hawaii**)
- Being enrolled in a certification program (**Texas**)
- Serving in the armed forces (**Texas**)

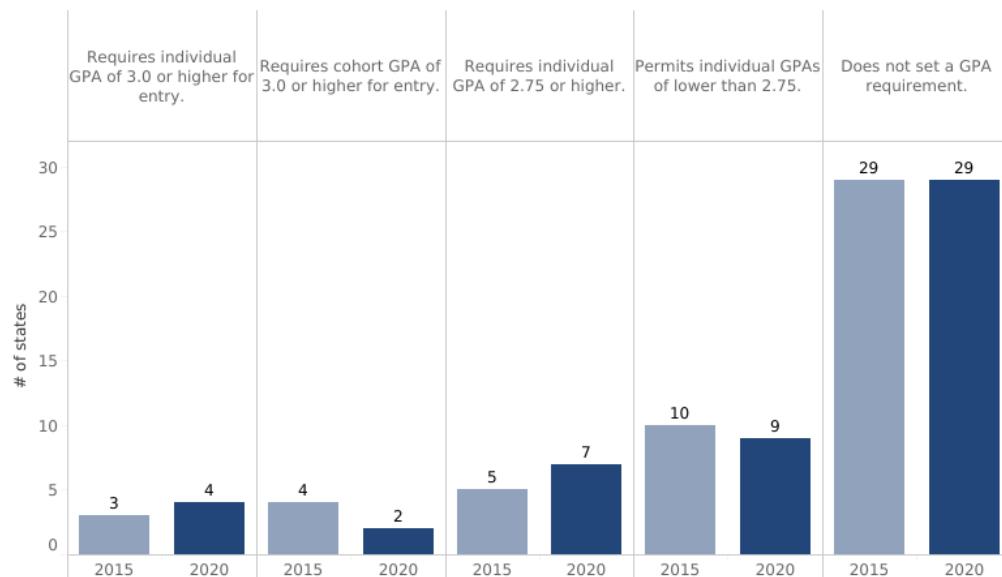
The sharp decline in the use of entry tests has not been countered by greater consideration of candidates' academic records.

Despite the shift from test requirements, few states have moved toward considering candidates' academic records (using students' college grade point average, or GPA). Four states (**Delaware, Maryland, Oklahoma, Pennsylvania**) now require candidates to have individual GPAs of 3.0 or higher (a B average), up from three states in 2015 (**Oklahoma, Pennsylvania, Utah**). With the exception of **Pennsylvania**, these states all allow candidates to demonstrate academic aptitude through either passing a basic skills test or having a 3.0 GPA.⁸

There has been a slight movement at the lower end of the distribution, with 38 states now either setting no GPA standard at all to enter a teacher preparation program or setting the minimum GPA at 2.75 or lower—well below the national mean GPA of 3.0.⁹ That number was 39 states in 2015.

Figure 3.

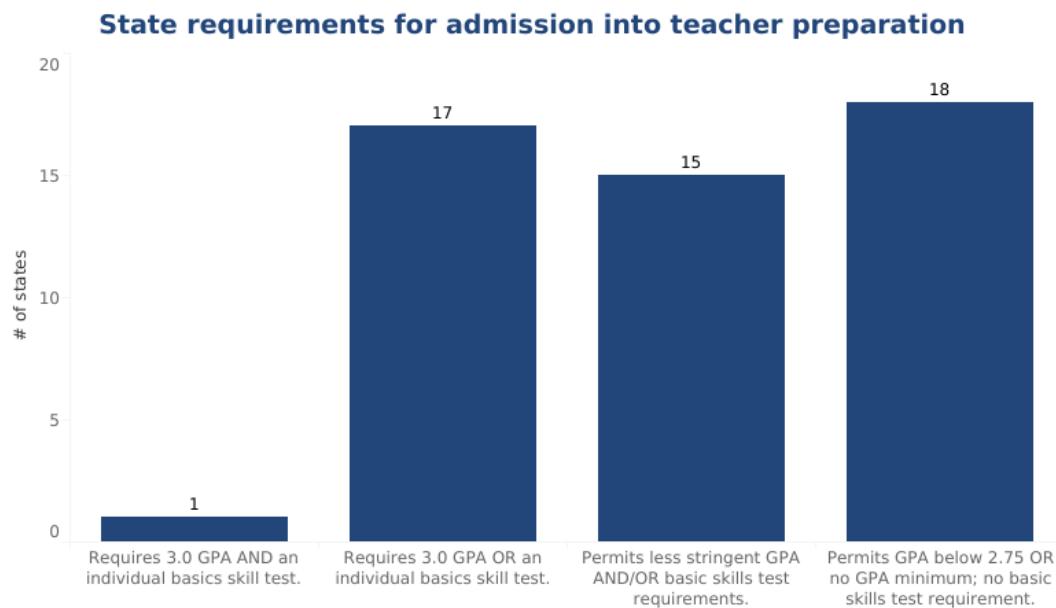
State GPA requirements for admission into teacher prep programs



More states now permit open admission into teacher preparation.

Considering these two measures of academic aptitude at entry into a teacher preparation program (basic skills testing and GPA), only about a third of all states approach a standard that will result in programs restricting admissions to more academically capable students. Only one state (**Pennsylvania**) requires both a B average individual GPA and passing a basic skills test, and 17 states have one of the two measures in place, but not both. Fifteen states set less stringent requirements (e.g., allowing cohort GPA averages or not requiring passing a basic skills test until completion of the preparation program). The remaining 18 states do not require a basic skills test and set either a very low or no GPA requirement.

Figure 4.

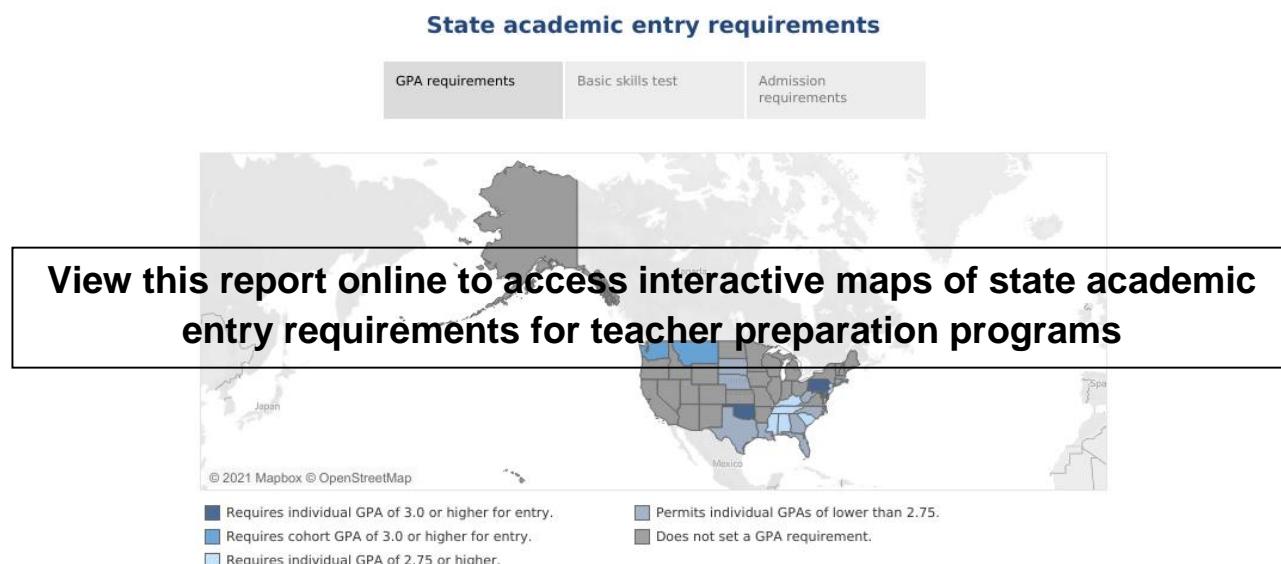


Alternative route programs and program entry requirements

States often set different requirements for alternative route programs. Of the 47 states that allow alternate route programs, only seven require all candidates to have a strong academic standing.

For more information about each state's alternative route preparation program entry requirements, visit NCTQ's [State Teacher Policy Database](#).

Figure 5.



SUPPORT FOR DIVERSE ENROLLMENT IN TEACHER PREP PROGRAMS

Half of states (25) now have initiatives to encourage individuals of color to enter the teacher pipeline, a substantial increase from 19 states in 2017.

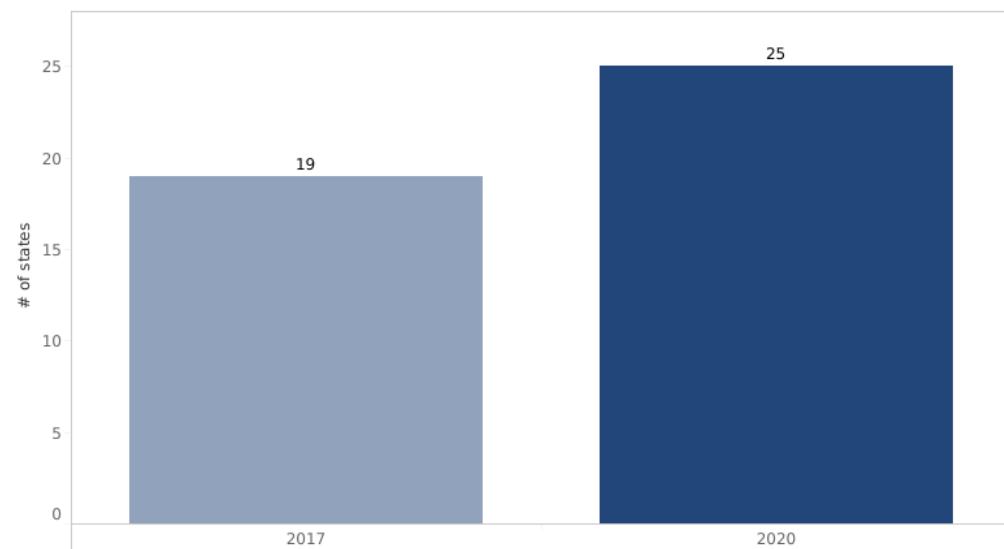
The importance of building a diverse teacher workforce is unequivocal. Teachers of color have been linked to greater academic gains for same-race students, and especially for Black students.¹⁰ These gains include short-term benefits like higher test scores, and longer-term benefits like higher rates of college matriculation.¹¹ Teachers of color view the behavior and academic prospects of students of color more positively, and they have higher expectations that those students will graduate from college.¹² Further, Black students are more likely to enroll in gifted services and in advanced courses when taught by a Black teacher.¹³

However, the current teacher workforce does not reflect the diversity of the student body, a problem that can be attributed only in part to the fact that the adult population in the U.S. is considerably whiter than the population under 18.¹⁴ Teaching has historically not attracted Black and Hispanic individuals at the rate of white individuals.¹⁵ Just over half of K-12 public school students are students of color, compared with 21% of teachers who identify as people of color.¹⁶

States can take a number of steps to encourage more teacher candidates of color to enter the pipeline, as outlined below. Currently, only half of states have policies with this explicit goal.

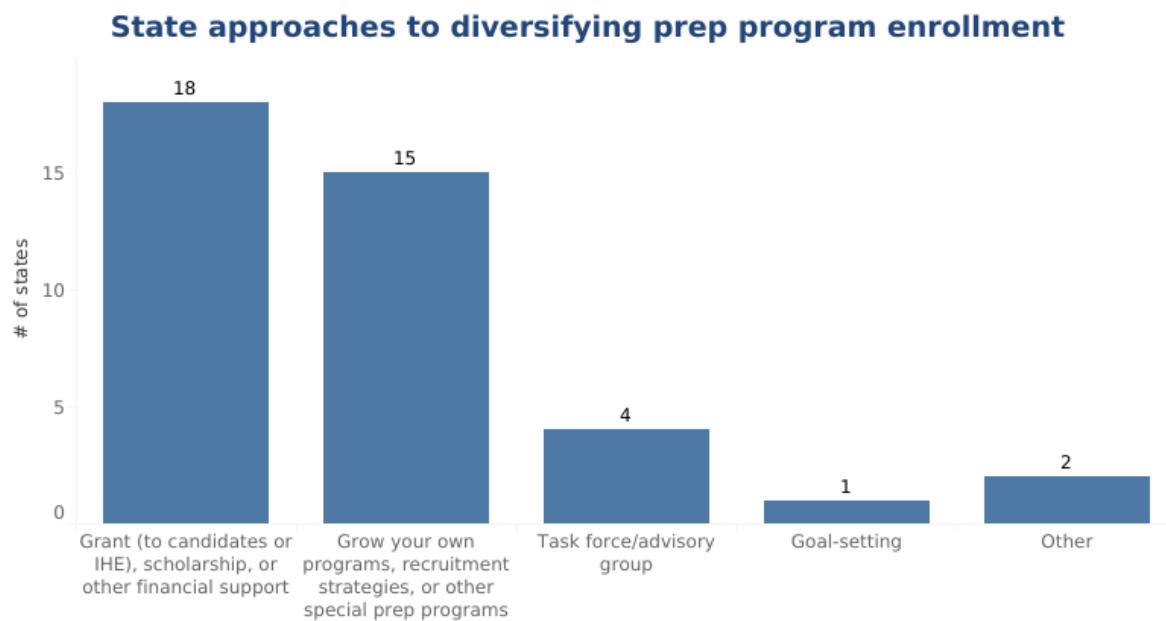
Figure 6.

