U.S. Country Background Report

Organization for Economic Cooperation and Development (OECD)
Teaching and Learning International Survey (TALIS) Initial Teacher Preparation Study

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EXECUTIVE SUMMARY

Education in the United States—and, by extension, initial teacher preparation—has been strongly influenced by several trends:

- a decentralized education system,
- rapid growth in the nation's size and population,
- supply and demand driven by varying local contexts, and
- an increasing focus on teacher quality.

These trends affect each of the areas identified by the Organization for Economic Cooperation and Development (OECD) as crucial in understanding the variation in initial teacher preparation (ITP).

ATTRACTING CANDIDATES INTO ITP PROGRAMS:

In surveys, undergraduate students have reported that teaching is not among the most desirable careers and that teacher education is one of the easiest courses of study at a university. Some have suggested that teacher salaries are too low to make it an attractive career. Other studies suggest the continuing criticism of education makes college students reluctant to entire the teaching force.

SELECTING THE MOST SUITABLE CANDIDATES FOR ITP PROGRAMS:

Recently, there have been policy shifts by some states and by the federal government to require more rigorous admissions requirements to teacher preparation programs. However, some states have no requirements or allow individual providers to set them.

EQUIPPING PROSPECTIVE TEACHERS WITH THE RIGHT MIX OF WHAT THEY NEED TO KNOW AND DO:

The decentralized structure of teacher preparation has meant that every state has a different set of requirements for the content of teacher preparation. Some states are specific about what is required; others are less prescriptive. There is a new national accreditor—the Council for the Accreditation of Educator Preparation—and 18 states require accreditation for at least some of their providers. The other states leave it to individual providers to decide whether to seek accreditation.

ENSURING QUALITY DELIVERY OF ITP PROGRAMS:

States are responsible for ensuring that ITP programs meet state standards, and each state has its own set of standards (as well as its own process for conducting reviews). Lately, there has been a significant shift among states to assess program quality based on outcome measures (e.g., the ability of graduates to raise student achievement, surveys of hiring principals about program quality, and the retention of teachers in teaching).

CERTIFYING AND SELECTING NEW TEACHERS:

States are responsible for certifying and licensing teachers. Most use standardized tests prepared and scored by a nonprofit vendor; however, some states have designed their own tests. In the last 5 years, several new performance assessments have been released that assess new teachers' teaching ability by having them create portfolios of work or by having video of their teaching reviewed and scored.

SUPPORTING NEW TEACHERS:

According to a report by the New Teacher Center, 29 states require school districts or other education organizations to provide induction programs for all new teachers. These programs range in length from 1 to 2 years. Some states are fairly prescriptive about the content of these programs. At least one state requires an ITP program to provide a coach to new teachers as part of the induction program.

SECTION 1: CONTEXT

1.1 TRENDS AND POLICIES THAT HAVE SHAPED THE U.S. EDUCATION SYSTEM, INCLUDING TEACHER PREPARATION

Education in the United States—including the preparation, licensure, and induction of teachers—has been influenced by a number of broad and powerful forces that make the nation's system of teaching and learning unique. First, the U.S. Constitution gave responsibility for education to the states. Second, the sheer geographic size of the United States and the way the population grew had an effect on the development of the education system. Third, the economics of supply and demand with regard to the teacher workforce shaped the way teachers were trained and hired. Finally, the growing concern about the quality of education and the achievement of students in the United States led to increased attention to the quality of teachers and how they are prepared and trained.

STATES HAVE RESPONSIBILITY FOR EDUCATION

One of the more distinctive features of the education system in the United States is its decentralized organization. While many nations have a strong federal system that standardizes, to varying degrees, academic achievement guidelines, curriculum, and other aspects of teaching and learning, that type of unifying structure does not exist in the United States. This means that for any statement made about the U.S. education system, there will be a number of exceptions. Any broad report about education in this country will thus be a collection of generalizations that might not be true in some parts of the country.

The decentralized system of education has its roots in the U.S. Constitution, written over two centuries ago. As part of a balancing act between those who favored a strong central government and those who wanted stronger local control, the document allocated power between the federal government and the states. The first ten amendments to the Constitution, called the Bill of Rights and ratified in 1789, said explicitly that the federal government would leave to the states many powers and responsibilities related to governance and civic welfare:

> The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

One of the powers given to the states was the regulation of schools and education and of the various occupations related to school and schooling. As a result, every state and territory in the United States now has a different arrangement for providing public education. What this means for initial teacher preparation is that its features and structures differ from state to state, based on the education policies determined by legislators there.

Teachers for a growing nation

Prior to the mid-1800s, there was not much organized education to regulate (Kaestle, 1972). But by the middle of the century, many states had accepted the idea of the common school, where the community would invest in free public education for its children (Cremin, 1980), leading to the need for more schools and teachers.

The need for more schools and teachers was the result of several trends. First, the growing U.S. population, fueled by immigration, increased the populations in cities. Second, the westward migration of the population led to new communities being founded in the western United States. Finally, as the economy became more industrialized, the need for more educated workers increased the desire for families to send children to school—initially for elementary education, but later for secondary and then postsecondary education. Between 1875 and 2000, the number of teachers in K–12 schools grew from about 260,000 to 3.4 million (see table 1).

TABLE 1. Number of teachers and students in K–12 schools: 1875–2000

Year	Number of teachers in K–12 schools	Number of students in K–12 schools
1875	260,000	8,869,000
1900	432,000	17,072,000
1925	778,000	27,180,000
1950	914,000	29,301,000
1975	2,198,000	49,819,000
2000	3,366,000	53,373,000

Source: U.S. Department of Education, National Center for Education Statistics, *120 Years of American Education: A Statistical Portrait, tables 8, 9, and 14,* at http://nces.ed.gov/pubs93/93442.pdf, for data prior to 2000; and *Digest of Education Statistics 2011,* at http://nces.ed.gov/pubs2012/2012001.pdf , for data for 2000.

The economics of the teacher workforce: Supply and demand

As the common school movement took hold, the demand for skilled teachers rose, which led to the creation of "normal schools," where prospective teachers learned content and pedagogy. Normal schools sprang up across the United States, following the growing push for common schools in communities swelling with new residents in the western United States. Most normal school students were women.

After 1920, as more students began to earn high school diplomas, states began to pass laws requiring teachers to have a bachelor's degree. At the same time, normal schools began transforming into regional state universities, adding academic and professional studies in other disciplines to the list of possible major areas of study, and awarding graduate degrees as well as bachelor's degrees. As a group, these former normal schools continue to prepare a large portion of the nation's teacher workforce (Fraser, 2007). But unlike the nation's flagship public universities, they usually have lower standards for admission and are considered less prestigious.

Teacher licensure followed the same kind of evolution; as communities and states changed, so did the process for earning a license to teach. However, the licensure process grew in different ways in cities and rural areas (Angus, 2001).

In rural areas, children often attended a one-room schoolhouse with a single teacher who taught students of all ages. Teachers for these schools were often selected based on a few questions from a local committee of citizens.

In cities, teachers were more likely to work in graded, multi-classroom school buildings, and over the course of the 1800s, cities began to license teachers, often by administering a test of knowledge (Angus, 2001).

Until the early 20th century, the trend in teacher preparation and licensure had been toward higher standards and greater rigor. But that was halted and reversed during World War I, when states faced a teacher shortage and relaxed standards to allow more people to teach. One report, published in 1918, noted that half of the nation's 600,000 teachers had no special training and 100,000 had less than 2 years of education beyond the eighth grade (National Education Association, 1918). But the lower standards gave way to stricter requirements during the Great Depression, thanks in part to what was now an oversupply of teachers.

During World War II, the higher salaries in war industries drew teachers out of classrooms and onto factory floors, leading to another teacher shortage. Once again, states lowered the requirements needed to earn a teaching credential. At the height of the shortage, it was estimated that 140,000 teachers held emergency credentials (LaBue, 1960). California issued the greatest number of emergency credentials, while Massachusetts and Oklahoma did not issue any. By 1960, the differences in requirements to become a teacher still continued to vary widely. A few states did not require new teachers to have a baccalaureate degree, although most did. Some states required specific teacher training. Some had assessments for certification and licensure (LaBue, 1960).

Differences in the requirements for teacher training and licensure continue today and are still affected by supply and demand, although most states currently require that new teachers receive at least some training and pass an assessment. However, many states in the United States are facing teacher shortages and, as a result, a few have relaxed their requirements. In Utah, anyone with a baccalaureate degree may be employed as a teacher; in Alabama and Wisconsin, there are several specialty subject areas where new teachers do not need a college degree.[1] In Oklahoma, anyone with a bachelor's degree and work experience can become a teacher, and in New York, a teacher with an out-of-state teaching license is no longer required to take the state's certification exam to get a New York teaching license.[2]

The quality of teachers and teaching

From the latter half of the 20th century to the present, one of the main concerns of educators and policymakers has been the gap in achievement between students who are poor or are minorities and students who are more affluent and White. Those concerns fueled federal legislation to send funds to schools to more fully serve disadvantaged students.[3] Another strategy was busing students to desegregate schools (Hochschild and Scovornick, 2003).

As the 20th century ended, educators and policymakers had seized on the idea of setting high standards for all students and measuring their achievement using assessments that would show annual progress (Ravitch, 2000). In the last 15 years, a great deal of research has been conducted using student test scores to gauge

[1] See http://www.edweek.org/ew/articles/2016/09/07/amid-shortage-fears-states-ease-teacher-licensing-rules.html?qs=shortages; http://www.edweek.org/ew/articles/2016/02/10/teacher-shortages-put-pressure-on-governors-legislators.html?qs=shortages+alabama

[2] See http://blogs.edweek.org/edweek/teacherbeat/2016/08/states_loosen_teacher_licensure_shortages.html?utm_source=feedblitz&utm_medium=FeedBlitzRss&utm_campaign=teacherbeat.

[3] The Elementary and Secondary Education Act was first passed in 1965 and has been reauthorized several times since then under different names, including the No Child Left Behind Act and, most recently, the Every Student Succeeds Act.

teacher effectiveness, along with other measures, such as scores from an observation of instruction and the results of student surveys (Bill and Melinda Gates Foundation, 2010). States and districts began to use these data to create models to show teacher effectiveness and put policies in place to use effectiveness data for everything from compensation and promotion to individualized professional development.

More recently, researchers have begun to link data from teacher effectiveness systems back to the initial teacher preparation provider as a means of accountability (Teacher Prep Analytics, 2016). This type of measurement of teacher preparation has both critics and supporters. However, many state policies related to teacher preparation now include some reference to the use of teacher effectiveness data to understand the impact of the provider.

1.2 CURRENT CONTEXT OF INITIAL TEACHER PREPARATION IN THE UNITED STATES

There are more than 3 million public school teachers in the United States, and most are women (see table 2). While U.S. teachers had, on average, 13.5 years of experience in the 2011–12 school year, most had just 5 years of experience, according to data from a federal study (Ingersoll, Merrill, & Stuckey, 2014).