States with policies that support prep programs to encourage qualified individuals of color to enter the teacher pipeline

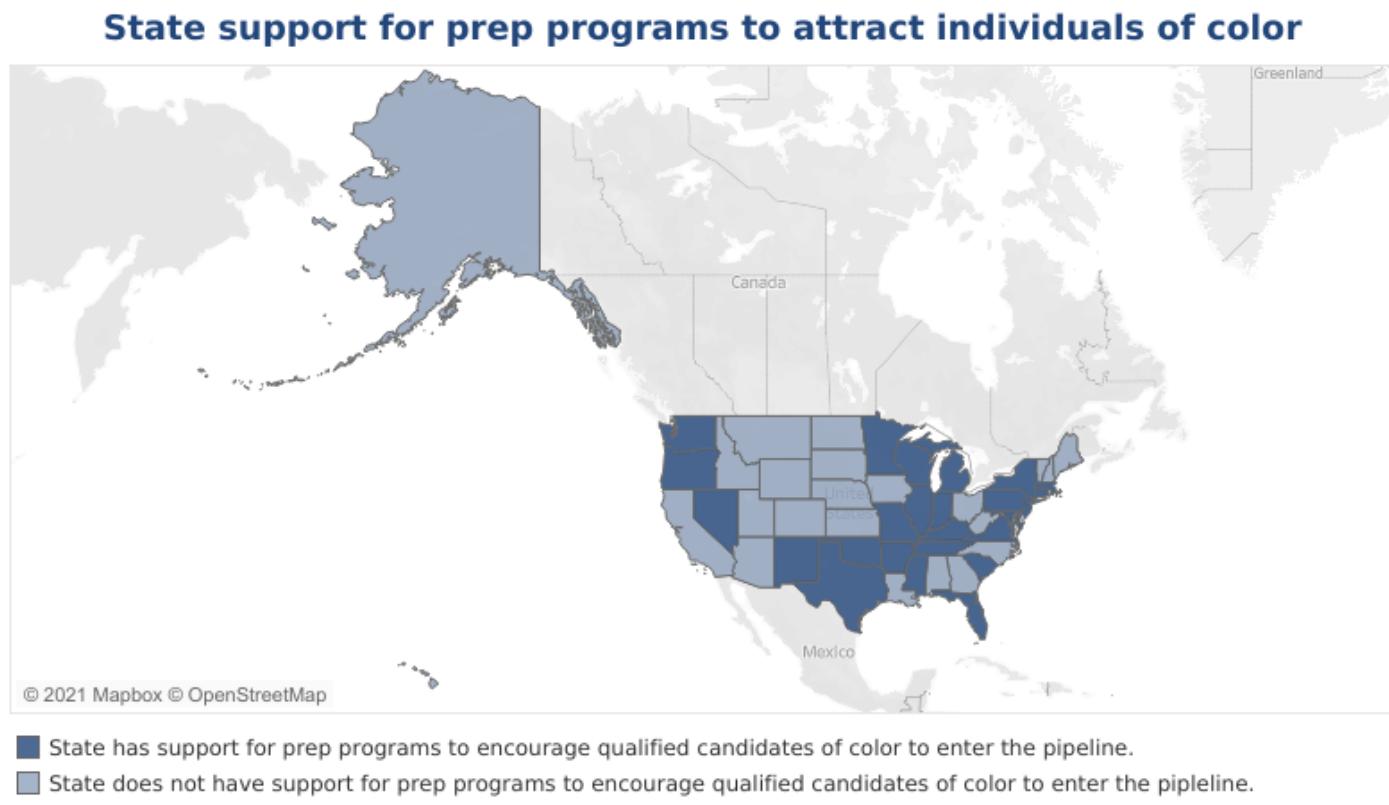


Approaches to bring more diverse candidates into teacher preparation programs include the following:

- **Grants (to candidates or institutions), scholarships, or other financial support.** The state offers grants or scholarships to support either preparation programs that are recruiting minority candidates or the candidates themselves (e.g., **Florida, Michigan, New Jersey, Oregon**).
- **Grow your own programs, recruitment strategies, or other special prep programs.** The state creates targeted recruitment efforts (other than scholarships or other financial incentives), grow your own programs, or other preparation programs specifically focused on bringing more people of color into the workforce, such as the Call Me Mister program (e.g., **Connecticut, Maryland, Pennsylvania, Texas**).
- **Task force or advisory group.** The state calls together a group charged with exploring how to diversify the teacher candidate pool (e.g., **Kentucky, Oklahoma, Virginia**).
- **Goal setting.** The state sets a target for candidate diversity or directs programs to set a target (e.g., **Arkansas**).

Figure 7.

For more information about what each state is doing to encourage diversity in teacher preparation programs, visit the [State Teacher Policy Database](#).

Figure 8.

- State has support for prep programs to encourage qualified candidates of color to enter the pipeline.
- State does not have support for prep programs to encourage qualified candidates of color to enter the pipeline.

REQUIREMENTS FOR KNOWLEDGE OF EARLY READING

Only 20 states fully measure elementary candidates' knowledge of the science of reading, and only 11 states do so for special education teacher candidates. About half of states (24) expect early childhood teachers to demonstrate their knowledge of emergent literacy as communicated by licensure tests, state standards, or other state guidance

A third of the nation's students reach fourth grade unable to read at even a basic level.¹⁷ 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.¹⁸ 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 10.¹⁹

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.

Elementary teacher candidates

Twenty states now require elementary teacher candidates to pass a licensure test that is well grounded in the science of reading.

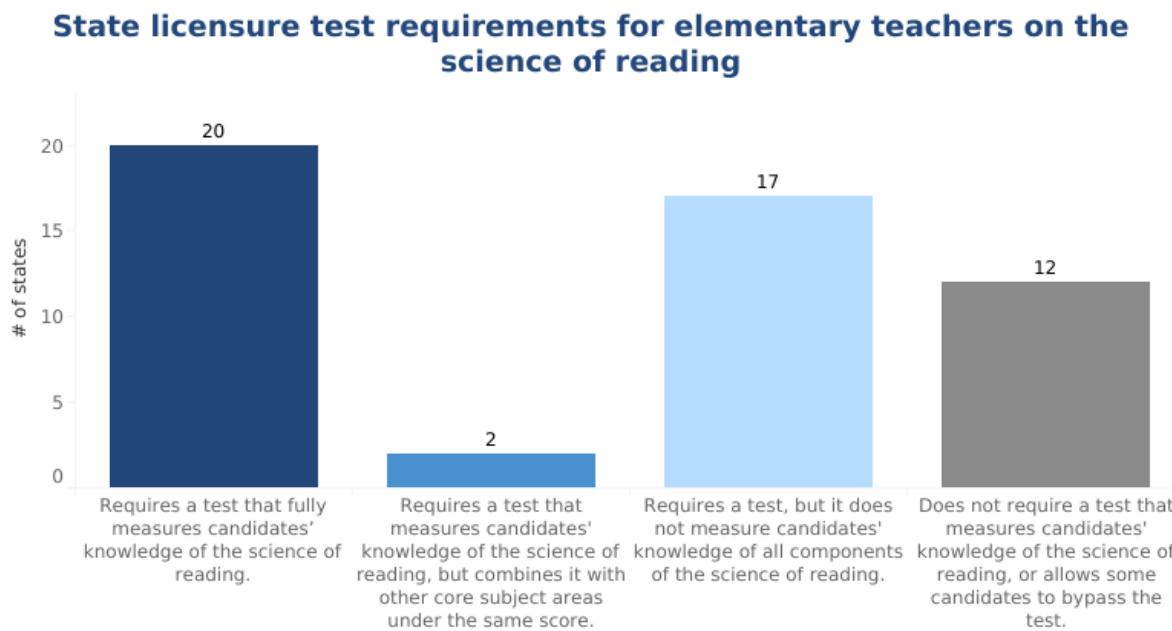
Since 2015, four states (**Alaska, Arkansas, Maryland, Texas**) have transitioned to a test that will more fully address teacher knowledge of how to build the essential skills of a successful reader. (In fact, Texas contracted for a wholly new test, which our early review identified as arguably the strongest test on the market.)²⁰

State approaches to reading tests:

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

- **Two states use a test that fully measures knowledge in the science of reading for all elementary candidates, but combines it with other subject matter:**²¹ Pennsylvania and Washington.
- **Seventeen states use an inadequate test that omits some key aspects of the science of reading:** Colorado, Delaware, District of Columbia, Idaho, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Missouri, Nevada, New Jersey, Rhode Island, South Carolina, Utah, Vermont, Wyoming.
- **Twelve states do not measure the science of reading for all candidates:** Georgia, New York, Iowa, Arizona, Oregon, Hawaii, Illinois, Michigan, Montana, Nebraska, North Dakota, South Dakota.
 - Two states use an English language arts test that does not address the science of reading. (Georgia and New York)
 - One state does not require a test in English language arts. (Iowa)
 - Three states allow an alternative to taking a reading test. (Arizona, Oregon, Hawaii)
 - Six states combine all elementary subjects, including reading, under one test.²² (Illinois, Michigan, Montana, Nebraska, North Dakota, South Dakota)

Figure 9.



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)
- Indiana CORE Assessment Early Childhood Generalist test
- Indiana CORE Exceptional Needs— Mild Intervention: Reading Instruction
- Indiana's CORE Elementary Education Generalist Test
- 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)

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

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

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

- Georgia Assessments for the Certification of Educators (GACE) 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

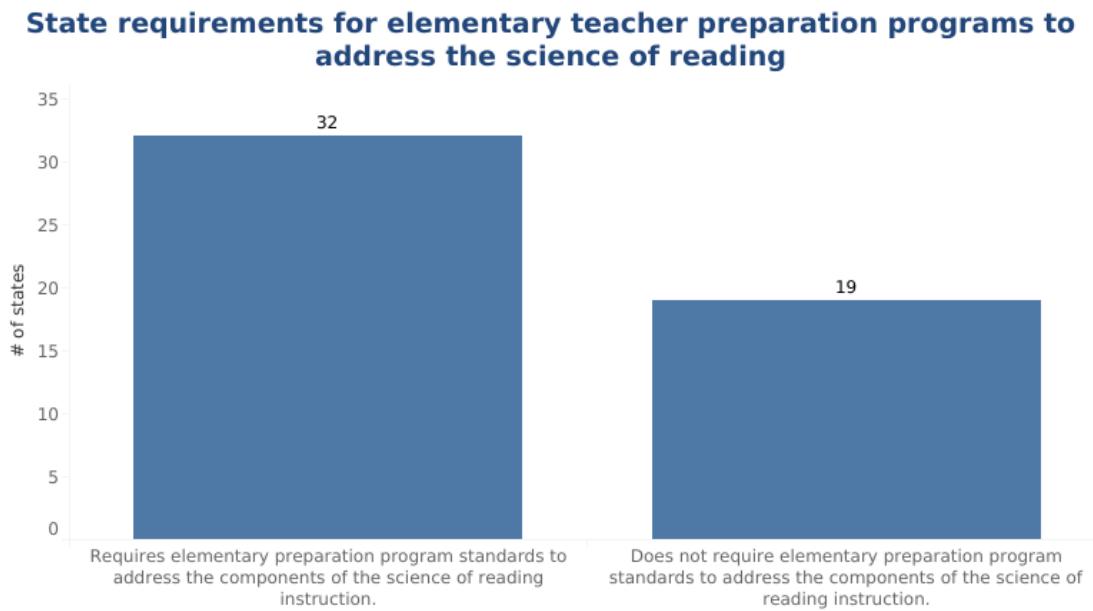
teachers). Only 11 of the 40 states in which early childhood teachers are certified to teach elementary grades require early childhood teachers to pass a test that addresses the science of reading.