TABLE 2. The U.S. teacher workforce in the 2011–12 school year

	Primary grade level	Secondary grade level*	Both grade levels**
Number of teachers, by grade level	1,628,800	1,553,400	205,000
Race			
White	81.2%	82.6%	80.9%
Hispanic	8.7%	6.9%	7.4%
African-American	7.1%	6.7%	7.9%
Asian	1.7%	1.9%	1.2%
Other	1.3%	1.9%	2.6%
Gender			
Female	89.3%	65.4%	68.8%
Male	10.7%	34.6%	31.2%
Average age in years	42.4	42.4	42.1
Average years of experience	14.0	13.7	13.0

*The secondary grade level includes grades 7–12.

**A teacher who works at both grade levels could be teaching in a small district where there are multi-age classrooms or in a specialized content area and thus moving from classroom to classroom.

Source: U.S. Department of Education, National Center for Education Statistics, 2011–12 Schools and Staffing Survey, at https://nces.ed.gov/surveys/sass/tables_list.asp.

The discussion of the current context of initial teacher preparation in the United States begins with an examination of stakeholders in teacher preparation. Stakeholders work at both the national and state levels.

Stakeholders at the national level

The federal government: Given the decentralized organization of education in the United States, the federal government has less direct control over education than do the states. The U.S. Department of Education, through

the Higher Education Act (HEA), can fund partnerships between institutions of higher education and local school districts to prepare teachers for high-needs schools.[4] Also through HEA, each state and teacher preparation organization is directed to collect data about its program and then report these data to the department.

The American Association of Colleges of Teacher Education (AACTE): This is a 68-year-old organization whose members are generally teacher preparation units in colleges and universities. Membership is voluntary, and more than 800 institutions of higher education (IHEs) with teacher preparation programs are members.[5] AACTE acts as a national advocate for its members with regard to federal and state legislation, provides information about trends and policies to members, and organizes activities to support improvement in teacher preparation.[6]

Deans for Impact: This organization was formed in 2014 by about two dozen deans of schools of education to promote processes for transforming teacher preparation. The organization has made teacher preparation accountability based on data and outcomes one of its main goals. By learning from and sharing what is learned through an accountability system based on data, the organization's members believe the field of teacher preparation will improve.[7]

The Council of Chief State School Officers (CCSSO): This is a membership organization made up of the highest ranking education official in each state. Among the goals of the organization are to coordinate programs and projects that help state chiefs learn from each and work together to raise the quality of teaching and learning in their states. CCSSO also represents the interests of the group by recommending, commenting on, or criticizing federal legislation that can affect state policies and practices.[8] For example, CCSSO shared the concerns and interests of its members with national legislators about the recently approved national education bill, the Every Student Succeeds Act (ESSA), that provides funds to states and schools districts to educate children from poor households. Given that states have the lion's share of responsibility for regulating and authorizing teacher preparation programs, it is not surprising that this organization works extensively in this area.

Teacher Unions: The two largest teacher unions in the United States are the National Education Association (NEA) and the American Federation of Teachers (AFT). The NEA has a little more than 2.5 million active members, while the AFT has about 1.6 million members, and about 50,000 of these are nurses and other health care workers. Both unions support improved teacher preparation, and both have written briefs and reports elaborating on their positions (American Federation of Teachers, 2013; National Education Association, 2013).

Parent organizations: The national Parent Teacher Association (PTA) works on policies to improve education and represent children's rights and needs. It has organizations in every state. There are also national organizations representing parents and families of children with various special needs.

[4] HEA was first passed in 1965, and then reauthorized in 2008. See http://www2.ed.gov/policy/highered/leg/hea08/index.html.
[5] See http://aacte.org/about-aacte.
[6] See http://aacte.org/.
[7] See http://deansforimpact.org/index.html.
[8] See http://www.ccsso.org/.

Stakeholders at the state level

Not every state has a stakeholder group from each of the following categories, but together they represent the landscape of state-level stakeholders.

State departments of education: Every state's department of education has a deep interest in the quality of teacher preparation providers. States are responsible for legislating standards for these providers and devote resources from their department of education to enact them.

Organizations of teacher preparation providers: In many states, deans from preparation providers at institutions of higher education may be a part of a group that discusses issues and developments in teacher preparation in their state. Somewhat rarely, these groups may also include representatives from alternative-certification providers.

Universities and colleges, and their respective membership organizations: Many, if not all, institutions of higher education have staff members who interact with state legislators, the governor, and state education officials. In some states, there are membership organizations representing these institutions that take on this task. Their efforts can influence state legislation and policy that affects teacher preparation.

State teacher unions: There are state-level union organizations for one or both of the national teacher unions.

State political parties: Given that teacher preparation is a state-level responsibility, it can be a political issue for candidates and political parties.

Other state-level stakeholders: The relative interest and impact of other stakeholders in states depend on local context and conditions. In some states, advocacy organizations for children lobby for improved education; in other states, professional membership organizations, such as the Association of School Administrators, may be more vocal stakeholders. Each state has a different mix of stakeholders that are active in such efforts.

1.3 NATIONAL POLICIES AND DEVELOPMENTS

FEDERAL GRANT PROGRAM FOR TEACHER CANDIDATES

The federal government has a program, first offered in 2008, called Teacher Education Assistance for College and Higher Education (TEACH) grants, that provides up to $16,000 to teacher candidates enrolled in teacher preparation. The funds are considered a grant and do not have to be repaid if the recipient teaches for 4 years in a high-needs field, such as special education, science, or mathematics, in a school that serves low-income students. If the recipient does not fulfill this obligation within 8 years of graduating, then the grant converts to a loan that must be repaid. A little more than half of the recipients of TEACH grants have their grant convert to a loan because they don't fulfill the service requirements.

FEDERAL EDUCATION LAW

The recently enacted Every Student Succeeds Act (ESSA) includes a provision that would allow states to use up to two percent of the state funds received under Title IIA to create a teacher preparation academy. (ESSA

is the most recent reauthorization of the Elementary and Secondary Education Act, first passed in 1965. The legislation in place prior to the passage of ESSA in 2016 was the No Child Left Behind Act.)[9]

ESSA includes requirements for states choosing to use funds for an academy. One is that the academy must demonstrate that its graduates will be effective teachers. Another is that the instructors in the academy must not be required to conduct academic research or publish articles in journals.[10]

So far, no state has established an academy.

NEW NATIONAL ACCREDITOR

A new national accrediting organization, the Council for the Accreditation of Education Preparation (CAEP), was created in 2010 when the two accrediting organizations that existed at the time merged. In some states, CAEP accreditation is required for approval or substitutes for a state approval process. In other states, CAEP accreditation is optional.

In order to earn accreditation, an ITP provider must submit data and other evidence to show it is meeting CAEP standards, many of which are based on outcomes such as satisfaction survey results from hiring principals or measures of the teaching effectiveness of graduates. A provider must report some data annually and then, every 7 years, prepare a detailed report about its program. After the provider submits the report, a team from CAEP visits the program and prepares a final report that is the basis of its decision to accredit. The CAEP standards are included in appendix A of this report.

NEW FEDERAL DATA REPORTING REGULATIONS

In 2016, the U.S. Department of Education released new regulations for increasing the type and amount of data that ITP programs and states must provide under HEA. These data include evidence that providers are preparing effective teachers, including

- survey data from hiring principals about the effectiveness of new teachers,
- survey data from graduates about the quality of their preparation, and
- teacher effectiveness data that would likely come from state teacher evaluation systems and include student achievement data.

However, President Donald Trump signed a bill overturning these new data reporting requirements in March, 2017.[11]

1.4 STATE-LEVEL POLICY REFORM

The concern and interest in teacher quality have led some states to take action to change policies related to program requirements and state approval structures. It is impossible to characterize the exact changes that states are enacting, but in general they relate to the:

- amount of coursework included in teacher preparation programs,

[9] See http://blogs.edweek.org/edweek/campaign-k-12/2016/09/teacher_money_guidance_hold.html.
[10] See http://blogs.edweek.org/edweek/teacherbeat/2015/12/teacher-prep_provisions_in_ess.html.
[11] See http://blogs.edweek.org/edweek/teacherbeat/2017/03/trump_signs_bill_scrapping_tea.html.

- length and quality of clinical training,
- timeline for approval of programs, and
- data that ITPs must report annually to the state department of education.

Alternative teacher preparation providers may or may not be included in these changes in state approval processes. Some states, such as Massachusetts and Colorado, are requiring alternative providers to meet the same approval requirements (Meyer, Broderson, and Linick, 2014).

Race to the Top (RTTT) was a federal grant program initiated in 2009 that asked states to describe how they would improve state education policies and activities in exchange for federal funds. In all, 19 states won grants in the three rounds of competition. All states were required to describe how they would improve teacher quality policies, including those related to teacher preparation and licensure, and to explain how they would use the money to create robust data systems related to teacher quality (Howell, 2015).

With the support of RTTT funding, Tennessee was able to refine and expand the state's Report Card on Teacher Preparation Program Effectiveness. The report provides feedback to preparation programs and measures effectiveness through retention and placement rates of teacher preparation program graduates, Praxis II pass rates, and teacher effectiveness data from the Tennessee Value-Added Assessment System (TVAAS). The state also used RTTT funds to create The Teacher and Leader Residency Program, a competitive grant project that supported school districts seeking to develop and/or expand teacher and principal residency programs. The state awarded 4-year grants to four residency programs.[12]

Other states were able to take on similar work even though they didn't receive RTTT funds. In California, the Commission on Teacher Credentialing has undertaken a systematic overhaul of its standards and accreditation process with the goal of shifting from an approach driven primarily by inputs to a performance-based system that will rely on outcome data from surveys, candidates' performance on assessments, and other indicators that are under development. Also in development is the state's new data dashboard system, which will allow potential teacher candidates and future employers to compare institutions and programs from across the state. The system is built on the new standards for teacher preparation and uses a clear set of performance expectations for candidates and programs.[13]

[12] See https://www.tn.gov/education/article/fttt-projects-and-programs.

[13] Personal communication, R. Saunders, January 3, 2017.

SECTION 2: ATTRACTING CANDIDATES INTO INITIAL TEACHER PREPARATION PROGRAMS

There were more than 2,000 providers of teacher preparation in the United States in 2014. Of these, 69 percent were traditional providers, based almost entirely at institutions of higher education, offering programs that lead to a degree. The rest were alternative programs and almost exclusively post-baccalaureate (U.S. Department of Education, 2016a).

Each provider of teacher preparation may offer multiple programs. For example, a provider based at an institution of higher education (IHE) may offer programs in elementary education, secondary education, special education, and other areas. Altogether, the U.S. Department of Education reported that there were more than 26,000 teacher preparation programs in the United States in 2014 (see table 3).