A majority of states require their approved teacher preparation programs to provide instruction on how to most effectively teach children to read.

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, eight²³ did not require a test of the science of reading or allow some candidates to bypass this test.

Figure 10.



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, 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.](#)

Special education teachers

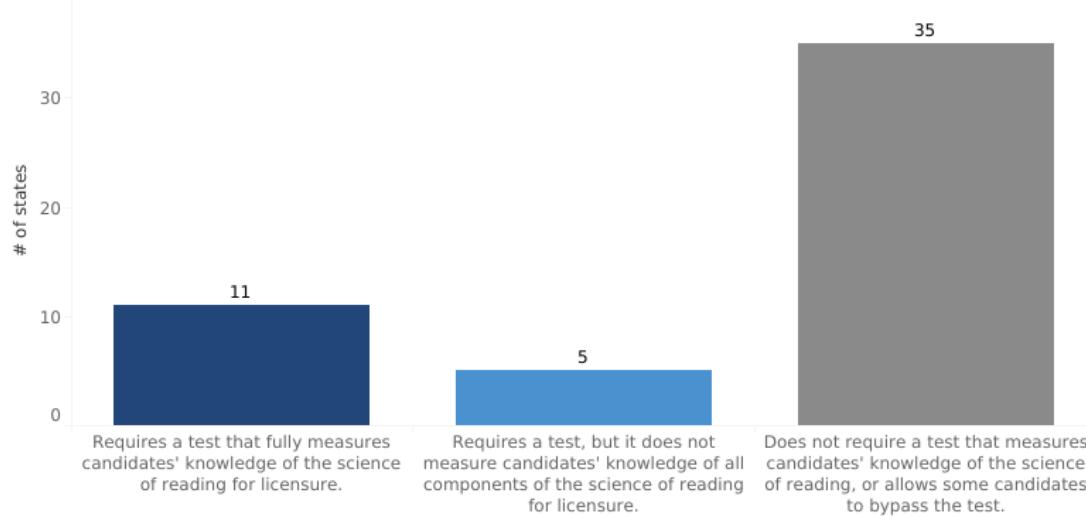
Most state policies overlook the critical need for special education teachers to know how to teach children to read.

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.²⁴ 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.²⁵ States should require no less from special education teachers in terms of preparation to teach reading than they require from general education teachers.²⁶

Only 11 states require special education teachers to take a test of their knowledge of reading instruction.

Figure 11.

State licensure test requirements for special education teachers on the science of reading



Early childhood teachers

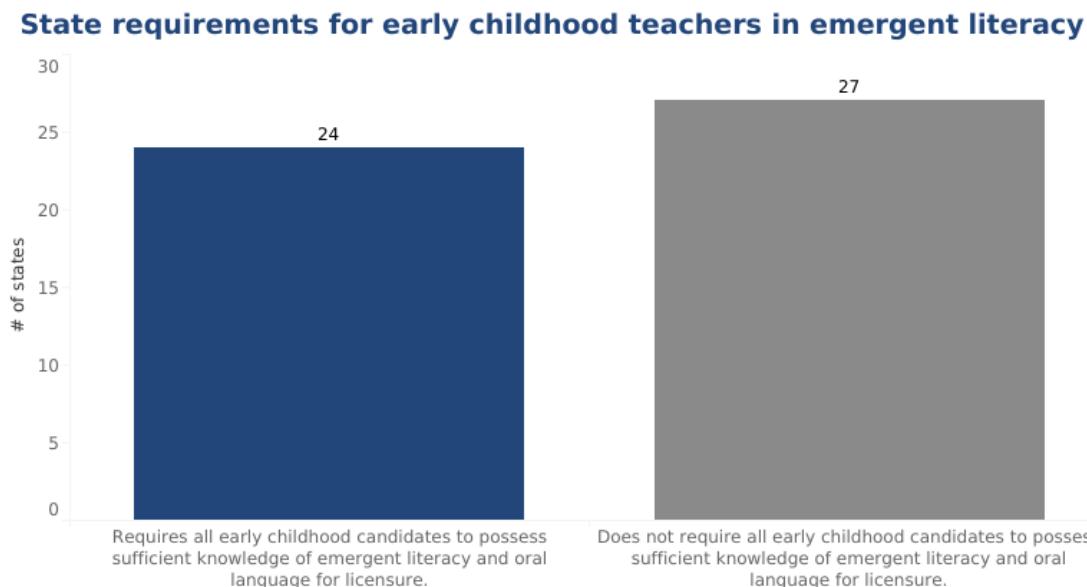
Nearly half of states set clear expectations in emergent literacy instruction for early childhood teachers.

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.²⁷ 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.²⁸ Teacher training in these areas can translate into substantial gains for children in alphabet knowledge, vocabulary, and language skills.²⁹ 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.³⁰ 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.³¹

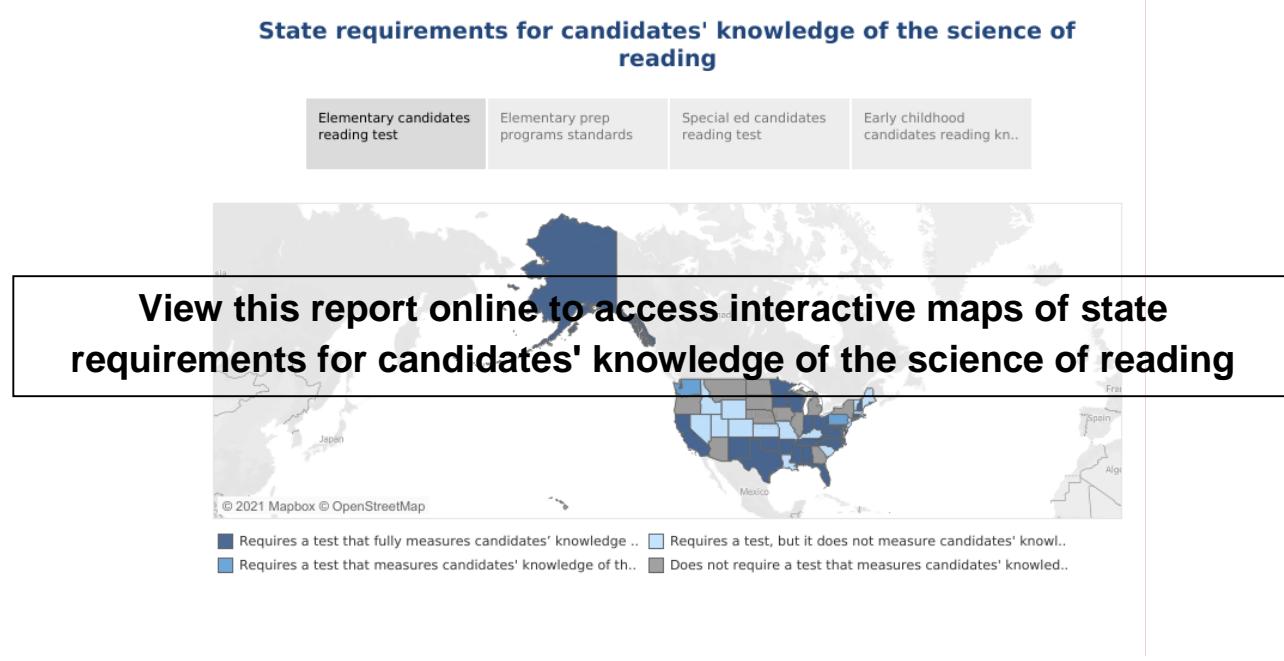
As communicated via a licensure test, standards, or other state guidance, 24 states expect early childhood teachers to demonstrate their knowledge of emergent literacy.

Figure 12.



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.

Figure 13.



REQUIREMENTS FOR KNOWLEDGE OF CONTENT AREAS

Half of states (25) require elementary teachers to pass a strong licensure test, but only a handful of states set this requirement for special education teachers. Thirty-one states require subject-specific tests for middle school teachers. More than 40 states require single-subject tests for secondary teachers, yet nearly all have deficiencies in science and/or social studies.

Much as learning phonics helps students make sense of the sound of words, learning a breadth of subject areas helps students draw meaning from what they read.³² Learning about the history and government of our country and of countries around the world enables students to become informed, participating members of our nation, familiar with their constitutional rights and how to exercise them.³³ Learning science builds critical thinking skills and background knowledge that help students understand current events, such as climate change and health crises. Yet students now fall short of where they need to be. Low scores in specific domains of knowledge such as in U.S. history,³⁴ civics,³⁵ and science³⁶ may explain in part why two thirds of American students have such low reading comprehension scores.³⁷ To teach these subjects comprehensively, developing students' ability to interpret and analyze information as well as clarifying students' misconceptions, teachers themselves must be steeped in the content. Yet not all elementary teachers who reach the classroom have this core content knowledge. Less than half of elementary teachers report feeling very well-prepared to teach either social studies or science,³⁸ and given the low performance of American fourth graders in both subjects,³⁹ their insecurity is not misplaced.

Elementary teachers

Half of states (25) require elementary teachers to pass a content licensure test that separately scores each core area. The number of states that have strengthened their elementary content testing requirements equals the number that have backtracked.

Most of the remaining states (18) require a test that does not separately score each core area, and eight states do not require all candidates to pass any test of content knowledge.

There has been a flurry of activity in the states regarding licensure tests for elementary content knowledge. Since 2015, about a third of states (14) have changed their requirements, but, unlike the high number of states no longer using basic skills tests, there's no net change to report.

Seven states have made changes to better measure candidates' essential knowledge before entering the classroom: **Colorado, Kansas, Maryland, Nevada, and Tennessee** have strengthened their required tests, and **Alaska** and **Montana** now require a content test. On the other hand, seven states, **Arizona, California, Missouri, New Mexico, North Carolina, Oregon, and Wisconsin** have scaled back or withdrawn entirely from elementary content testing requirements.

State-approved alternatives to content tests

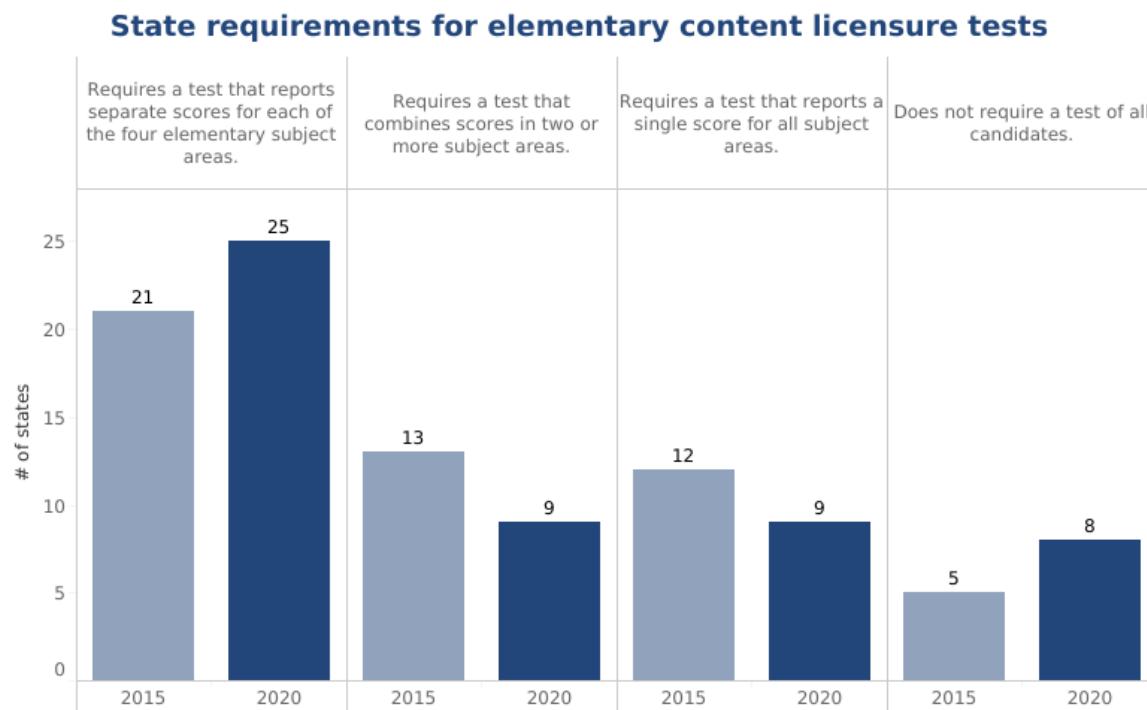
Eight states offer candidates alternative ways to demonstrate content knowledge, although it is not always clear whether states reviewed evidence on the validity of these proxy measures:

- A degree or major in the content area (**Arizona, Colorado,* Hawaii,⁴⁰ Oregon, South Dakota,** Utah****)
- Candidates that fail a licensure test by 5% or less can be exempt with a 3.5 GPA or higher. (**New Jersey**)
- Completion of a subject-matter preparation program (**California**)
- Content-based portfolio (**Wisconsin**)
- Coursework in the content area (**Arizona, Colorado,* Hawaii**)
- Cumulative GPA of 3.0 or higher in the subject area (**Wisconsin**)
- Current enrollment in a program that will result in a bachelor's degree (**Utah****)
- National Board Certification (**Arizona, Hawaii**)
- Prior teaching experience or work experience in the subject area (**Arizona**)
- Score of 70 or higher on the Teacher Standards and Practices Commission (TSPC) content preparation matrix. The matrix factors in scores from the applicable content test. (**Oregon**)

* Alternative option does not apply to elementary or special education candidates

** Alternative option only applies to middle school and secondary education candidates.

Figure 14.

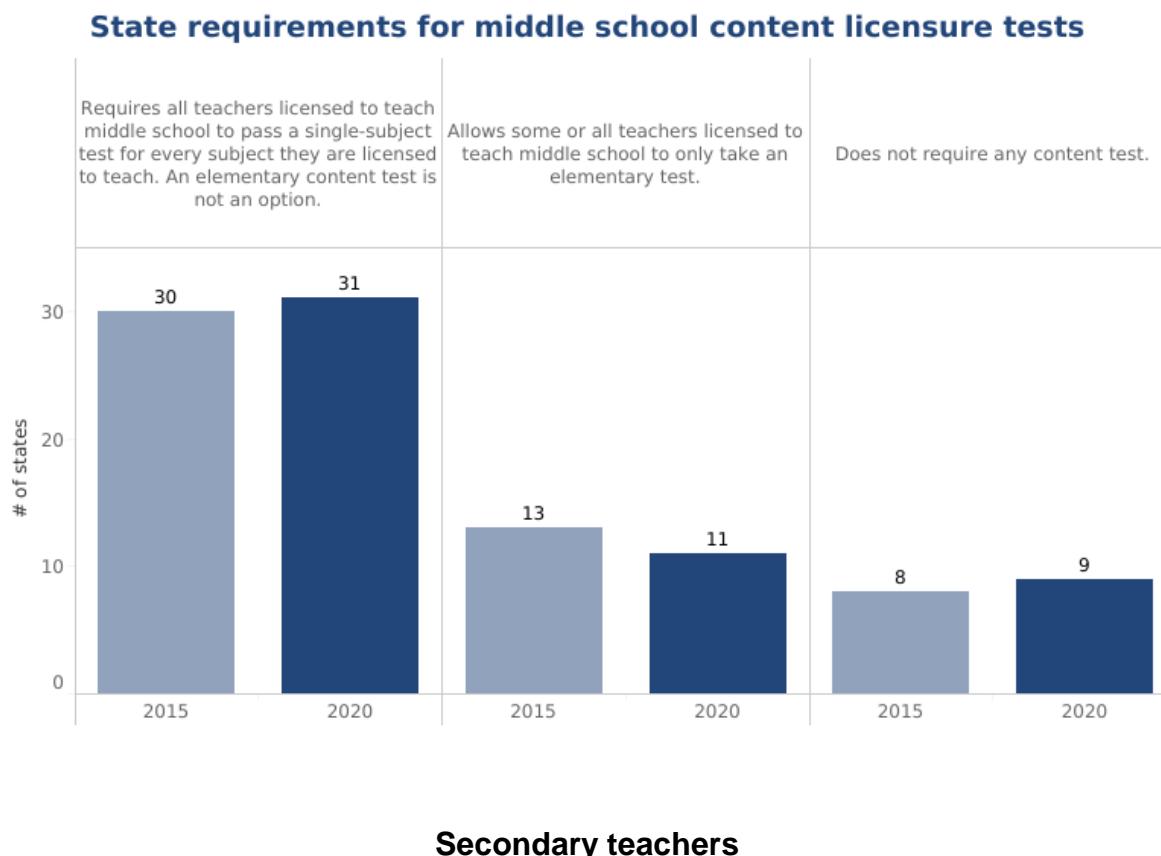


Middle school teachers

In spite of a flurry of activity regarding middle school content tests, there has been little net change.

Various actions by states regarding middle school content area testing have cancelled one another out in terms of defining any national trend. **Minnesota** now requires all candidates to pass a test in every subject they are licensed to teach, and three states that did not previously require tests (**Alaska, Montana, Nebraska**) now require candidates to take a test, although they can choose to take one targeted to elementary grades. However, four states (**Arizona, Oregon, Utah, Wisconsin**) that previously required a test no longer do so, allowing candidates to either pass a content test or meet alternative criteria. These states permit relevant work experience (**Arizona**), a bachelor's degree in a relevant subject area (**Arizona, Oregon, Utah**), a content-based portfolio (**Wisconsin**), or a high GPA in the subject area (**Wisconsin**) to serve as an alternative indicator of a teacher's content knowledge.

Figure 15.

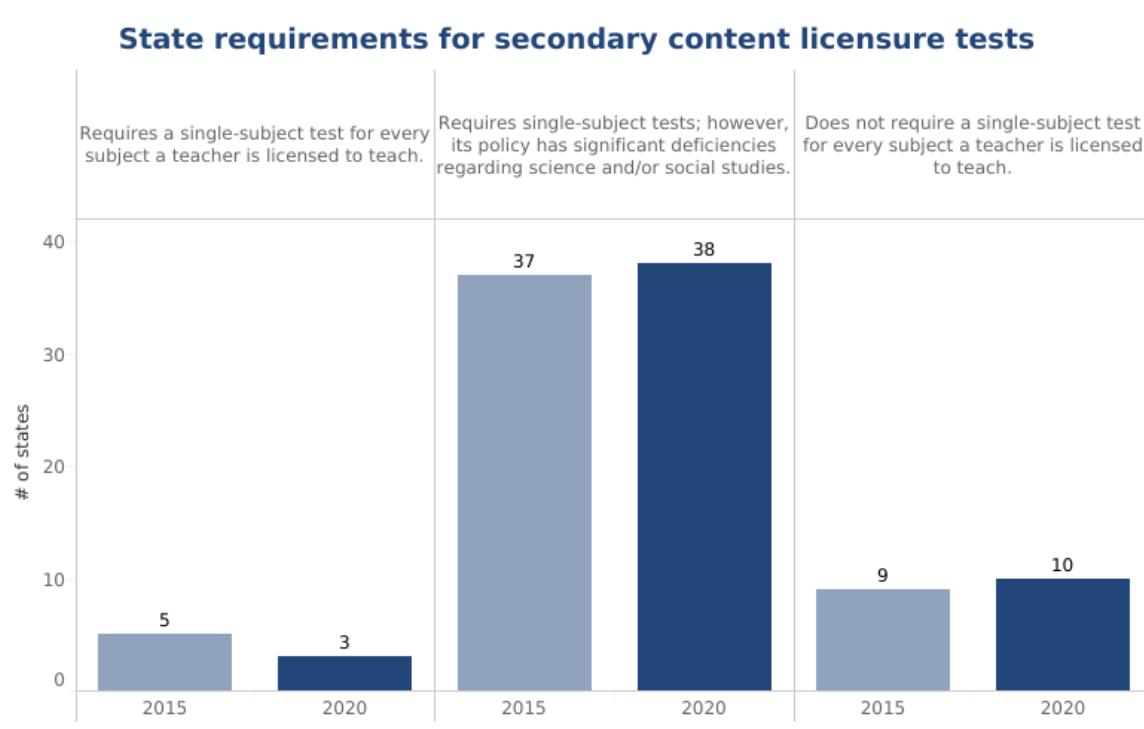


Few states have made changes to their testing requirements for secondary teachers.

Licensing tests are most common for secondary teachers, although science and social studies teachers' tests often come with a loophole: They allow a teacher to teach a range of areas within those subjects (e.g., a science teacher may be certified to teach chemistry, biology, and physics) without separately testing that teacher's knowledge in each area.

At the high school level, three states (**Alaska, Montana, Washington**) that did not previously require a licensure test in every subject a teacher is licensed to teach now do so, although their new testing requirements for science and social studies teachers, as in many states, have real

shortcomings. On the other hand, four states (**Oregon, South Dakota, Utah, Wisconsin**) have backtracked: They no longer require tests for every subject a teacher is licensed to teach.

Figure 16.

Special education teachers

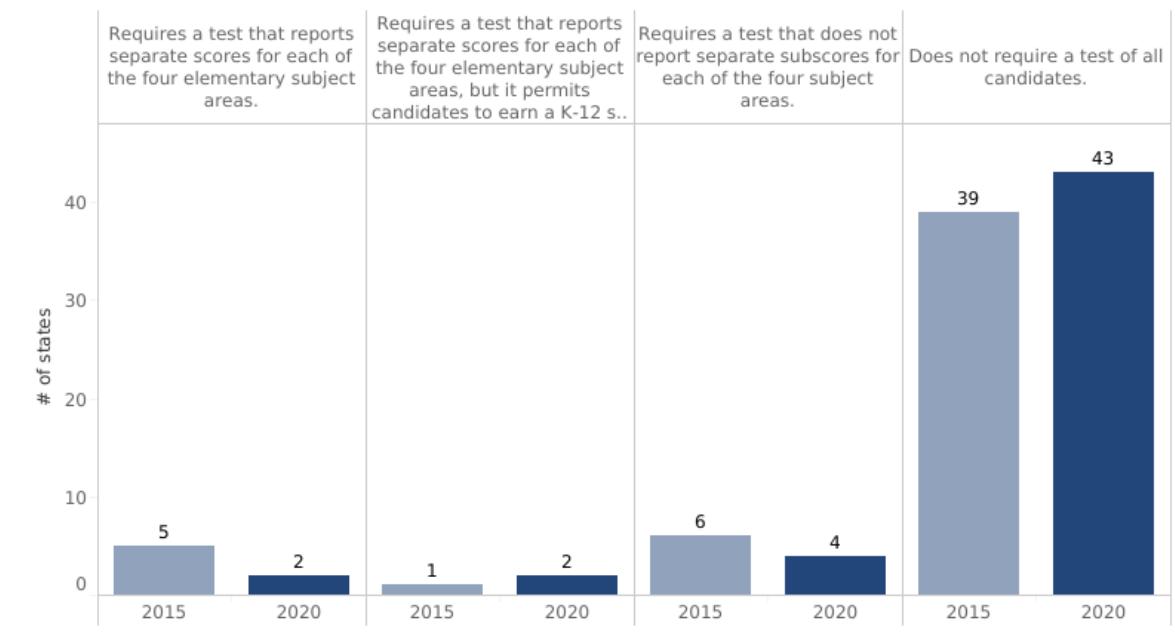
Almost all states continue to largely exempt special education teachers from testing requirements.

Special education teachers also need to be prepared to teach core content areas so that their students with Individualized Education Programs (IEPs) can continue to learn at grade level. However, many states do not distinguish between teachers who are licensed to teach elementary grades and those who are licensed to teach secondary grades, despite the fact that, realistically, teachers cannot be expected to know the full K-12 span of content knowledge well enough to teach it. Only 11 states require special education teachers to earn either an elementary or secondary special education certification. Fourteen states only offer the overly broad K-12 special education licenses, and the remaining 26 states offer both the narrow and the broad grade span licenses.