TABLE 3. Number of initial teacher preparation providers and programs: 2014

	Traditional	Alternative (institution of higher education based)	Alternative (not institution of higher education based)
Number of providers	1,497	201	473
Number of programs	18,514	5,325	2,750

Source: U.S. Department of Education, 2016a.

Most teachers are prepared through a program at a traditional provider. Most often, these are undergraduate programs leading to a degree and certification. At some IHEs, teacher candidates enter the department of education at the beginning of the third year of their university education. At others, they can enter the department of education earlier in their education. The course of study—including the length and context of clinical training—varies from provider to provider based on a number of factors, including state policies.

A number of alternative certification programs, such as The New Teacher Project (TNTP) and Teach for America, offer teacher candidates 6–8 weeks of training in the summer and partner with IHEs to provide coursework that may lead to a degree. These teacher candidates become the teacher of record while completing their training.

Other programs, such as the post-baccalaureate alternative route to licensure at the University of Nevada, Las Vegas, allow candidates to complete a semester of coursework while participating in 150 hours of clinical training in a school, which leads to a conditional teaching license once the candidate has passed the state licensure assessment. Candidates then become the teacher of record while finishing coursework at the university.[14]

[14] See http://tl.unlv.edu/arl-glp/elementary/.

Other post-baccalaureate programs require candidates to do several weeks of training in the summer and then become the teacher of record while continuing to receive coaching and mentoring on clinical practices. In some cases, teacher candidates become the teacher of record in a school while completing their training.

Several traditional and alternative providers offer a portion or all of the coursework in an online setting. For example, Grand Canyon University—which enrolls the largest number of teacher candidates in the nation—offers undergraduate programs that are totally online and lead to a teaching certificate and a bachelor's degree. It also has a physical campus in Arizona, and teacher candidates can attend the university there. Other IHEs offer programs similar to Grand Canyon's, with both online and on-campus programs. Some alternative providers offer all coursework online. Traditional and alternative online providers require candidates to engage in some clinical training and to document that training as part of the program completion requirements.[15]

The exact course of study offered through online providers varies between providers. Often teacher candidates enrolled in an online program are responsible for setting up their own clinical training at a nearby school, including securing a teacher mentor. However, online providers often have student advisers located in various regions of the nation who can help students with their placements.

2.1 ENROLLMENT IN INITIAL TEACHER PREPARATION

Enrollment at the nation's ITPs ranges from a high of more than 20,000 (see table 4) to a low of a few dozen at several colleges, such as Grinnell College in Iowa. Several of the largest teacher preparation providers (for example, Grand Canyon University) offer teacher training both at a physical campus and online. Each of these institutions has a course of study that can be tailored to match the requirements of the state where the student plans to work.

TABLE 4. Ten largest traditional teacher preparation providers by enrollment: School year 2012–13

Institution name	State	Total enrollment
Grand Canyon University–campus and online	Arizona	20,045
University of Phoenix–campus and online	Arizona	10,880
Arizona State University	Arizona	3,613
Brigham Young University	Idaho	3,541
Brigham Young University	Utah	3,470
Illinois State University	Illinois	3,408
Liberty University–campus and online	Virginia	3,133
Western Kentucky University	Kentucky	3,070
CUNY Queens College	New York	2,834
Bridgewater State University	Massachusetts	2,779

Source: U.S Department of Education, 2016a.

Enrollment at alternative programs varies based on the program. At an alternative program based at a specific IHE, enrollment might be just a few hundred (for example, at the program at UNLV, with an enrollment of 389).[16] Teach for America had 6,900 corps members in either the first or second year of its program at one

[15] See, for example, http://www.teacherbuilder.com/ and https://www.gcu.edu/degree-programs/bachelor-science-elementary-education.
[16] See https://title2.ed.gov/Public/Report/Providers/Providers.aspx?p=4_03&i=4861.

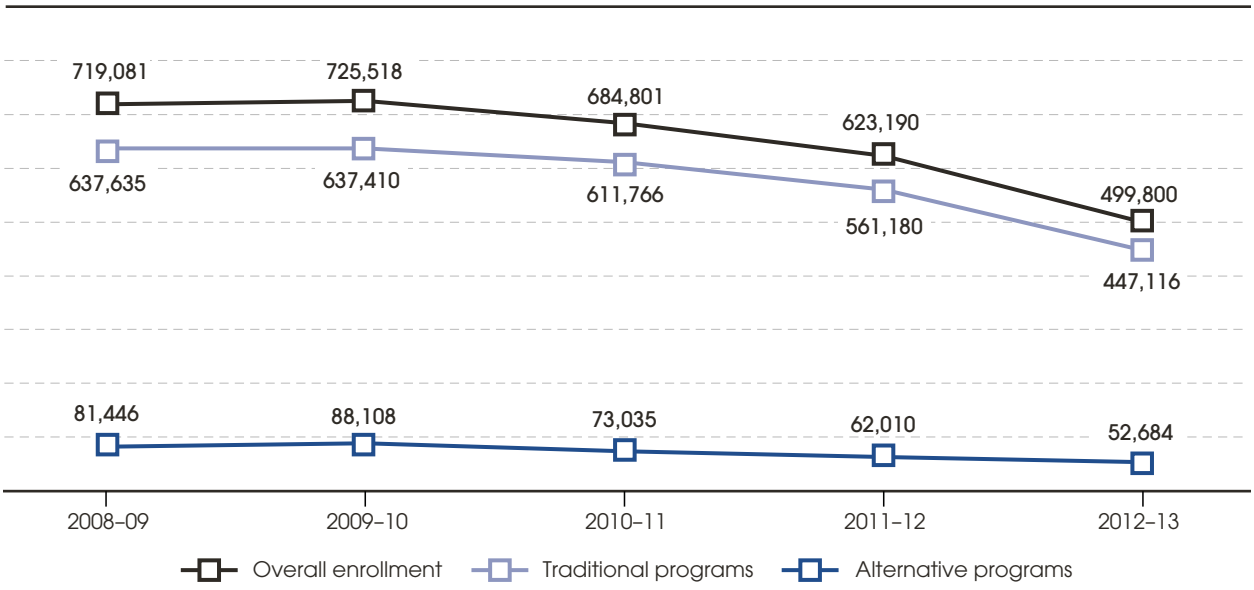
of 35 sites across the United States in 2016–17.[17] Teachers for Tomorrow, which trains teachers in a summer program and then places them as teachers of record for the rest of their training, certified more than 6,000 teachers in five states in 2015.[18]

Teach for America, one of the earliest alternative programs, was created to bring some of the nation's high-performing college graduates to fill teaching vacancies in the nation's most disadvantaged schools. Other alternative programs have the goal of helping adults who already have a bachelor's degree and work experience to get into teaching quickly, after taking some courses online. Alternative-route programs have grown because they appeal to both teacher candidates and school districts, for different reasons. For some teacher candidates, they offer a chance to change careers without having to go back to school for several years. For districts, candidates in alternative programs may be attractive as new hires.

2.2 LABOR AND ENROLLMENT TRENDS

Many states and school districts are reporting a shortage of teachers. This is not a new problem; for decades, states have reported needing more teachers in science and mathematics and in special education.[19] Because teacher labor markets are largely local, states may have shortages in different areas (Aragon, 2016b). At the same time, enrollment in initial teacher preparation programs overall was down by more than 30 percent from 2010 to 2014 (Barth et al., 2016). While the actual decline varies by locale and program, declining enrollment has affected both traditional and alternative ITP programs (see figure 1).

FIGURE 1. Enrollment in teacher preparation programs: School years 2008–09 to 2012–13



Source: U.S Department of Education, 2016a.

[17] See https://teachforamerica.app.box.com/s/daekyml307gyz7lrtna2xz578ypg8yl1.
[18] See https://www.teachersoftomorrow.org/company.
[19] See https://www2.ed.gov/about/offices/list/ope/pol/tsa.pdf.

Some have hypothesized that the drop in enrollment in teacher preparation followed teacher layoffs during the recession, which turned some away from teaching, while others say that those who might have gone into teaching felt pressure to take a higher paying job (Barth et al., 2016). There is evidence that enrollment in teacher preparation rises and falls in response to labor market conditions. Enrollment fell between 2009 and 2013 during the recession, when many school districts were laying off teachers (Aragon, 2016b). If this is the case, it is likely that enrollment will rise as the economy moves out of the recession and districts hire more teachers.

The perception that teaching is not a desirable career has been borne out in recent surveys. For example, Third Way, an advocacy organization, surveyed high-achieving college students and found that half thought teaching had become less prestigious in the last few years, slightly more than half said that teacher preparation was among the easiest majors offered at their colleges and universities, and only 35 percent described teachers as smart (Hiler and Hatalsky, 2014). In addition, some studies have found that college graduates with the highest levels of measured ability tend not to go into teaching (Henke et al., 2000; Gitomer, 2007; Podgursky, Monroe, and Watson, 2004).

Two researchers, in looking at the academic achievement of incoming teacher candidates, found that achievement on college entrance assessments was higher in 2009–10 than in previous years (Goldhaber and Walch, 2013). They hypothesized that this rise in achievement was due to the high unemployment rate at the time and the desirability of teaching as a stable career.

The Education Commission of the States, a group whose mission is to help states have access to and share information about improving education, recently identified several policies that could help relieve teacher shortages. One was to institute financial incentives, such as raising starting salaries for teachers (Aragon, 2016a). Table 5 shows the average and range of starting salaries for new teachers in school year 2012–13.

TABLE 5. Average salaries for public school teachers: School year 2012–13

Starting salary for new teachers	Amount
Average	$36,141
Range	$29,851–$48,631
Average salary for all teachers	**$56,383**

Source: National Education Association, at http://www.nea.org/home/2012-2013-average-starting-teacher-salary.html, for data on starting salaries; U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 2013,* at https://nces.ed.gov/programs/digest/d13/tables/dt13_211.60.asp, for data on average salaries.

SECTION 3: SELECTING THE MOST SUITABLE CANDIDATES FOR ITP PROGRAMS

Selection into teacher preparation programs varies quite a bit, based on the type of program and the organization offering it. Some states have put in place selection requirements for entry into teacher preparation. For example, the National Council on Teacher Quality (2015a) reports that:

- 5 states have only a minimum GPA requirement for admission,
- 1 state has a only testing requirement for admission,
- 18 states have a testing and minimum GPA requirement for admission, and
- 27 states have no testing or minimum GPA requirement for admission.

Providers of teacher preparation programs can set admission standards to a higher level than state minimum requirements if they choose to.

Numerous states are projecting a shortage of teachers to fill vacant jobs, although the exact scope of the problem may vary geographically or by subject area (Behrstock-Sherratt, 2016). However, as noted earlier, the concern over teacher shortages has prompted several states to relax their requirements for entry into the teaching profession, allowing anyone with a baccalaureate degree to get a teaching license without any preservice preparation (Will, 2016).

There is some research about the effect of more rigorous selection on teachers and teaching. Several studies suggest that teachers admitted to the selective Teach for America program achieve better outcomes for their students (Clark et al., 2013; Glazerman et al., 2010; Henry et al., 2013). Another study found that graduates of the Boston Teacher Residency, part of the National Center for Teacher Residencies (NCTR), were less effective at increasing student achievement in mathematics in their first year than were typical teachers, but by the fourth and fifth years, they were outperforming similar teachers in Boston Public Schools (Papay et al., 2012).

Several teacher residency programs—in which candidates are placed in urban schools with a mentor teacher to train for an entire year while taking coursework or teaching nights and weekends—are as selective as Teach for America. Overall, the 22 residency programs that are part of NCTR admit 11 percent of applicants, and, unlike Teach for America, they aim to prepare teachers to stay in the profession. In 2013–14, 82 percent of teachers trained at NCTR programs were still teaching after 5 years (Urban Teacher Residency United, 2014), compared with Teach for America's 5-year retention rate of 28 percent (Donaldson & Johnson, 2011).

There is also evidence that the academic ability of new teachers, as measured by standardized test scores, is rising. Fewer teachers are in the bottom third of their classes as measured by scores on the Scholastic Assessment Test (SAT), a college entrance exam, and at the same time the average SAT score for teacher candidates is rising (Barshay, 2015).

3.1 TRADITIONAL PROGRAMS

Traditional IHE-based preparation programs often accept undergraduates when they are college juniors, meaning at the beginning of their third of four years in the university. While a university sets admission standards for incoming freshmen, a department of education can set different standards for the upper classmen who seek entry into teacher preparation that are either higher or lower than the university's standards. The same generally holds true for graduate programs leading to a teaching certificate.

3.2 ALTERNATIVE PROGRAMS

While most teachers in traditional programs are prepared in undergraduate programs, the lion's share of teachers prepared in alternative programs have a baccalaureate degree when they enter teacher preparation.

Some alternative programs have rigorous entry requirements. For example, the residency programs that are part of the National Center for Teacher Residencies report that, on average, only 24 percent of applicants are admitted into their programs (Urban Teacher Residency United, 2015). Teach for America, another alternative certification program, accepts about 15 percent of its applicants (Rich, 2015). However, some alternative programs advertise that it is easy to meet their entry requirements. Texas Teachers, an alternative certification program, tells potential teachers on its website, "All you need is a four-year bachelor's degree in any major and a 2.5 GPA."[20]

Looking at all teacher candidates enrolled in a teacher preparation program in school year 2012–13, 89 percent were enrolled in a traditional program and 11 percent were enrolled in some type of alternative program (U.S. Department of Education, 2015b).

3.3 MISMATCH BETWEEN TEACHER WORKFORCE AND STUDENT POPULATION

One concern related to selecting candidates into teacher preparation is the mismatch between the race/ethnicity of the teacher workforce (see table 6) and the student population (see figure 2). For example, in 2011–12, about 80 percent of teachers were White, compared to only about half of the student population. Programs seeking to increase diversity among teacher candidates must not only cast a wider net in terms of recruitment but also ensure that selection requirements, including assessments, are not culturally, racially, or linguistically biased, unnecessarily keeping qualified candidates out.

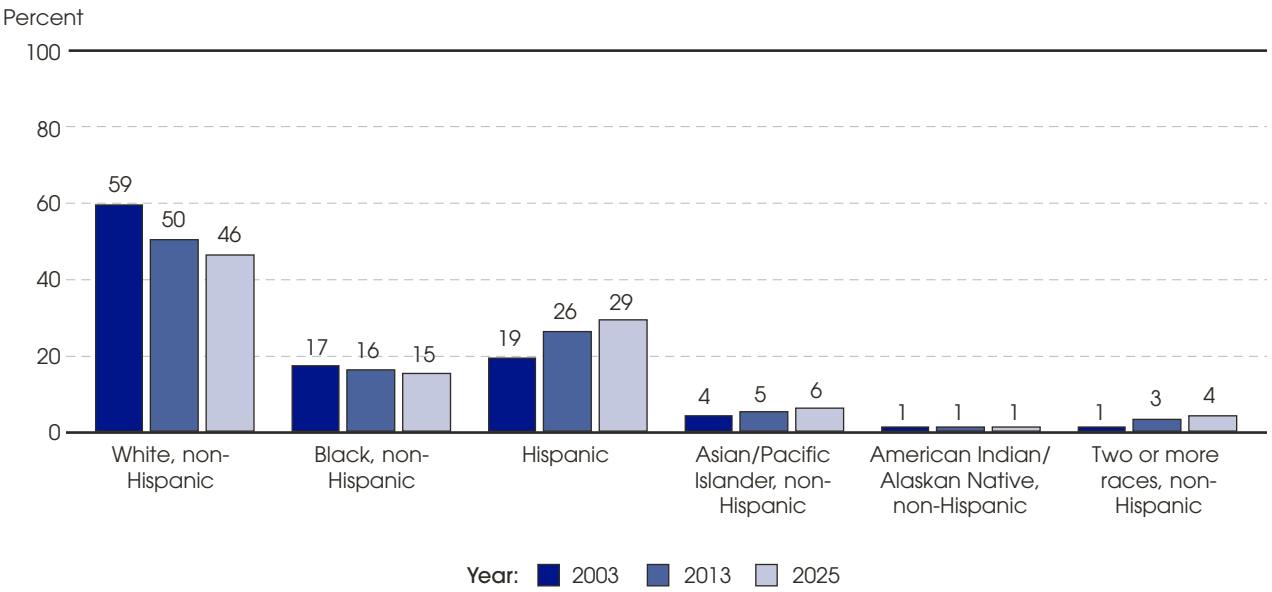
TABLE 6. Race/ethnicity of the teacher workforce: School year 2011–12

White	81%
Hispanic	8%
African American	7%
Other	4%

Source: U.S. Department of Education, National Center for Education Statistics, 2011–12 Schools and Staffing Survey, at https://nces.ed.gov/surveys/sass/tables_list.asp.

[20] See http://www.texasteachers.org/?_sm_au_=iVVjnZ4LDq0HTWfP.

FIGURE 2. Race/ethnicity of the student population: 2003, 2013, and 2025



Source: U.S. Department of Education, 2016b.

Forecasts of the student population predict that the number of students who are racial and ethnic minorities—specifically, students who are of Hispanic descent—will increase. These students, who are likely to be immigrants and to use a language other than English as their first language, will be considered English language learners (ELL) when then enter the U.S. school system. In school year 2012–13, 9.2 percent of students were considered English language learners[21] and 71 percent of ELL students spoke Spanish as their first language (see table 7).

TABLE 7. First language of ELL students: School year 2012-13

Spanish	71%
Chinese	4%
Vietnamese	3%
French/Haitian Creole	2%
All other languages	<1%

Source: Migration Policy Institute, ELL Information Center, at http://www.migrationpolicy.org/programs/ell-information-center.

Enrollment data for teacher preparation programs suggest that the future teacher workforce will be slightly more diverse than it is now, although not nearly as diverse as the student population. In school year 2012–13, 73 percent of the teacher candidates enrolled in teacher preparation programs were White (see table 8).

[21] See https://nces.ed.gov/fastfacts/display.asp?id=96.

TABLE 8. Race/ethnicity of enrollees in teacher preparation program: School year 2012–13

White	73%
Hispanic	11%
African American	10%
Other	6%

Source: U.S. Department of education, Office of Postsecondary Education. Higher Education Act, Title II Reporting System, at https://title2.ed.gov/Public/44077_Title_II_Issue_Brief_Enrollment.pdf.

Some states have put in place policies and practices that will attract teacher candidates to the profession, some with the specific goal of increasing the proportion of teacher candidates of color. Among the strategies that states are using are grants for tuition and loan forgiveness, early outreach to middle and high school students, and rewarding and incentivizing preparation providers to increase minority enrollment (Education Commission of the States, 2003).

SECTION 4: EQUIPPING PROSPECTIVE TEACHERS WITH THE RIGHT MIX OF WHAT THEY NEED TO KNOW AND DO

The course of study in initial teacher preparation varies widely, depending on the program and whether there are state requirements for coursework. For example, California requires traditional IHE-based programs to include a course on the U.S. Constitution. New York requires programs to include 6 hours of training on harassment and bullying. In Alaska, teacher preparation programs must include a course on Alaska studies. There are also differences in the course of study depending on whether the program is offered by a traditional or an alternative provider. In other words, there is no set of common courses or competencies shared by the teacher preparation community, just as there is no common curriculum for all student learning, although there are similarities between states and districts.

It is worth noting, however, that there have been attempts to get states to coalesce around common standards for students. For instance, the Common Core State Standards were created by work groups of educators at the request of state education leaders.[22] They became controversial when some critics called them national standards and complained that the federal government was meddling in local education issues (Baker, 2014). Since then, a number of states have made small revisions to the standards and have renamed them to reflect local interests.

There are also signs that the teacher preparation field may be coming to agreement about the capabilities that new teachers need. One group that is trying to organize the key teaching skills that every new teacher needs is TeachingWorks at the University of Michigan's School of Education. TeachingWorks has developed a list of 19 high-leverage practices, based on research and clinical experience, which can be seen as the fundamentals of teaching.[23] These practices are essential for all new teachers to know before they enter the classroom, according to TeachingWorks.

Doug Lemov, one of the founders of a charter school network, published the first edition of *Teach Like a Champion* in 2010; this was his initial attempt to document the specific skills and competencies that teachers need to have. The first edition listed 49 skills, while the revised edition, published in 2014, listed 62 skills (Lemov, 2014). Among the skills are call and response, change the pace, and strong voice.

4.1 TRADITIONAL ITPS

Typically, students in an undergraduate teacher preparation program will take courses in pedagogy, in educational psychology, and in specific subject matter. They will also likely take courses on teaching diverse

[22] See http://www.corestandards.org/about-the-standards/development-process/.
[23] See http://www.teachingworks.org/work-of-teaching/high-leverage-practices.

students, which may include the history and sociology of education. In nearly every state, candidates intending to teach in secondary schools must complete an academic major in the subject area in which they intend to teach, while minoring in education; in contrast, elementary teacher candidates major in education. One reason for this difference may be that elementary candidates usually take pedagogy courses in reading, math, science, and social studies because they will be teaching all of these to their students, whereas secondary teachers usually teach classes only in their specific subject area.

There are differences in coursework among traditional providers. At one university, undergraduates preparing to teach elementary school take a course on curriculum and assessment, while at another university, candidates in a similar degree program do not take such a course (Greenberg and Dugan, 2015).

In terms of clinical training, traditional preparation programs typically include a practicum, during which time teacher candidates observe in a classroom for several hours, a few days per week. Teacher candidates participate in practicums during the first three semesters of a four-semester program. The actual clinical training that takes place during the practicum might be more involved than observation, but it can vary depending on the program requirements, the inclination of the mentor teacher, and the desire of the teacher candidate. In 2014, the most common number of practicum hours reported by traditional teacher preparation programs—also known as the mode—was 100, and the median was 125 hours (U.S. Department of Education, 2016a).