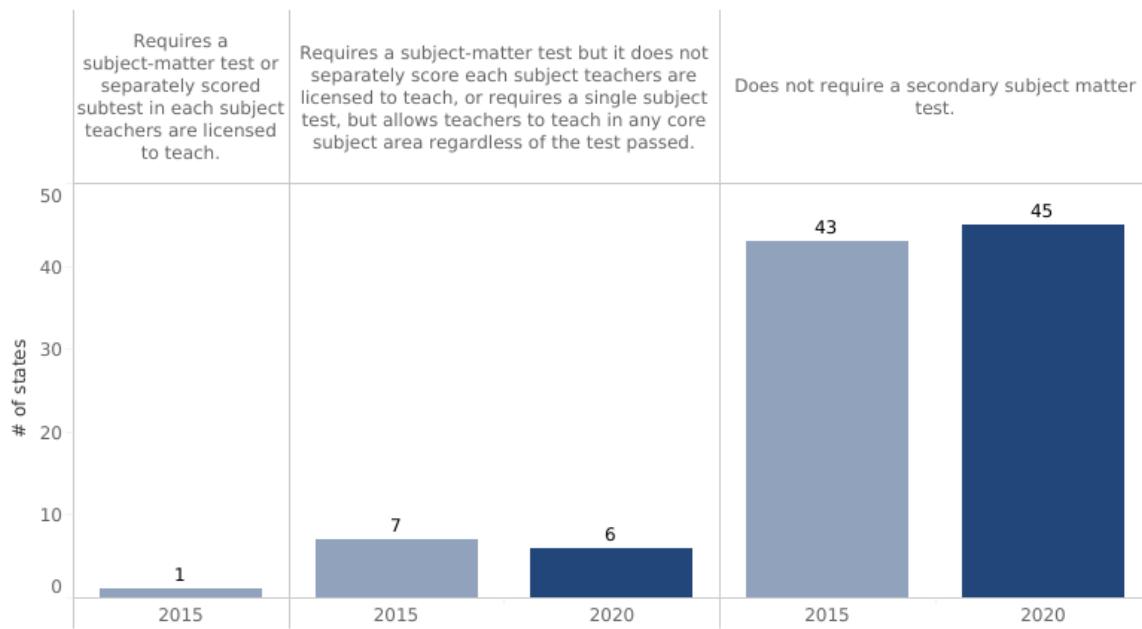
The vast majority of states do not currently require special education teacher candidates to take a test of content knowledge to earn a teaching license. In fact, fewer states now require special education candidates to take a test than were required five years ago. The result of both broad licenses and a lack of content licensure testing means that states are, in effect, exempting special education teachers from having content knowledge.

Figure 17.

State requirements for elementary special education content licensure tests

**Figure 18.**

State requirements for secondary special education content licensure tests



Alternative route programs and content knowledge requirements

States often set different requirements for alternative route programs. Of the 47 states that allow alternate route programs, only 13 have regulations that require all alternate route candidates to demonstrate the necessary content knowledge before admission into a program. For more information, see [NCTQ's Databurst on state oversight of alternative routes into teaching](#).

For full information about what each state is doing to verify teacher candidates' content knowledge, visit the [State Teacher Policy Database](#).

Figure 19.



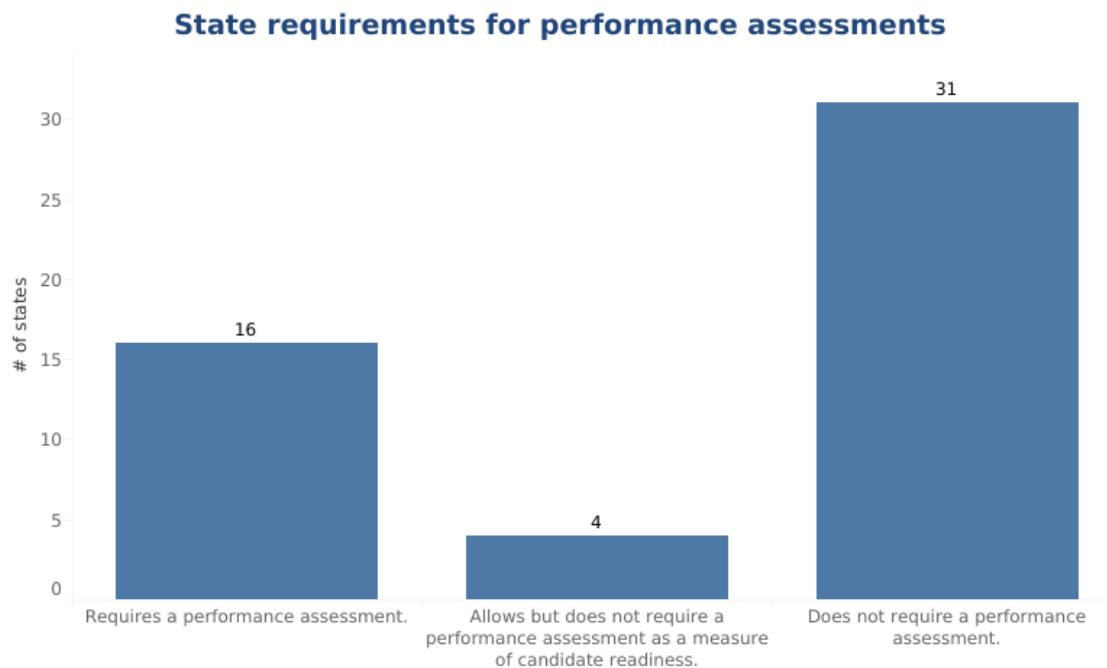
REQUIREMENTS TO TAKE PERFORMANCE ASSESSMENTS

Sixteen states require a performance assessment.

Students need teachers who not only know content, but also how to teach it in real time with all the challenges that come with a class of students. The learning curve is steep for new teachers,⁴¹ but even among first-year teachers, there's a wide range of skills and effectiveness.⁴² Performance assessments are better poised to ensure that novice teachers have grasped the rudimentary aspects of *how* to teach before their first day of school.

States vary in their use of performance assessments.⁴³ Some use them as a requirement for program completion (e.g., **Oregon**, **Washington**), some as a requirement for initial licensure (e.g., **Illinois**, **Maryland**, **New York**),⁴⁴ and some require taking but not passing the test as part of their program approval process as a measure of the quality of the preparation programs themselves (e.g., **Minnesota**).

Figure 20.



Common exams are the edTPA (required or optional in 19 states) and the ETS PPAT (required or optional in seven states).

Alternative route programs and performance assessment requirements

Of the 16 states that require a performance assessment for teachers from traditional programs, 10 also require a performance assessment for teachers from alternative routes. However, because these states do not require candidates to pass the test until program completion or until the teacher earns a standard license, most alternative route teachers will be the teacher of record for a year or more before having to pass a performance assessment.

REQUIREMENTS FOR CLINICAL PRACTICE AND STUDENT TEACHING

While quite a few states have enacted new policies on clinical practice, the net effect is virtually unchanged since 2015.

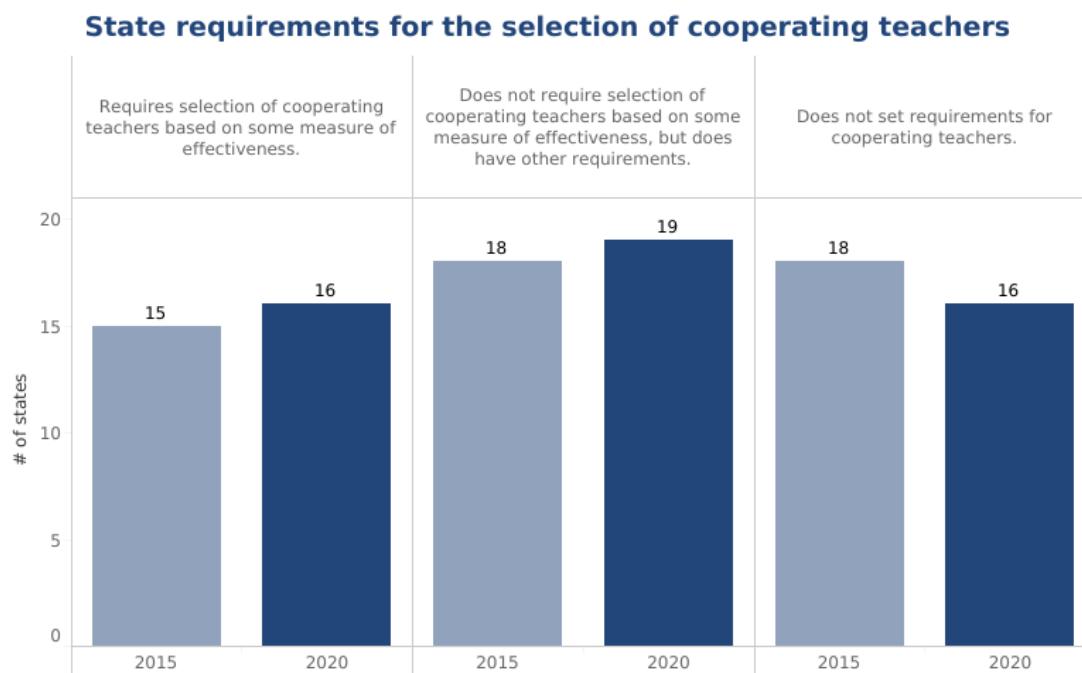
Clinical practice, often referred to as student teaching, is the best opportunity aspiring teachers have to practice and hone the skills they learned from coursework in a classroom with real students. Not only do new teachers report that student teaching was the most important part of their preparation,⁴⁵ a high-quality student

teaching experience can also help teachers become more effective and can be a powerful recruitment tool for school districts.⁴⁶

In fact, first-year teachers can be as effective as typical third-year teachers by spending their clinical practice in a classroom of a highly effective teacher.⁴⁷ However, cooperating teachers are often chosen for factors other than their effectiveness, such as their willingness to host a student teacher, their years of experience, or even their own struggles managing student behavior.⁴⁸

In total, 16 states now require cooperating teachers to be selected based on some measure of effectiveness. An equal number of states do not set any requirements for cooperating teachers, while the remainder (19 states) set requirements on criteria other than teacher effectiveness.

Figure 21.

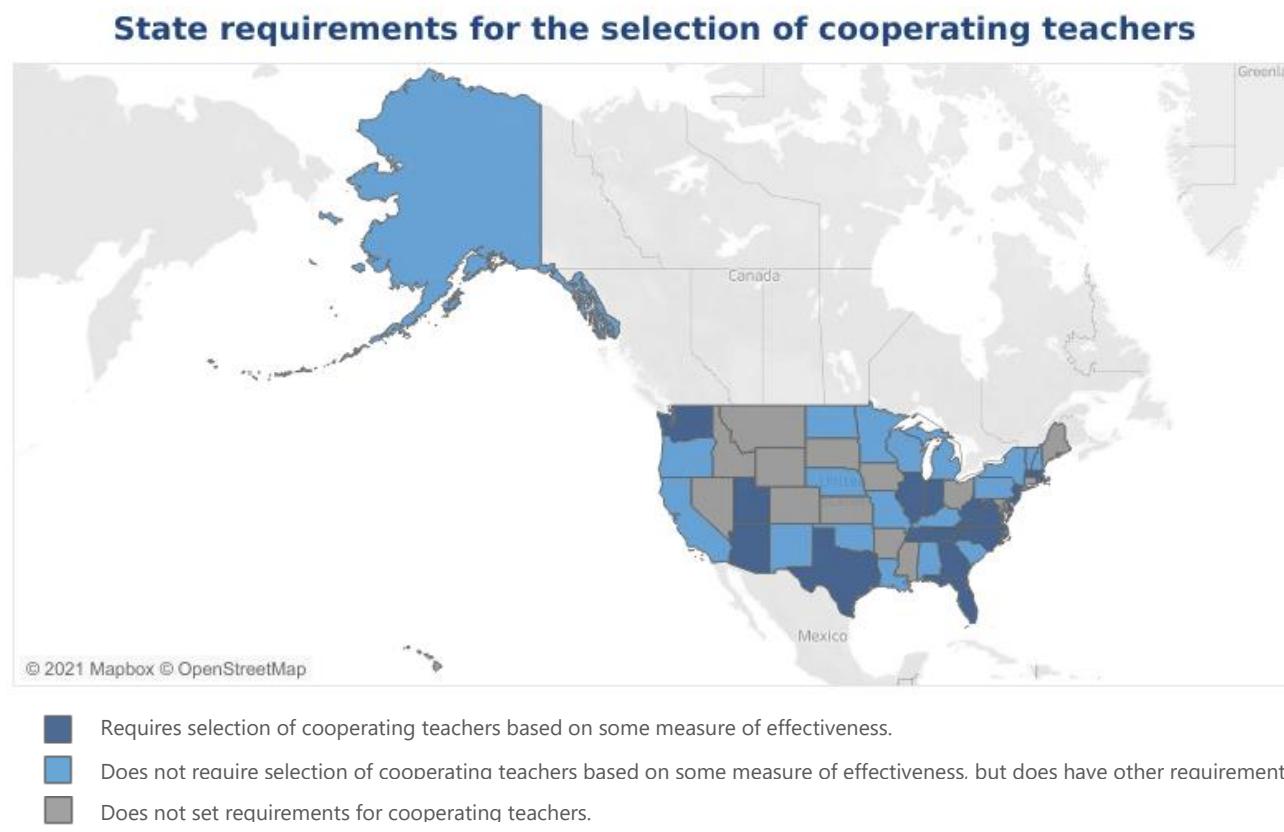


In total, only one additional state since 2015 now requires cooperating teachers to be selected based on effectiveness. However, this net count obscures substantial activity in this area. Four more states require cooperating teachers to be selected based on effectiveness (**Texas, Virginia, Washington, West Virginia**), while three have removed this requirement (**Arkansas, New York, Oregon**).