Student teaching is a more intense period of clinical training that takes place at the end of teacher preparation. During student teaching, teacher candidates spend 4 or 5 days a week teaching in a classroom under the supervision of a mentor teacher. Student teaching usually lasts for one or two semesters.

Nearly every state specifies the minimum length of student teaching in traditional preparation programs. In 2014, the most common number of required student teaching hours reported by traditional teacher preparation programs was 600, with a median of 525 hours (U.S. Department of Education, 2016a).

Some states require that the mentor teacher supervising a student teacher meet specific criteria. Sometimes, mentor teachers are required to complete training before they can supervise a candidate. In some states, mentor teachers must be rated as effective or highly effective by the local teacher evaluation system. Again, this varies from state to state and program to program.

4.2 ALTERNATIVE ITPS

Alternative preparation programs also vary widely. As noted earlier, Teach for America and TNTP require their candidates to undergo intensive training for 6 to 8 weeks in the summer, including teaching summer school while being supervised by teacher educators. These candidates become classroom teachers after this training and receive continued, periodic supervision of their teaching while taking coursework, often at a nearby university, in pedagogy and subject matter.

There are also alternative programs called residencies that place teacher candidates in schools for an entire school year. Often, teacher residents work in schools 4 days a week and take coursework on the day they are not in a school. Residents often start the program by taking courses in the summer, do their clinical training and more coursework during the school year, and then take courses again in the summer. They are nearly always hired by the school district where they completed their residency and, while teaching, finish a graduate degree.

States generally require teachers in alternative programs to complete the same kind of coursework that teacher candidates receive in traditional programs. However, teachers in most alternative programs do not fully complete their coursework prior to becoming the teacher of record and being responsible for teaching in a classroom. Often, a teacher's first year as a candidate in alternative program is considered part of clinical training and is sometimes called an internship. During this year, the program and school district often commit to providing a certain number of observations of teaching, mentoring, and support as part of the clinical training. Some states mandate the number of observations that alternative programs must provide.[24]

In the past 5 years, several new graduate schools of education have opened, although not in institutions of higher education, which is why they are often perceived as alternative programs; they are considered traditional providers because they grant academic degrees in teaching. Perhaps the most well known is the Relay Graduate School of Education, which has its roots in training teachers for several charter school networks. Originally part of Hunter College in New York City, it has since become a stand-alone institution. The New York Board of Regents approved Relay as a graduate school in 2011. Relay has opened campuses in a dozen states since it was founded. A similar organization, although not affiliated with Relay, is the Sposato Graduate School of Education in Boston, which was approved by the state to offer the Master in Effective Teaching graduate degree in 2012.

Both Relay and Sposato are 2-year programs in which teacher candidates spend the first year working in schools under the supervision of teacher educators. Sposato calls this a residency year, during which time candidates assist in classrooms and take on other roles, such as tutoring students. Relay students, in their first year, experience what the graduate school calls a structured program of working in a school, supervised by a master resident advisor teacher. At the same time, teacher candidates in both graduate schools take classes in the evening and on weekends about how to deliver effective instruction. In the second year, the candidates become full-time lead teachers, joining the faculty of a K–12 school. At the same time, they complete their coursework and earn a degree. Both institutions emphasize that to receive a degree, teacher candidates must demonstrate that they have improved student achievement.

Another new graduate school, the Richard Gilder Graduate School, is located at New York City's Museum of Natural History; this institution was approved by the state in 2009 to offer a Master of Arts in Teaching degree in earth science. In this 1-year program, teacher candidates begin by working in the museum with groups of students in summer programs. Then they spend a residency year in a high-needs middle school or high school, assisting in teaching earth science. They co-teach, along with scientists and teachers, and take courses at the museum about teaching science. At the end of the year, they earn their degree.

4.3 INNOVATION IN TEACHER PREPARATION

For many providers, establishing strong partnerships with schools and districts is a relatively new activity. Often, in the past, providers were not particularly intentional about matching teacher candidates with student teaching assignments in schools and districts. What makes these new partnerships different is that providers and schools and districts work together in a deliberate way to select student teaching placements for candidates.

[24] As noted throughout, the teacher preparation landscape in the United States varies from provider to provider and from state to state. Thus, these observations might not be true for any particular preparation program or state.

There is research suggesting that the setting where the student teaching takes place and the quality of the mentor teacher, as well as other characteristics, are all important parts of a strong and collaborative partnership (Ronfeldt, 2015; Ronfeldt, 2012; Ronfeldt & Reininger, 2012).

Some programs have incorporated a "virtual classroom" into some courses. The classroom of TeachLivE, a technology created at the University of Central Florida, has a performer, known as an interactor, who takes on the role of the students, while the teacher candidate sees a classroom of five or six students on screen and a camera captures the candidate's interaction with the students. A teacher educator can design a scenario so that all candidates can practice a specific skill, like leading a class discussion, or practice classroom management. Students with disabilities can also be included in the virtual classroom.[25] As many as 80 schools of education are using TeachLivE in their programs, typically incorporating scenarios created by teacher educators. While there is research indicating that teachers can improve their teaching skills by practicing them in the simulator, research has not yet been carried out on the use of TeachLivE in ITP (Straub et al., 2015).

In 2015, the Woodrow Wilson National Fellowship Foundation created a new school of education that will be based entirely on competency-based training. The Woodrow Wilson Academy of Teaching and Learning, founded in partnership with the Massachusetts Institute of Technology (MIT), will offer master's degrees. Teacher candidates will complete a series of online courses and modules and demonstrate that they have mastered the skills and knowledge included in the training by completing an assessment. In some cases, the assessment will allow candidates to demonstrate their ability to execute instruction (Blumenstyk, 2015). Candidates will be able to move through the coursework and training at their own pace, and will earn a degree when they successfully complete all program requirements. MIT will use the academy as a site to conduct research on the curriculum and how teacher candidates learn and perform as they move through the course of study. The academy is backed by $7 million in initial funding from the Bill and Melinda Gates Foundation, the Amgen Foundation, and the Wilson Foundation. It will enroll about 25 candidates when it opens in the summer of 2017, and plans to grow to several hundred candidates in coming years (Thompsen, 2015).

[25] See http://teachlive.org/.

SECTION 5: ENSURING QUALITY DELIVERY OF ITP PROGRAMS

As noted in section 1 of this report, over the past few decades, the significance of teacher quality in improving student achievement has come into sharper focus, contributing to an increased interest in the role of teacher preparation programs. Policymakers and stakeholders are scrutinizing the quality and rigor of teacher preparation programs, including the standards used to evaluate their performance (DeMonte, 2015).

States are responsible for approving teacher preparation programs, and the process varies from state to state. However, their standards and processes are often similar to those of the Council for the Accreditation of Educator Preparation (CAEP), the national accreditor.

A 2016 report prepared by Teacher Prep Analytics for the Council of Chief State School Officers looked at teacher preparation approval policies across all states and concluded that many states were actively reviewing and revising their program policies and practices. Most states were including both input and output data in their reviews. Among the input data were the quality and duration of clinical training, the strength of partnerships with K–12 schools, and demographic and academic data about those accepted into teacher preparation. Among the output data were satisfaction survey data from hiring principals and graduates, evaluation measures of instruction and impact on student achievement, graduates' retention in teaching, and scores from licensure exams.

The U.S. Department of Education, in *Preparing and Credentialing the Nation's Teachers,* reported that 22 states had never flagged a program as being low performing or at risk (U.S. Department of Education, 2016a). States decide what kind of evidence indicates that a program falls into these categories.

5.1 REQUIRING NATIONAL ACCREDITATION FROM CAEP

A number of states require ITP providers to earn national accreditation from CAEP; some states require all providers to be accredited, while others require a subset of providers to be accredited (see table 9).

TABLE 9. State requirements for CAEP accreditation of ITP providers

Require all ITPs to be nationally accredited	Require public ITPs to be nationally accredited	Require ITPs of certain size to be accredited
Alaska, Arkansas, Delaware, Hawaii, Louisiana, Michigan , New Jersey, New York, Ohio, Oregon, Utah, West Virginia, Wyoming	Mississippi, North Carolina (NC University System), North Dakota, South Carolina	Maryland (EPPs with over 2,000 FTE)

Source: Personal communication, J. Carinci, December 8, 2016.

To earn CAEP accreditation, providers must submit annual data about their teacher candidates and completers, including outcome data related to the skills of completers from the perspective of hiring principals. Every 7 years, accredited programs must complete a report that includes pedagogical artifacts (e.g., lesson plans, student work samples, and videos) and submit it to CAEP. A team of reviewers from CAEP reads and assesses the report and then conducts a site visit. The CAEP team is usually accompanied on the site visit by state education officials, who also receive the annual reporting data that providers send to CAEP. After the site visit, the review team sends a report with its findings to the CAEP accreditation council, which makes recommendations for accreditation. A committee also reviews the provider's annual data reporting and reports on it to the accreditation council.[26]

In the fall of 2016, the first group of ITPs sought accreditation from CAEP under all of the standards. Of the 21 providers seeking accreditation, 17 earned it without stipulation.[27] The other four providers must provide evidence they have met all five standards through a document review or site visit within the next 2 years. The two standards that the providers who failed accreditation found difficult to meet were standards 3 and 4: the first requires providers to demonstrate selectivity by admitting candidates with an overall GPA of 3.0; the second involves collecting and providing data showing that graduates have an impact on student learning (Iasevoli, 2016).

ITPs can pursue CAEP accreditation even if they are not required to do so by the state. The CAEP standards are included in appendix A of this report.

5.2 STATE APPROVAL BY STATE-SPECIFIC PROCESSES

Many states have unique, state-specific program approval processes. Washington State, for example, requires teacher preparation providers to submit annual reports on outcome measures—such as how much teacher candidates learn and teacher candidates' impact on student learning—and data on the programs themselves, such as clinical placements and candidate characteristics. These data are used for assessing program quality.[28]

Florida recently adopted rules to guide its approval of teacher preparation, including annual data reporting (with the goal of meeting specific benchmarks) and site visits by state officials every 5 years.[29] Other states have different policies regarding site visits: some send a team to visit providers at regular intervals, commonly every 5 to 7 years; some conduct a site visit only if their annual reporting data indicate that a provider is not effective at preparing new teachers. In addition, some states ask providers to show evidence that the programs include specific opportunities for candidates to use technology in teaching, to teach students from diverse backgrounds, and to teach English language learners.