Alternative route programs and clinical practice requirements

States often set different requirements for alternative route programs. Of the 47 states that allow alternative route certification, 27 have specific requirements for mentoring and induction for alternative route teachers. For more information, see [NCTQ's Databurst on state oversight of alternative routes into teaching](#).

Figure 22.



CONCLUSION AND RECOMMENDATIONS

This edition of *State of the States* focuses on key state policies related to teacher preparation in terms of state guardrails for approved programs and what teacher candidates must do to qualify for a teaching license. In a period when states have been genuinely concerned about teacher shortages, many have chosen to eliminate or compromise their policies directed at the quality of the teacher workforce, often making the expedient choice. However, not only can choosing quantity over quality cause more harm than good, it may be altogether unnecessary. **States could consider alternative policy solutions that would not only address teacher shortages and expand the diversity of the workforce—two clear priorities for states—but that also would not imperil teacher quality.**

Three areas rise to the top for special consideration by states, as each provides alternatives to some of the more popular but less advantageous choices states have made since 2015.

I. Raising admissions standards

Since 2015, many states have retreated from using academic standards in the teacher preparation program admission process. A significant number of states (10 out of the 25 that had a policy in place in 2015) scaled back their requirement that applicants pass a test of their reading, writing, and mathematics skills.

While these actions were taken in response to the pressing need to diversify the profession or to ease potential teacher shortages, they may not help solve those problems. In fact, [nearly 200 teacher prep programs across the country are both selective and diverse](#). Teacher candidates, regardless of whether they are able to pass a basic skills test for admission into a program, almost always still need to pass licensure tests administered at the end of their course of studies. How a candidate performs on a basic skills test serves as a strong predictor of performance on both content licensure tests and performance assessments.⁴⁹ The same candidates who would have struggled to pass the basic skills test may have difficulty passing the content licensure test. *In effect, states may be boosting the size and diversity of enrollment in teacher preparation—but not of the teaching profession itself.*

Some states have instituted “proxy” measures to determine the reading, writing, and mathematics skills of teacher candidates.⁵⁰ However, to our knowledge, few states have first determined whether these alternatives serve as adequate measures of a candidate’s abilities. Many of the proxies currently in use may not be capable of fulfilling the role they have been assigned.

States struggling with this issue might consider the more careful approach taken by **Massachusetts**, which contracted for an independent study to assess whether the state’s licensure tests do predict future teacher effectiveness (they do), and whether the tests are as predictive of how well teachers of color will perform in the classroom as white teachers (they are).⁵¹ States have an obligation to verify that their testing regimes are serving the public good, and if they are not, they should be abandoned or significantly revised. Massachusetts also launched a three-year pilot to determine whether alternative assessments to the communication and literacy skills and subject-specific Massachusetts Tests for Educator Licensure (MTELs) could serve as a reliable measure of a candidate’s future effectiveness.⁵² A pilot of that nature, without making a more permanent decision affecting all, will serve the interests of the state.⁵³

II. 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. Four states (**Alaska, Arkansas, Maryland, Texas**) serve as bright spots with their decisions to transition to licensure tests that are more reflective of the knowledge teachers need. Twenty states currently require elementary teachers to pass what we identify as high-quality tests. Only 11 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—how to teach reading.

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

1. Select a strong, stand-alone 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 the 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 teachers 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, including reviewing the reading courses to ensure alignment with the content on the tests.
4. The 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, not just the tests of program completers.

III. Diversifying the teacher workforce

State action since 2017 is brighter on this front, with 25 states now forging policies to bring more candidates of color into the teacher pipeline. **Arkansas** has led the way as one of only a few states to publicly state a specific goal of increasing the diversity of the workforce by 25% by 2025. The state also requires preparation programs to provide a list of teachers of color who completed licensure programs and, with the licensees' consent, include their contact information in a central database that is available to every public school superintendent. States are also targeting candidates early on in high school and offering funding and mentoring.

Other state actions that bear repeating include **Maryland**, which initiated a digital recruitment effort aimed at attracting the top 25% of high school students to diversify the teacher workforce, and **New Jersey**, which launched a grant program to universities that offers funding and support for aspiring teachers of color.

One of the most fruitful strategies states could deploy is to increase the number of teacher candidates of color who not only enroll in but successfully complete their program of preparation.⁵⁴ A potential hurdle to program completion is licensure tests, which have recently come under fire as some candidates reach the end of their preparation program but cannot pass the test necessary to become a licensed teacher. Candidates of color are hit hardest by low passing rates on licensure tests.⁵⁵

The answer is not to remove the tests, as they are the most efficient, scalable way to measure the breadth of content knowledge and other core knowledge and skills in a way that is comparable across programs. Instead, to tackle this problem, states must collect the data necessary to better understand this challenge, and then work with preparation programs to strengthen support for candidates. Low passing rates on content knowledge tests are largely driven by inequities in the K-12 education system. But with support and guidance from their state education agencies, preparation programs are in the best position to remedy this problem, not

just through remediation efforts but also more explicit guidance on the coursework that aligns with what candidates will need to know and do to pass licensure tests and be effective in the classroom.

Three steps to improve enrollment and program completion rates for Black and Hispanic students:

1. Set a goal to diversify the workforce, taking into consideration the current state teacher workforce and the diversity of the local adult population. Establish leading indicators disaggregated by race/ethnicity, such as program enrollment, program completion, and novice teachers within their first five years.
2. Use funding to incentivize prep programs to strategically develop partnerships; recruit early; and provide financial support for candidates of color, particularly for Pell grant recipients.
3. Examine licensure test first-time pass rates disaggregated by race/ethnicity to identify programs that are more successful than comparable programs in achieving positive outcomes for all groups of teacher candidates. Encourage approved programs to direct aspiring teachers toward the most optimal content coursework and to make broader use of general education requirements to fill content gaps.

In the past year, many states have had to adjust their requirements for entry into the teaching profession to accommodate the very real challenges posed by the pandemic. However, as the pandemic begins to fade, so, too, will the disruptions—but not, unfortunately, the damage done to student learning. Students will emerge from the pandemic needing teachers who are ready to make up for lost time. States can avoid compounding some of this damage through faithful adherence to the policies that can best ensure that new teachers enter the classroom thoroughly prepared to meet their students' needs.

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ENDNOTES

1. Goldhaber, D., Lavery, L., & Theobald, R. (2015). Uneven playing field? Assessing the teacher quality gap between advantaged and disadvantaged students. *Educational Researcher*, 44(5), 293-307.
2. Goldhaber, D., Krieg, J., Naito, N., & Theobald, R. (2019). Making the most of student teaching: The importance of mentors and scope for change. *Education Finance and Policy*, 1-11.
3. Note that this report is based on states' policies prior to the start of the COVID-19 pandemic and does not reflect temporary waivers and other changes to teacher licensure requirements put in place directly in response to the novel coronavirus.
4. For evidence on international teacher preparation program standards, see: Hanushek, E. A., Piopiunik, M., & Wiederhold, S. (2014). *The value of smarter teachers: International evidence on teacher cognitive skills and student performance* (National Bureau of Economic Research Working Paper No. w20727); Organisation for Economic Co-Operation and Development. (2005). Recruiting, selecting and employing teachers. *Teachers Matter: Attracting, Developing and Retaining Effective Teachers* (pp. 141-167). Paris, France: OECD Publishing; Whitehurst, G. J. (2002). *Scientifically based research on teacher quality: Research on teacher preparation and professional development*. White House Conference on Preparing Tomorrow's Teachers, 39-53. Retrieved from <http://www.stcloudstate.edu/tpi/initiative/documents/assessment/ScientificallyBasedReserachonTeacherQualit y.pdf>.

For evidence on teacher preparation programs' admissions selectivity, see: Auguste, B., Kihm, P., & Miller, M. (2010). *Closing the talent gap: Attracting and retaining top-third graduates to careers in teaching*. Washington, DC. Retrieved from <http://mckinseyonsociety.com/closing-the-talent-gap/>; The Education Trust. (1999). Not good enough: A content analysis of teacher licensing examinations. *Thinking K-16*, 3(1), 1-24; Boyd, D., Lankford, H., Loeb, S., Rockoff, J., & Wyckoff, J. (2008). The narrowing gap in New York City teacher qualifications and its implications for student achievement in high-poverty schools. *Journal of Policy Analysis and Management*, 27(4), 793–818; Steele, J. L., Pepper, M. J., Springer, M., & Lockwood, J. R. (2015). The distribution and mobility of effective teachers: Evidence from a large, urban school district. *Economics of Education Review*, 48, 86-101; Lincove, J. A., Osborne, C., Mills, N., & Bellows, L. (2015). Teacher preparation for profit or prestige: Analysis of a diverse market for teacher preparation. *Journal of Teacher Education*, 66(5), 415-434; Henry, G. T., Bastian, K. C., & Smith, A. A. (2012). Scholarships to recruit the "Best and Brightest" into teaching: Who is recruited, where do they teach, how effective are they, and how long do they stay? *Educational Researcher*, 41(3), 83-92; Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007). *How and why do teacher credentials matter for student achievement?* (Working Paper No. 12828). Cambridge, MA: National Bureau of Economic Research.

Clotfelter, Ladd, and Vigdor found college selectivity to have a positive impact on student achievement in North Carolina. For more research supporting greater selectivity for teacher preparation programs, see: Gitomer, D. (2007). *Teacher quality in a changing policy landscape: Improvements in the teacher pool*. Princeton, NJ: Educational Testing Service, http://www.ets.org/Media/Education_Topics/pdf/T; Goldhaber, D., Perry, D., & Anthony, E., (2004). *NBPTS certification: Who applies and what factors are associated with success?* Seattle, WA: Center for Reinventing Public Education; Whitehurst, G. J., 2002. *Scientifically based research on teacher quality: Research on teacher preparation and professional development*. (Paper presented at the 2002 White House Conference on Preparing Tomorrow's Teachers); Kain, J., & Singleton, K. (1996, May-June). Equality of education revisited. *New England Economic Review*, (May), 87- 114; Ferguson, R., & Ladd, H. (1996). How and why money matters: An analysis of Alabama schools. In H. Ladd (Ed.), *Holding schools accountable*. Washington, DC: Brookings Institution; Greenwald, R., et al. (1996). The effect of school resources on student achievement. *Review of Educational Research*, 66(3), 361-396; Ferguson, R. (1991). Paying for public education: New evidence on how and why money matters. *Harvard Journal on Legislation*, 28, 465-498; Strauss, R., & Sawyer, E. (1986). Some new evidence on teacher and student competencies. *Economics of Education Review*, 5(1), 41-48; McLaughlin, M., & Marsh, D. (1978). Staff development and school change. *Teachers College Record*, 80(1), 69-94; Summers, A., & Wolfe, B. (1977). Do schools make a difference? *American Economic Review*, 67(4), 639-652; Hanushek, E. (1971). Teacher characteristics and gains in student achievement: Estimation using micro-data. *American Economic Review*, 61(2), 280-288; Master, B., Loeb, S., & Wyckoff, J. (2014). *Learning that lasts: Unpacking variation in teachers' effects on students' long-term knowledge* (Working Paper). National Center for Analysis of Longitudinal Data in Education Research.