A small but growing group of states is beginning to use an inspection-based model for assessing and ensuring quality in teacher preparation. Teacher Prep Inspection-US (TPI-US) has based its process for inspections on the model used in the United Kingdom and other nations (Sawchuk, 2014a). Louisiana is currently piloting

[26] For a description and discussion of the accreditation process, see http://caepnet.org/accreditation/about-accreditation/what-is-accreditation.
[27] See http://blogs.edweek.org/edweek/teacherbeat/CAEP_REPORT.pdf
[28] See http://program.pesb.wa.gov/standards/standard-2.
[29] See https://www.flrules.org/Gateway/View_notice.asp?id=1562041.

this inspection process for all its providers.[30] In addition, TPI-US has been funded by the Bill and Melinda Gates Foundation to perform inspections for the organizations that were awarded grants to improve teacher training as Teacher Preparation Transformation Centers.[31]

Commonly, five inspectors spend 3 to 5 days visiting providers and assessing their preparation in four aspects of teacher training:

- selection of candidates,
- preparation in content knowledge and teaching skills,
- quality of clinical practice (e.g., student teaching), and
- strength of program performance management.

The inspectors observe student teachers and sit in when university supervisors give feedback on the candidates' performance. They also observe university teacher preparation courses and interview candidates, program leaders, faculty, recent graduates, and educators in districts where candidates do their clinical training. At the end of the visit, the inspection team gives the program leaders an oral summary of its findings and a brief written report,[32] which can be used by states for program approval and by program leaders to improve their teacher training.

5.3 DATA DASHBOARDS

As part of their approval and accountability activities, many states are now publishing data about teacher preparation providers on their websites in an effort to provide transparency about the quality of providers. The amount of data and the presentation vary by state.

Delaware publishes data in five domains—recruitment, candidate performance, placement, retention, and graduate performance—and includes two or three indicators in each domain. The state intends to add information about hiring principals' and program graduates' perceptions in the future. From the main page, which summarizes ratings for each program, a viewer can jump to a more detailed report for each program by clicking on a link.[33]

Louisiana creates individual reports for each provider, which are linked to a page on the state website. Each report includes information about candidate and graduate performance, the retention of graduates in the teacher workforce, and other data.[34]

5.4 NEW FEDERAL DATA REPORTING REGULATIONS

In October 2016, after 5 years of deliberation, the U.S. Department of Education released new regulations mandated by HEA on the collection of teacher preparation data. The regulations would increase the amount of data that must

[30] See https://www.louisianabelieves.com/docs/default-source/teaching/on-site-review-frequently-asked-questions.pdf?sfvrsn=4.

[31] See http://www.gatesfoundation.org/Media-Center/Press-Releases/2015/11/Teacher-Prep-Grants.

[32] A sample report from a 2014 site visit to Texas Tech University's teacher preparation programs is available at https://www.depts.ttu.edu/education/institutional-research/documents/elementary-education-inspectorate-report-2014.pdf.

[33] See the main state page here: http://www.doe.k12.de.us/cms/lib09/DE01922744/Centricity/Domain/398/ED_PREP_SUMMARY_TABLE_LAND.pdf.

[34] See http://www.regents.la.gov/page/2014-teacher-preparation-data-dashboards.

be reported by ITPs and states to the federal government. Data are currently reported on the department's Title II website, https://title2.ed.gov/Public/Home.aspx, for academic years 2010–11 through 2013–14.

In increasing the amount of data reported, the department's goal would be to help teacher candidates get the information they need to choose the most suitable training program, spur accountability by bringing transparency to the performance of teacher preparation programs, and support providers' efforts to implement continuous improvement. Among the data that the department highlighted in its press release about the release of the new regulations:

- placement and retention rates of graduates in their first 3 years of teaching, including placement and retention in high-need schools;
- feedback from graduates and their employers on the effectiveness of program preparation;
- student learning outcomes measured by novice teachers' student growth, teacher evaluation results, and/or another state-determined measure that is relevant to student outcomes, including academic performance, and that meaningfully differentiates among teachers; and
- other program characteristics, including assurances that the program has specialized accreditation or graduates candidates with content and pedagogical knowledge, and quality clinical preparation, who have met rigorous exit requirements.[35]

States would also be required to rate all teacher preparation programs as effective, at risk, or low performing. Programs that received a rating of less than effective in two of the three previous years would lose federal approval to offer TEACH grants to their teacher candidates.

These data reporting regulations never took effect, though. In March 2017, President Trump signed a bill rescinding the new regulations.[36]

[35] See https://www.ed.gov/news/press-releases/education-department-releases-final-teacher-preparation-regulations.

[36] See http://blogs.edweek.org/edweek/teacherbeat/2017/03/trump_signs_bill_scrapping_tea.html.

SECTION 6: CERTIFYING AND SELECTING NEW TEACHERS

6.1 CERTIFICATION AND LICENSURE

States are responsible for setting policies for teacher certification, including determining appropriate preservice teacher training, choosing certification or licensure assessments, and setting the minimum score needed to pass the certification assessment. This means that certification isn't technically the responsibility of a preparation program; it occurs after the candidate graduates from the certification program, but prior to becoming a classroom teacher. Every state reports that it has standards in place that a new teacher must meet in order to be certified.[37]

Certification assessments function both as a capstone event at the end of teacher education and as a threshold that must be successfully crossed to enter the teaching profession. They serve as a demonstration that a teacher candidate has been well prepared by a training program and as a marker that the candidate is capable of delivering competent teaching to a state's students.

Most states have "licensure bands" that span many grades, so, for example, a teacher who does all of her clinical work in a fifth-grade classroom may find that her first job is as a kindergarten teacher. Eighteen states offer elementary teacher certification for kindergarten through sixth grade, 4 states certify teachers from prekindergarten through sixth grade, and 14 states certify elementary educators for kindergarten through eighth grade or higher. For example, Alabama offers teaching certificates for preschool–grade 3, kindergarten–grade 6, grades 4–8, grades 6–12, and preschool–grade 12.[38] Kansas offers certificates for kindergarten–grade 6, grades 5–9, and grades 7–12.[39] Specific grade bands for licensure differ from state to state. In addition, teachers can earn additional endorsements to teach in specific areas (for example, special education or career and technical education).

6.2 ASSESSMENTS FOR CERTIFICATION

There are more than 100 different certification assessments: some are for specific subjects for secondary teachers; some are for specialties, such as special education; and some are more general, covering teaching and learning across subjects. Many states use the Praxis II series offered by the Educational Testing Service (ETS) as their licensure assessment, but passing scores differ by state. For example, the passing score in Idaho and

[37] See the data tools at https://title2.ed.gov/Public/Home.aspx.

[38] See https://www.alsde.edu/sec/ec/Pages/iwanttobeteacher-faq.aspx?navtext=I%20Want%20to%20be%20a%20Teacher.

[39] See appendix B in this report.

Alaska for the biology content knowledge exam is 139, while in Delaware and Rhode Island it is 157.[40] Other states, such as Michigan, use a unique assessment designed by educators and officials, usually in the state where it will be administered.[41] Both Praxis and similar assessments commonly include multiple-choice items and essay questions. While the Praxis assessments are taken on computer, other tests, such as Michigan's, can be taken on paper or on computer.[42]

Eighteen states are piloting or using assessments that are focused on professional practices that teachers must demonstrate in classrooms. One of these assessments, edTPA, is already used in New York and other states, and the Praxis Performance Assessment for Teachers (PPAT) is currently being field-tested. These assessments ask for a portfolio of lesson plans, student work, and video of the candidate teaching students. PPAT is an assessment designed by ETS, which also scores each test, while edTPA is delivered and scored by Pearson Education.

ETS is collaborating with TeachingWorks at the University of Michigan on a new certification assessment called the National Observational Teaching Exam (NOTE). NOTE is a performance assessment that consists of several standardized teaching situations. Teacher candidates are each given the same description and content of the lesson to be taught, and each candidate then teaches that lesson to a virtual classroom of students.[43] Each lesson is timed, and candidates are directed to pay attention to specific instructional practices. Currently, ETS and TeachingWorks are conducting a pilot study of the first NOTE assessments in elementary-grade reading and mathematics, with the first assessments projected to be ready in fall 2017.

6.3 PATHWAYS TO FULL CERTIFICATION

Many states have different pathways to certification for teachers who obtain their training from traditional providers rather than from alternative providers, particularly those whose teachers enter the classroom before they have completed their training.

Typically, a teacher prepared in a traditional program follows this path:

- To earn a basic license:
  - Complete a preparation program, including student teaching
  - Pass an exam, often a mix of content knowledge and pedagogical knowledge
  - Complete state-specific courses (for example, Educator Ethics)
- After teaching and completing other requirements, obtain a full license

Teachers in alternative programs often follow a path that has an extra step before they earn a basic license:

- To earn a temporary license:
  - Enroll in a program
  - Complete requirements in the summer and pass exams
  - While teaching, complete the requirements of the program

[40] These scores come from a lengthy document published online by ETS, showing state passing scores on all Praxis II assessments. See https://www.ets.org/s/praxis/pdf/passing_scores.pdf.

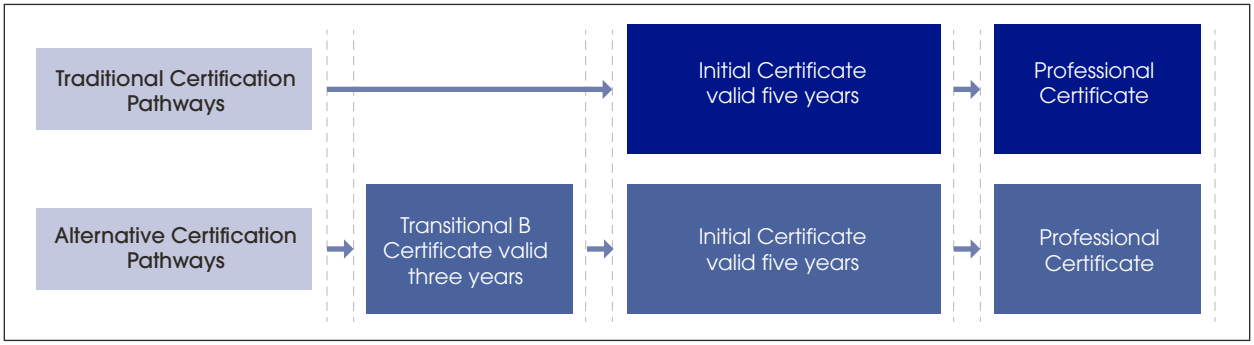
[41] Appendix B lists the licensure assessments (and their passing scores) for 18 states: Alabama, Arkansas, Delaware, Hawaii, Kansas, Louisiana, Michigan, Montana, Nebraska, New Hampshire, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Washington, West Virginia, and Wyoming. In addition, the appendix includes links to state policies and regulations governing educator licensure.

[42] See http://www.mttc.nesinc.com/PDFs/MI_SG_frontmatter.pdf.

[43] The virtual classroom was designed by TeachLivE at the University of Central Florida.

- To earn a basic license:
  - Complete the remaining requirements for traditional candidates
- After teaching and completing other requirements, obtain a full license

For example, New York State has the following certification steps based on the pathways:



Typically, once a teacher has received a professional license, it is possible to teach under that license indefinitely. There may be some professional learning requirements to fulfill at various intervals to maintain the license, but there is not a requirement to obtain a more advanced license.

Nonetheless, every state has a different licensure process, and all but five states have a multi-tiered licensure system that allows teachers to move up the licensure ladder. Depending on the state and the teacher contract agreed upon with the local union, a teacher who moves up a step to, say, a teacher leader license, might also receive a salary increase.

However, becoming a teacher leader doesn't necessarily require a new license. In New York City, teachers in the school district can take on roles that add responsibility to support and train classroom teachers while still remaining a classroom teacher.[44] New York City teachers who are selected to become teacher leaders receive a salary increase of as much as $20,000 annually.

To become a school leader or administrator, a teacher would typically take a series of courses, sometimes complete a school leader internship or some clinical training, and then pass a school leader licensure assessment.

6.4 RECIPROCITY AND RECOGNITION OF LICENSES BETWEEN STATES

Forty-nine states and territories have signed a reciprocity agreement created by the National Association of State Directors of Teacher Education and Certification (NASDTEC)[45] to recognize each other's teacher licenses. Under the agreement, an out-of-state, licensed teacher may first receive a temporary license that allows the teacher to take a teaching position in a reciprocating state while completing additional requirements. For example, an out-of-state teacher may have been licensed in a state that uses an assessment not recognized by the state where the teacher would like to work. In that case, the teacher must take a new assessment before obtaining full certification. Out-of-state, licensed teachers wishing to teach in California

[44] See http://schools.nyc.gov/NR/rdonlyres/540F9BAA-1C59-4FA1-A283-4735238CC078/0/TCPFAQ_published20150710.pdf.
[45] See http://www.nasdtec.net/?page=Interstate.

are required to complete an induction program and either have an endorsement to teach English language learners or complete a course on teaching English language learners.[46]

6.5 SELECTION OF TEACHERS INTO TEACHING

New teachers are hired by school districts, and the hiring process varies from district to district. In some districts, human resources officials sort through applications and send a selected group to principals with opening in their schools. Although there is no centralized source of information about hiring practices, a recent report by the Center for American Progress—based on a survey of more than 100 school districts—offers a look at how teachers are hired in the United States (Konoske-Graf, Partelow, & Benner, 2016).

The report found that:

- More than 90 percent of districts require a written application, but only 13 percent require a demonstration of teaching or a sample performance lesson;
- One in three districts do not require an interview with the hiring principal;
- Fewer than half of districts send representatives to job fairs at university-based teacher preparation providers, but most districts recruit teachers from local preparation providers
- Few districts recruit teachers from other states.

School districts are beginning to make a change related to the timing of when they hire teachers. Until recently, school districts often delayed hiring teachers until the summer before the new school year, and teachers' contracts often allowed them to delay resigning their jobs until mid-summer. But districts are starting to use historical data about job needs to target hiring new teachers earlier. The Cleveland, OH, school district has reviewed data about its new teachers and found that those hired prior to June are more effective than those hired after June (Flanigan, 2016). Similarly, two researchers who analyzed 10 years' worth of data from a large school district about the timing of teacher hiring found that teachers hired after the beginning of the school year were less effective at raising student achievement than those hired before school started (Papay & Kraft, 2016).

The selection process has been complicated by teacher shortages in some states and districts, leading some states to relax certification requirements to increase the pool of potential teachers.

[46] See http://www.ctc.ca.gov/credentials/leaflets/cl561.pdf.

SECTION 7: SUPPORTING BEGINNING TEACHERS

7.1 DEFINITION OF A NEW TEACHER

A new teacher is one who is taking a first job in teaching. In the case of traditionally prepared teachers, this means a new teacher who has completed a preparation program. However, many states include teachers who are hired into their first job as teacher of record while they are still completing an alternative preparation program. For example, Arkansas defines a new teacher as "any licensed teacher of record with less than one school year of classroom teaching experience in a public school, other Arkansas agency, or organization requiring an Arkansas Educator's License. The classroom teaching experience does not include student internship or substitute teaching. All new educators are referred to as novice teachers, regardless of area of specialty…."[47]

7.2 INDUCTION PROGRAMS

The institutions and organizations that support beginning teachers are possibly more varied than those that train preservice teachers, and policies vary as well. Twenty-nine states require support for beginning teachers (Goldrick, 2016). In other states, districts can implement an induction program if they choose to. In addition, a few traditional programs support their graduates into their first year of teaching, but there is no comprehensive data or information on the number of providers that have such a program in place.

Of the 29 states that require some type of support for beginning teachers, 15 require support beyond the first year of teaching, according to a report from the New Teacher Center (Goldrick, 2016). The report also says that 30 states have policies that describe the qualities that an acceptable mentor teacher in such a program ought to have.

California is one of the 29 states that require an induction program; beginning teachers there must take a 2-year program called Beginning Teacher Support and Assessment (BTSA).[48] The program, which has been in existence for about two decades, is delivered by districts according to state standards.

Kentucky recently introduced an induction program called the Kentucky Teacher Internship Program (KTIP). Beginning teachers who were prepared in a traditional preparation program spend their first year in KTIP being evaluated and mentored by an experienced teacher in their school or district and by a faculty member from a school of education.[49] At the end of the beginning teacher's first year, these two support faculty determine whether the novice should be recommended for a professional certification or spend another year as an intern.

[47] See http://www.arkansased.gov/divisions/human-resources-educator-effectiveness-and-licensure/office-of-educator-effectiveness/teacher-inductionmentoring.

[48] See the BTSA website: http://www.btsa.ca.gov/.

[49] See http://www.epsb.ky.gov/internships/index.asp and http://www.lrc.ky.gov/kar/016/007/010.htm.

7.3 SUPPORT IN ALTERNATIVE PROGRAMS

Four states—Alabama, Florida, Mississippi, and Tennessee—require induction only for alternative-route teachers. Arkansas requires 1 year of induction for all teachers and 2 years for alternative-route teachers (Goldrick, 2016). Alternative providers often include support during a candidate's first year of teaching, while he is completing coursework. For example, both Teach for America and The New Teacher Project (TNTP) provide their own staff to help support their teachers' first year following the summer program. Others, like the American Board for the Certification of Teacher Excellence (ABCTE), have candidates take courses online, pass an examination, and get hired for a job. At that point, the new teacher is assigned a mentor by the school administrator and observed teaching four times during the school year.[50] All of these programs could be considered support for first-year teachers, despite their differences. Some alternative preparation providers that offer minimal training to a novice the summer before she takes over a classroom offer extensive support and training throughout the teacher's first year and, possibly, into later years.

TNTP recently reported on its program to support and evaluate beginning teachers and, through its own data, concluded that the first year in a teacher's career is the most important; during this time, a teacher can either grow or stall professionally (TNTP, 2013). That trajectory can influence whether teachers improve their instruction or leave for another profession. TNTP gathered data on the first-year teachers who had completed its summer program, entered the profession as the teacher of record, and continued to receive support and mentoring through the TNTP program. Using an instrument developed by its staff, TNTP measured the improvement of each new teacher in several key classroom practices that revealed the variation in teacher ability, and this led to a revamping of its training program (TNTP, 2014).

7.4 INNOVATION IN INDUCTION

In 2016, Arkansas introduced an induction program for new teachers called the Novice Teacher Mentoring system. All new teachers are assigned to a mentor teacher who helps them design a professional growth plan. Then the mentor supports the new teacher, in part by observing the new teacher and offering feedback.

As part of the program, new teachers and mentors work together through a set of online resources called "Survive and Thrive."[51] As new teachers improve their skills, they can earn microcredentials to document their achievement. Each microcredential asks the new teacher to demonstrate her teaching knowledge and skill in a particular teaching activity or practice. These online modules first describe and offer resources to learn about the teaching activity being assessed. Then, when the teacher feels ready, she takes an assessment related to the activity practice that may include answering test questions, writing a case study, or uploading a video of her own teaching. The assessment materials are assessed by more experienced educators, who score the teacher on the microcredential. The new teacher might pass and earn a credential related to the knowledge or skill or might be required to repeat the assessment.[52]

[50] See the ABCTE website: http://abcte.org/certification/mentoring/.

[51] See http://www.arkansased.gov/divisions/human-resources-educator-effectiveness-and-licensure/office-of-educator-effectiveness/teacher-inductionmentoring.

[52] See http://www.onlineschoolscenter.com/micro-credentials/.

SECTION 8: CONCLUSION

Even a cursory look at ITP programs in different nations reveals differences in how countries approach the work of teaching teachers. In the United States, that approach has been greatly influenced by the nation's history and growth. Consider that from 1875 to 2000, the number of teachers in the United States increased by more than 3 million to meet the demands of a growing nation.[53] States used their local control of education to shape their institutions to meet the needs of the local context.

This has led to great diversity in the administration, monitoring, and implementation of initial teacher preparation. It has also allowed for innovation. For example, the United States has 684 organizations that operate alternative teacher preparation programs (U.S. Department of Education, 2016a). Some of the best of these have helped inspire change and improvement at the more than 2,000 traditional ITP providers.

There have, in the past 15 years, been considerable efforts to strengthen teacher preparation in all kinds of programs and to take advantage of the skill and experience of the nation's larger workforce. There have been successful efforts to use technology in teaching, including the design of a virtual classroom where teachers can practice instruction with avatars, just as pilots practice landing a plane in a simulator before they do it in an actual airplane.

Throughout much of the 20th century, teacher training was not the focus of efforts to improve teaching and learning. But now it is, and as a result, many in the United States involved in the work of preparing teachers are being challenged by this new focus and, at the same time, are hopeful about its results.

[53] See page 4 of this report.

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APPENDIX A:

COUNCIL FOR THE ACCREDITATION OF EDUCATOR PREPARATION (CAEP) STANDARDS

STANDARD 1: CONTENT AND PEDAGOGICAL KNOWLEDGE

The provider ensures that candidates develop a deep understanding of the critical concepts and principles of their discipline and, by completion, are able to use discipline-specific practices flexibly to advance the learning of all students toward attainment of college- and career-readiness standards.

Candidate Knowledge, Skills, and Professional Dispositions

1.1 Candidates demonstrate an understanding of the 10 InTASC standards at the appropriate progression level(s) in the following categories: the learner and learning; content; instructional practice; and professional responsibility.

Provider Responsibilities

1.2 Providers ensure that completers use research and evidence to develop an understanding of the teaching profession and use both to measure their P-12 students' progress and their own professional practice.

1.3 Providers ensure that completers apply content and pedagogical knowledge as reflected in outcome assessments in response to standards of Specialized Professional Associations (SPA), the National Board for Professional Teaching Standards (NBPTS), states, or other accrediting bodies (e.g., National Association of Schools of Music – NASM).

1.4 Providers ensure that completers demonstrate skills and commitment that afford all P-12 students access to rigorous college- and career-ready standards (e.g., Next Generation Science Standards, National Career Readiness Certificate, Common Core State Standards).