Several studies have found no relationship between selectivity and teacher effectiveness: Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality and student achievement. *Journal of Public Economics*, 95, 798-812; Henry, G. T., Campbell, S. L., Thompson, C. L., Patriarca, L. A., Luterbach, K. J., Lys, D. B., & Covington, V. M. (2013). The predictive validity of measures of teacher candidate programs and performance: Towards an evidence-based approach to teacher preparation. *Journal of Teacher Education*, 64(5) 439-453; Chingos, M. M., & Peterson, P. E. (2011). It's easier to pick a good teacher than to train one: Familiar and new results on the correlates of teacher effectiveness. *Economics of Education Review*, 30(3), 449-465.

5. Cowan, J., Goldhaber, D., Jin, Z., & Theobald, R. (2020). *Teacher licensure tests: Barrier or predictive tool?* (Working Paper No. 245-1020). CALDER. Retrieved from <https://caldercenter.org/publications/teacher-licensure-tests-barrier-or-predictive-tool>.
6. Note that this analysis only considers states' own policies and not policies of external accreditation organizations such as CAEP.
7. Common tests of basic skills or academic aptitude include the SAT, ACT, GRE, and the Praxis Core Academic Skills for Educators.
8. Pennsylvania does grant an exemption to candidates with a 2.8 GPA and a passing score on the basic skills test.
9. National Council on Teacher Quality. (2016). *Fine points: Changes in the selection criteria standard as applied to undergraduate programs (Teacher Prep Review 2016)*. Washington, D.C.: National Council on

Teacher Quality. Retrieved from www.nctq.org/dmsView/NCTQ-Standard_1-Fine_Points-Changes_Selection_Criteria_UG.

10. Egalite, A., Kisida, B., & Winters, M. (2015). Representation in the classroom: The effect of own-race teachers on student achievement. *Economics on Education Review*, 45, 44-52; Goldhaber, D., & Hansen, M. (2010). Race, gender and teacher testing: How informative a tool is teacher licensure testing and how does it impact student achievement? *American Educational Research Journal*, 47(1), 218-51; Dee, T. S. (2004). Teachers, race, and student achievement in a randomized experiment. *The Review of Economics and Statistics*, 86(1), 195-210.
11. Hart, C. (2020). An honors teacher like me: Effects of access to same-race teachers on Black students' advanced-track enrollment and performance. *Educational Evaluation and Policy Analysis*, 42(2), 163-187; Gershenson, S., Hart, C. M. D., Hyman, J., Lindsay, C., & Papageorge, N. W. (2018). *The long-run impacts of same-race teachers* (Working Paper No. 25254). National Bureau of Economic Research. Retrieved from <https://www.nber.org/papers/w25254>.
12. Fox, L. (2016). Seeing Potential: The effects of student-teacher demographic congruence on teacher expectations and recommendations. *AERA Open*, 2(1), 1-17; Gershenson, S., Holt, S., & Papageorge, N.W. (2016). Who believes in me? The effect of student-teacher demographic match on teacher expectations. *Economics of Education Review*, 52, 209-224; Bates, L., & Glick, J. (2013). Does it matter if teachers and schools match the student? Racial and ethnic disparities in problem behaviors. *Social Science Research*, 42, 1180-1190; Dee, T. S. (2005). A teacher like me: Does race, ethnicity, or gender matter? *American Economic Review*, 95(2), 158-65; Downey, D. B., & Prebish, S. (2004). When race matters: Teachers' evaluations of students' classroom behaviors. *Sociology of Education*, 77, 267–282; Lindsay, C. A., & Hart, C. M. D. (2017). Teacher-student race match and student disciplinary outcomes in North Carolina. *Educational Evaluation and Policy Analysis*, 39(3), 485–510; Wright, A., Gottfried, M., & Le, V. N. (2017). A kindergarten teacher like me: The role of student-teacher race in socio-emotional development. *American Educational Research Journal*, 54(1 Suppl.), 78S–101S; Dee (2005); McGrady, P. B., & Reynolds, J. R. (2012). Racial mismatch in the classroom: Beyond Black-white differences. *Sociology of Education*, 86(1), 3-17.
13. Grissom, J. A., & Redding, C. (2016). Discretion and disproportionality: Explaining the underrepresentation of high-achieving students of color in gifted programs. *AERA Open*, 2(1), 1-25; Hart, 2020.
14. As of 2017, 47.6% of public school students were white, compared with 79.3% of teachers. U.S. Department of Education, National Center for Education Statistics. Table 203.50. *Schools and Staffing Survey (SASS)*. Retrieved from https://nces.ed.gov/programs/digest/d19/tables/dt19_203.50.asp?current=yes; U.S. Department of Education, National Center for Education Statistics. Table 209.10. *Schools and Staffing Survey (SASS)*, Retrieved from https://nces.ed.gov/programs/digest/d19/tables/dt19_209.10.asp?current=yes. However, as of 2017, an estimated 79.4% of all adults (ages 18 and older) are white. <https://data.census.gov/cedsci/table?q=United%20States&q=0100000US&tid=ACSDP1Y2017.DP05>
15. For example, among college seniors graduating in 2016, 5.5% of white seniors majored in education, compared with 3.6% of Black seniors and 3.0% of Hispanic seniors. U.S. Department of Education, National Center for Education Statistics, *B&B:17. Baccalaureate and Beyond Longitudinal Study*. However, rates of

teaching among graduates of color have actually trended upward recently, while rates for white graduates have declined. Among 2016 college graduates interviewed a year later, 18% of Black graduates and 22% of Hispanic graduates reported having taught, compared with 16% of white graduates. This is in comparison with 17% of Black graduates, 18% of Hispanic graduates, and 19% of white graduates who finished school in 2008 and were interviewed in 2012. (U.S. Department of Education, National Center for Education Statistics, 2008/12 *Baccalaureate and Beyond Longitudinal Study*, B&B:08/12.; U.S. Department of Education, National Center for Education Statistics, B&B:17 *Baccalaureate and Beyond Longitudinal Study*).

16. U.S. Department of Education, National Center for Education Statistics, *Schools and Staffing Survey (SASS)*, (2019).
17. The Nation's Report Card. (2019). *NAEP report card: Reading*. Retrieved from <https://www.nationsreportcard.gov/reading/nation/achievement/?grade=4>
18. The Nation's Report Card. (2019). *NAEP report card: Reading*. Retrieved from: <https://www.nationsreportcard.gov/reading/nation/achievement/?grade=4>
19. Torgesen, J. K. (2004). Preventing early reading failure. *American Educator*, 28(3), 6-9; Torgesen, J. K. (1998). Catch them before they fall: Identification and assessment to prevent reading failure in young children. *American Educator*, 22(1-2), 32-39. Retrieved from www.aft.org/sites/default/files/periodicals/torgesen.pdf; Lyon, G. R. (1998). Overview of reading and literacy initiatives (Report to Committee on Labor and Human Resources, U.S. Senate). Bethesda, MD: National Institute of Child Health and Human Development, National Institute of Health. Retrieved from <https://files.eric.ed.gov/fulltext/ED444128.pdf>; Vellutino, F. R., Fletcher, J. M., Snowling, M. J., & Scanlon, D. M. (2004). Specific reading disability (dyslexia): What have we learned in the past four decades? *Journal of Child Psychology and Psychiatry*, 45(1), 2-40. Retrieved from <https://onlinelibrary.wiley.com/doi/full/10.1046/j.0021-9630.2003.00305.x>
20. 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.
21. 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 it 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.
22. 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: Michigan Test for Teacher Certification (MTTC) Elementary Education Test (Michigan); 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].

23. Arizona, Hawaii, Montana, Nebraska, New York, North Dakota, Oregon, South Dakota
24. Wehman, P. (2002). A new era: Revitalizing special education for children and their families. *Focus on Autism and Other Developmental Disabilities*, 17(4), 194-197. Retrieved from http://ectacenter.org/~pdfs/calls/2010/earlypartc/revitalizing_special_education.pdf.
25. Research also connects individual content knowledge with increased reading comprehension, making the capacity of the teacher to infuse all instruction with content of particular importance for student achievement. See, Willingham, D. T. (2006). How knowledge helps: It speeds and strengthens reading comprehension, learning, and thinking. *American Educator*, 30(1), 30. Retrieved from <https://www.aft.org/newspubs/periodicals/ae/spring2006/willingham.cfm>
26. Levenson, N. (2011). *Something has got to change: Rethinking special education* (Working Paper 2011-01). American Enterprise Institute for Public Policy Research. Retrieved from <http://eric.ed.gov/?id=ED521782>
27. Diamond, K. E., Justice, L. M., Siegler, R. S., & Snyder, P. A. (2013). *Synthesis of IES research on early intervention and early childhood education* (NCSER 2013-3001). National Center for Special Education Research; Beck, I. L., & McKeown, M. G. (2007). Increasing young low-income children's oral vocabulary repertoires through rich and focused instruction. *The Elementary School Journal*, 107(3), 251-271; Institute of Medicine & National Research Council. (2015). *Transforming the workforce for children birth through age 8: A unifying foundation*. Washington, DC: The National Academies Press; M. Adams, personal communication, January 2016; Dickinson, D. K., & Porche, M. V. (2011). Relation between language experiences in preschool classrooms and children's kindergarten and fourth-grade language and reading abilities. *Child Development*, 82(3), 870-88.
28. U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2012). *Early childhood education interventions for children with disabilities intervention report: Phonological awareness training*. Retrieved from https://ies.ed.gov/ncee/wwc/Docs/InterventionReports/wwc_pat_060512.pdf; Diamond, K. E., Justice, L. M., Siegler, R. S., & Snyder, P. A. (2013). *Synthesis of IES research on early intervention and early childhood education* (NCSER 2013-3001). National Center for Special Education Research.
29. Landry, S. H., Swank, P. R., Smith, K. E., Assel, M. A., & Gunnewig, S. B. (2006). Enhancing early literacy skills for preschool children bringing a professional development model to scale. *Journal of Learning Disabilities*, 39(4), 306-324; U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2012). *Early childhood education interventions for children with disabilities intervention report: Phonological awareness training*. Retrieved from https://ies.ed.gov/ncee/wwc/Docs/InterventionReports/wwc_pat_060512.pdf.
30. Diamond, K. E., Justice, L. M., Siegler, R. S., & Snyder, P. A., 2013.
31. Diamond, K. E., Justice, L. M., Siegler, R. S., & Snyder, P. A., 2013.

32. Recht, D. R., & Leslie, L. (1988). Effect of prior knowledge on good and poor readers' memory of text. *Journal of Educational Psychology, 80*(1), 16; Schneider, W., Körkel, J., & Weinert, F. E. (1989). Domain-specific knowledge and memory performance: A comparison of high- and low-aptitude children. *Journal of Educational Psychology, 81*(3), 306; Tyner, A., & Kabourek, S. (2020). *Social studies instruction and reading comprehension: Evidence from the early childhood longitudinal study*. Washington, DC: Thomas B. Fordham Institute. Retrieved from <https://fordhaminstitute.org/national/resources/social-studies-instruction-and-reading-comprehension>.
33. Mahnken, K. (October 2020). Federal judge dismisses Rhode Island students' suit for right to civic education. *The 74*. Retrieved from <https://www.the74million.org/federal-judge-dismisses-rhode-island-students-suit-for-right-to-civic-education/>.
34. On NAEP in U.S. history, 15% of 8th graders scored proficient or above. National Center for Education Statistics. (2018). *National Assessment of Educational Progress: NAEP Report Card: U.S. History*. Washington, D.C.: National Center for Education Statistics, Institute of Education Sciences, U.S. Dept. of Education. Retrieved from <https://www.nationsreportcard.gov/ushistory/results/achievement/>.
35. On NAEP in civics, 24% of 8th graders scored proficient or above. National Center for Education Statistics. (2018). *National Assessment of Educational Progress: NAEP report card: Civics*. Washington, D.C.: National Center for Education Statistics, Institute of Education Sciences, U.S. Dept. of Education. Retrieved from <https://www.nationsreportcard.gov/highlights/civics/2018/>.
36. On NAEP in science, 34% of 8th graders scored proficient or above. National Center for Education Statistics. (2015). *National Assessment of Educational Progress: 2015 science assessment*. Washington, D.C.: National Center for Education Statistics, Institute of Education Sciences, U.S. Dept. of Education. Retrieved from https://www.nationsreportcard.gov/science_2015/#acl?grade=8.
37. Scores from the National Assessment on Educational Progress (NAEP) found that in reading, 35% of 4th grade students scored proficient or above; 34% of 8th grade students scored proficient or above, and 37% of 12th grade students scored proficient or above. National Center for Education Statistics. (2019). *National Assessment of Educational Progress: NAEP report card: Reading*. Washington, D.C.: National Center for Education Statistics, Institute of Education Sciences, U.S. Dept. of Education.
38. Banilower, E. R., Smith, P. S., Malzahn, K. A., Plumley, C. L., Gordon, E. M., & Hayes, M. L. (2018). *Report of the 2018 NSSME+*. Chapel Hill, NC: Horizon Research, Inc.
39. In 2015, 38% of fourth grade students scored at or above proficient in science on NAEP. National Center for Education Statistics. (2015). *National Assessment of Educational Progress: 2015 science assessment*. Washington, D.C.: National Center for Education Statistics, Institute of Education Sciences, U.S. Dept. of Education. Retrieved from https://www.nationsreportcard.gov/science_2015/#acl?grade=4; In 2010, 20% of fourth grade students were at or above proficient in U.S. History. National Center for Education Statistics. (2020). *National Assessment of Educational Progress: NAEP data explorer*. Washington, D.C.: National Center for Education Statistics, Institute of Education Sciences, U.S. Dept. of Education. Retrieved from <https://www.nationsreportcard.gov/ndecorg/xplore/NDE>.

40. Hawaii allows for Master's, specialist, or doctoral degree in the license field or 36 semester hours, including nine semester hours in each core content area. At least three semester hours in each core content area must be upper division level.
41. Rockoff, J. E. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *American Economic Review*, 94(2), 247-252; Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality and student achievement. *Journal of Public Economics*, 95(7-8), 798-812; Wiswall, M. (2013). The dynamics of teacher quality. *Journal of Public Economics*, 100, 61-78; Papay, J. P., & Kraft, M. A. (2015). Productivity returns to experience in the teacher labor market: Methodological challenges and new evidence on long-term career improvement. *Journal of Public Economics*, 130, 105-119.
42. Atteberry, A., Loeb, S., & Wyckoff, J. (2015). Do first impressions matter? Predicting early career teacher effectiveness. *AERA Open*, 1(4), 2332858415607834.
43. SCALE. (January 2020). State edTPA policy overview. Retrieved 3 December 2020 from https://secure.aacte.org/apps/r1/res_get.php?fid=1014&ref=edtpa.
44. Requirements for program completion only apply to programs within that state, while requirements to take a test for initial licensure apply to all teachers seeking a license in that state, including those who prepared out of state.
45. Levine, A. (2006). *Educating school teachers*. Washington, DC: The Education Schools Project.
46. Krieg, J. M., Theobald, R., & Goldhaber, D. (2016). A foot in the door: Exploring the role of student teaching assignments in teachers' initial job placements. *Educational Evaluation and Policy Analysis*, 38(2), 364-388.
47. Goldhaber, D., Krieg, J., Naito, N., & Theobald, R. (2019). Making the most of student teaching: The importance of mentors and scope for change. *Education Finance and Policy*, 1-11.
48. Ronfeldt, M., Matsko, K. K., Greene Nolan, H., & Reininger, M. (2018b). Who knows if our teachers are prepared? Three different perspectives on graduates' instructional readiness and the features of preservice preparation that predict them. Stanford Center for Education Policy Analysis; St. John, E., Goldhaber, D., Krieg, J., & Theobald, R. (2018). *How the match gets made: Exploring student teacher placements across teacher education programs, districts, and schools*. (Working Paper No. 204-1018-1). CALDER.
49. Gitomer, D. H., Brown, T. L., & Bonett, J. (2011). Useful signal or unnecessary obstacle? The role of basic skills tests in teacher preparation. *Journal of Teacher Education*, 62(5), 431-445; Goldhaber, D., Cowan, J., & Theobald, R. (2017). Evaluating prospective teachers: Testing the predictive validity of the edTPA. *Journal of Teacher Education*, 68(4), 377-393.
50. These alternative measures include: meeting a GPA requirement, having a bachelor's degree, having an associate's degree, being enrolled in an accredited institution, being enrolled in a certification program, and serving in the armed forces.

51. Cowan, J., Goldhaber, D., Jin, Z., Theobald, R. (2020). *Teacher licensure tests: Barrier or predictive tool?* (Working Paper No. 245-1020.) CALDER. Retrieved from <https://caldercenter.org/publications/teacher-licensure-tests-barrier-or-predictive-tool>.
 52. It is worth noting that while Massachusetts' investigation of its licensure test system is laudable, the state does set lower requirements for program entry than the research suggests is advisable (no GPA requirement and the basic skills test is not required until program completion).
 53. Massachusetts' bid solicitation is available at:
<https://www.commbuys.com/bso/external/bidDetail.sdo?docId=BD-21-1026-DOE02-DOE01-56600&external=true&parentUrl=bid>.
 54. Putman, H., & Walsh, K. (2019). *A fair chance: Simple steps to strengthen and diversify the teacher workforce*. Washington, DC: National Council on Teacher Quality. Retrieved from <https://www.nctq.org/publications/A-Fair-Chance>; Goldhaber, D., Cowan, J., & Theobald, R. (2017). Evaluating prospective teachers: Testing the predictive validity of the edTPA. *Journal of Teacher Education*, 68(4), 377-393.
 55. Putman, H., & Walsh, K., 2019; Goldhaber, D., Cowan, J., & Theobald, R., 2017.
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APPENDIX

The following documents provide a state-by-state breakdown of state's requirements for teacher preparation programs.

REQUIREMENTS FOR ADMISSION INTO TEACHER PREP PROGRAMS

	REQUIREMENTS FOR BASIC SKILLS TEST				GPA REQUIREMENTS			
	Requires all candidates to pass a basic skills test at admission into the program.	Requires all candidates to pass a test at program completion.	Lists a test as one of several options for demonstrating basic skills at admission into the program.	Does not require a basic skills test.	Requires individual GPA of 3.0 or higher for entry.	Requires cohort GPA of 3.0 or higher for entry.	Requires individual GPA of 2.75 or higher.	Permits individual GPAs of lower than 2.75.
Alabama	✓						✓	
Alaska		✓						✓
Arizona				✓				✓
Arkansas				✓				✓
California		✓						✓
Colorado				✓				✓
Connecticut				✓			✓	
Delaware			✓		✓			
D.C.		✓						✓
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				✓				✓

SUPPORT FOR DIVERSE ENROLLMENT IN TEACHER PREP PROGRAMS

	State offers support for prep programs to encourage individuals of color to enter the teacher pipeline for individuals of color	Grant (to individual or institution)/ Scholarship/ Money	Grow your own/ recruitment/ special prep programs	Task force/ advisory group	Set goal	Other
Alabama						
Alaska						
Arizona						
Arkansas	✓		✓		✓	
California						
Colorado						
Connecticut	✓		✓			✓
Delaware						
D.C.						
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						

REQUIREMENTS FOR KNOWLEDGE OF EARLY READING

Elementary Teachers

	LICENSURE REQUIREMENTS FOR ELEMENTARY TEACHERS ON THE SCIENCE OF READING				STATES' REQUIREMENTS FOR ELEMENTARY PREP PROGRAM TO ADDRESS 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.	Requires elementary preparation programs standards to address the components of the science of reading instruction.	Does not require elementary preparation program standards to address the components of the science of reading instruction.
Alabama	✓				✓	
Alaska	✓					✓
Arizona				✓		✓
Arkansas	✓				✓	
California	✓				✓	
Colorado			✓		✓	
Connecticut	✓					✓
Delaware			✓		✓	
D.C.			✓			✓
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	✓					✓

REQUIREMENTS FOR KNOWLEDGE OF EARLY READING

Special Education and Early Childhood Teachers

	LICENSURE REQUIREMENTS FOR SPECIAL EDUCATION TEACHERS ON SCIENCE OF READING			LICENSURE REQUIREMENTS FOR EARLY CHILDHOOD TEACHERS ON EMERGENT LITERACY	
	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.	Requires all early childhood candidates to possess sufficient knowledge of emergent literacy and oral language for licensure.	Does not require all early childhood candidates to possess sufficient knowledge of emergent literacy and oral language for licensure.
Alabama		✓			✓
Alaska			✓		✓
Arizona			✓		✓
Arkansas	✓			✓	
California	✓				✓
Colorado		✓			✓
Connecticut	✓				✓
Delaware			✓	✓	
D.C.			✓		✓
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			✓		✓

REQUIREMENTS FOR KNOWLEDGE OF CONTENT AREAS

Elementary Teachers

	Requires a test that reports separate scores for each of the four elementary subject areas.	Requires a test that combines scores in two or more subject areas.	Requires a test that reports a single score for all subject areas.	Does not require a test of all candidates.
Alabama	✓			
Alaska			✓	
Arizona				✓
Arkansas	✓			
California				✓
Colorado	✓			
Connecticut	✓			
Delaware	✓			
D.C.	✓			
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	✓			

REQUIREMENTS FOR KNOWLEDGE OF CONTENT AREAS

Middle and High School Teachers

	LICENSURE REQUIREMENTS FOR MIDDLE SCHOOL TEACHERS' CONTENT KNOWLEDGE			LICENSURE REQUIREMENTS FOR SECONDARY TEACHERS' CONTENT KNOWLEDGE		
	Requires all teachers licensed to teach middle school to pass a single-subject test for every subject they are licensed to teach. An elementary content test is not an option.	Allows some or all teachers licensed to teach middle school to only take an elementary test.	Does not require any content test.	Requires a single-subject test for every subject a teacher is licensed to teach.	Requires single-subject tests; however, its policy has significant deficiencies regarding science and/or social studies.	Does not require a single-subject test for every subject a teacher is licensed to teach.
Alabama	✓				✓	
Alaska		✓			✓	
Arizona			✓			✓
Arkansas	✓				✓	
California			✓			✓
Colorado			✓			✓
Connecticut	✓				✓	
Delaware	✓				✓	
D.C.	✓				✓	
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	✓					✓

REQUIREMENTS FOR KNOWLEDGE OF CONTENT AREAS

Special Education Teachers

	SPECIAL EDUCATION - ELEMENTARY CONTENT KNOWLEDGE LICENSURE REQUIREMENTS				SPECIAL EDUCATION - SECONDARY CONTENT KNOWLEDGE LICENSURE REQUIREMENTS	
	Requires a test that reports separate scores for each of the four elementary subject areas.	Requires a test that reports separate scores for each of the four elementary subject areas, but it permits candidates to earn a K-12 special education license.	Requires a test that does not report separate subscores for each of the four subject areas.	Does not require a test of all candidates.	Requires a subject-matter test but it does not separately score each subject teachers are licensed to teach, or requires a single subject test, but allows teachers to teach in any core subject area regardless of the test passed.	Does not require a secondary subject matter test.
Alabama	✓					✓
Alaska				✓		✓
Arizona				✓		✓
Arkansas			✓		✓	
California				✓		✓
Colorado		✓				✓
Connecticut				✓		✓
Delaware				✓		✓
D.C.				✓		✓
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				✓		✓

REQUIREMENTS TO TAKE PERFORMANCE ASSESSMENTS

	Requires a performance assessment	Allows but does not require a performance assessment as a measure of candidate readiness	Does not require a performance assessment
Alabama	✓		
Alaska			✓
Arizona			✓
Arkansas			✓
California	✓		
Colorado			✓
Connecticut	✓		
Delaware	✓		
D.C.			✓
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			✓

REQUIREMENTS FOR CLINICAL PRACTICE AND STUDENT TEACHING

STATE REQUIREMENTS FOR SELECTION OF COOPERATING TEACHERS

	Requires selection of cooperating teachers based on some measure of effectiveness	Does not require selection of cooperating teachers based on some measure of effectiveness, but does have other requirements	Does not set requirements for cooperating teachers
Alabama		✓	
Alaska		✓	
Arizona	✓		
Arkansas		✓	✓
California		✓	
Colorado			✓
Connecticut			✓
Delaware	✓		
D.C.			✓
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			✓