1.5 Providers ensure that completers model and apply technology standards as they design, implement and assess learning experiences to engage students and improve learning; and enrich professional practice.

STANDARD 2:

CLINICAL PARTNERSHIPS AND PRACTICE

The provider ensures that effective partnerships and high-quality clinical practice are central to preparation so that candidates develop the knowledge, skills, and professional dispositions necessary to demonstrate positive impact on all P-12 students' learning and development.

Partnerships for Clinical Preparation

2.1 Partners co-construct mutually beneficial P-12 school and community arrangements, including technology-based collaborations, for clinical preparation and share responsibility for continuous improvement of candidate preparation. Partnerships for clinical preparation can follow a range of

forms, participants, and functions. They establish mutually agreeable expectations for candidate entry, preparation, and exit; ensure that theory and practice are linked; maintain coherence across clinical and academic components of preparation; and share accountability for candidate outcomes.

Clinical Educators

2.2 Partners co-select, prepare, evaluate, support, and retain high-quality clinical educators, both provider- and school-based, who demonstrate a positive impact on candidates' development and P-12 student learning and development. In collaboration with their partners, providers use multiple indicators and appropriate technology-based applications to establish, maintain, and refine criteria for selection, professional development, performance evaluation, continuous improvement, and retention of clinical educators in all clinical placement settings.

Clinical Experiences

2.3 The provider works with partners to design clinical experiences of sufficient depth, breadth, diversity, coherence, and duration to ensure that candidates demonstrate their developing effectiveness and positive impact on all students' learning and development. Clinical experiences, including technology-enhanced learning opportunities, are structured to have multiple performance-based assessments at key points within the program to demonstrate candidates' development of the knowledge, skills, and professional dispositions, as delineated in Standard 1, that are associated with a positive impact on the learning and development of all P-12 students.

STANDARD 3:

CANDIDATE QUALITY, RECRUITMENT, AND SELECTIVITY

The provider demonstrates that the quality of candidates is a continuing and purposeful part of its responsibility from recruitment, at admission, through the progression of courses and clinical experiences, and to decisions that completers are prepared to teach effectively and are recommended for certification. The provider demonstrates that development of candidate quality is the goal of educator preparation in all phases of the program. This process is ultimately determined by a program's meeting of Standard 4.

Plan for Recruitment of Diverse Candidates who Meet Employment Needs

3.1 The provider presents plans and goals to recruit and support completion of high-quality candidates from a broad range of backgrounds and diverse populations to accomplish their mission. The admitted pool of candidates reflects the diversity of America's P-12 students. The provider demonstrates efforts to know and address community, state, national, regional, or local needs for hard-to-staff schools and shortage fields, currently, STEM, English-language learning, and students with disabilities.

Admission Standards Indicate That Candidates Have High Academic Achievement And Ability

3.2 The provider sets admissions requirements, including CAEP minimum criteria or the state's minimum criteria, whichever are higher, and gathers data to monitor applicants and the selected pool of candidates. The provider ensures that the average grade point average of its accepted cohort of candidates meets or exceeds the CAEP minimum of 3.0, and the group average performance on nationally normed ability/ achievement assessments such as ACT, SAT, or GRE:

- is in the top 50 percent from 2016-2017;
- is in the top 40 percent of the distribution from 2018-2019; and
- is in the top 30 percent by 2020.

If any state can meet the CAEP standards, as specified above, by demonstrating a correspondence in scores between the state-normed assessments and nationally normed ability/achievement assessments, then educator preparation providers from that state will be able to utilize their state assessments until 2020. CAEP will work with states through this transition.

Over time, a program may develop a reliable, valid model that uses admissions criteria other than those stated in this standard. In this case, the admitted cohort group mean on these criteria must meet or exceed the standard that has been shown to positively correlate with measures of P-12 student learning and development.

The provider demonstrates that the standard for high academic achievement and ability is met through multiple evaluations and sources of evidence. The provider reports the mean and standard deviation for the group.

[Board amendment adopted February 13, 2015] CAEP will work with states and providers through this transition regarding nationally or state normed assessments. Alternative arrangements for meeting this standard (beyond the alternative stated above for "a reliable, valid model that uses admissions criteria other than those stated in this standard") will be approved only under special circumstances. The CAEP staff will report to the Board and the public annually on actions taken under this provision. In all cases, EPPs must demonstrate the quality of the admitted candidates.

Additional Selectivity Factors

3.3 Educator preparation providers establish and monitor attributes and dispositions beyond academic ability that candidates must demonstrate at admissions and during the program. The provider selects criteria, describes the measures used and evidence of the reliability and validity of those measures, and reports data that show how the academic and non-academic factors predict candidate performance in the program and effective teaching.

Selectivity During Preparation

3.4 The provider creates criteria for program progression and monitors candidates' advancement from admissions through completion. All candidates demonstrate the ability to teach to college- and career-ready standards. Providers present multiple forms of evidence to indicate candidates' developing content knowledge, pedagogical content knowledge, pedagogical skills, and the integration of technology in all of these domains.

Selection At Completion

3.5 Before the provider recommends any completing candidate for licensure or certification, it documents that the candidate has reached a high standard for content knowledge in the fields where certification is sought and can teach effectively with positive impacts on P-12 student learning and development.

3.6 Before the provider recommends any completing candidate for licensure or certification, it documents that the candidate understands the expectations of the profession, including codes of ethics, professional standards of practice, and relevant laws and policies. CAEP monitors the development of measures that assess candidates' success and revises standards in light of new results.

STANDARD 4:

PROGRAM IMPACT

The provider demonstrates the impact of its completers on P-12 student learning and development, classroom instruction, and schools, and the satisfaction of its completers with the relevance and effectiveness of their preparation.

Impact on P-12 Student Learning and Development

4.1 The provider documents, using multiple measures, that program completers contribute to an expected level of student-learning growth. Multiple measures shall include all available growth measures (including value-added measures, student-growth percentiles, and student learning and development objectives) required by the state for its teachers and available to educator preparation providers, other state-supported P-12 impact measures, and any other measures employed by the provider.

Indicators of Teaching Effectiveness

4.2 The provider demonstrates, through structured and validated observation instruments and student surveys, that completers effectively apply the professional knowledge, skills, and dispositions that the preparation experiences were designed to achieve.

Satisfaction of Employers

4.3 The provider demonstrates, using measures that result in valid and reliable data and including employment milestones such as promotion and retention, that employers are satisfied with the completers' preparation for their assigned responsibilities in working with P-12 students.

Satisfaction of Completers

4.4 The provider demonstrates, using measures that result in valid and reliable data, that program completers perceive their preparation as relevant to the responsibilities they confront on the job, and that the preparation was effective.

STANDARD 5:

PROVIDER QUALITY ASSURANCE AND CONTINUOUS IMPROVEMENT

The provider maintains a quality assurance system comprised of valid data from multiple measures, including evidence of candidates' and completers' positive impact on P-12 student learning and development. The provider supports continuous improvement that is sustained and evidence-based, and that evaluates the effectiveness of its completers. The provider uses the results of inquiry and data collection to establish priorities, enhance program elements and capacity, and test innovations to improve completers' impact on P-12 student learning and development.

Quality and Strategic Evaluation

5.1 5.1 The provider's quality assurance system is comprised of multiple measures that can monitor candidate progress, completer achievements, and provider operational effectiveness. Evidence demonstrates that the provider satisfies all CAEP standards.

5.2 The provider's quality assurance system relies on relevant, verifiable, representative, cumulative and actionable measures, and produces empirical evidence that interpretations of data are valid and consistent.

Continuous Improvement

5.3 The provider regularly and systematically assesses performance against its goals and relevant standards, tracks results over time, tests innovations and the effects of selection criteria on subsequent progress and completion, and uses results to improve program elements and processes.

5.4 Measures of completer impact, including available outcome data on P-12 student growth, are summarized, externally benchmarked, analyzed, shared widely, and acted upon in decision-making related to programs, resource allocation, and future direction.

5.5 The provider assures that appropriate stakeholders, including alumni, employers, practitioners, school and community partners, and others defined by the provider, are involved in program evaluation, improvement, and identification of models of excellence.

APPENDIX B:

LICENSURE ASSESSMENTS AND PASSING SCORES IN 18 STATES

State	Licensure Assessment Policy	Source
Alabama	The Alabama Educator Certification Assessment Program (AECAP) consists of the basic skills assessments and Praxis® Subject Assessments. Applicants seeking certification must complete current requirements, as well as those seeking to reinstate a certificate lapsed for more than 12 months. The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams. *General Testing Cut Scores* All P–3 Teaching Fields ▪ Principles of Learning and Teaching: Grades K–6: 145 All K–6 Teaching Fields ▪ Principles of Learning and Teaching: Grades K–6: 145 All 4–8 Teaching Fields ▪ Principles of Learning and Teaching: Grades K–6: 145, or ▪ Principles of Learning and Teaching: Grades 7–12: 153 All 6–12 Teaching Fields ▪ Principles of Learning and Teaching: Grades 7–12: 153 All P–12 Teaching Fields ▪ Principles of Learning and Teaching: Grades K–6: 145, or ▪ Principles of Learning and Teaching: Grades 7–12: 153 ▪ K–6 Collaborative Special Education and 6–12 Collaborative Special Education ▪ Principles of Learning and Teaching: Grades K–6: 145, or ▪ Principles of Learning and Teaching: Grades 7–12: 153	https://www.ets.org/praxis/al/

State	Licensure Assessment Policy	Source
Alabama	The Alabama Educator Certification Assessment Program (AECAP) consists of the basic skills assessments and Praxis® Subject Assessments. Applicants seeking certification must complete current requirements, as well as those seeking to reinstate a certificate lapsed for more than 12 months. The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams. *General Testing Cut Scores* All P–3 Teaching Fields ▪ Principles of Learning and Teaching: Grades K–6: 145 All K–6 Teaching Fields ▪ Principles of Learning and Teaching: Grades K–6: 145 All 4–8 Teaching Fields ▪ Principles of Learning and Teaching: Grades K–6: 145, or ▪ Principles of Learning and Teaching: Grades 7–12: 153 All 6–12 Teaching Fields ▪ Principles of Learning and Teaching: Grades 7–12: 153 All P–12 Teaching Fields ▪ Principles of Learning and Teaching: Grades K–6: 145, or ▪ Principles of Learning and Teaching: Grades 7–12: 153 K–6 Collaborative Special Education and 6–12 Collaborative Special Education ▪ Principles of Learning and Teaching: Grades K–6: 145, or ▪ Principles of Learning and Teaching: Grades 7–12: 153	https://www.ets.org/praxis/al/
Arkansas	Beginning teachers in all content areas must pass all three Praxis® Core Academic Skills for Educators (Core) tests. The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams. *General Testing Cut Scores* Entry into Teacher Education Programs and Non-Traditional Licensure Programs ▪ Core Academic Skills for Educators: Reading: 156 ▪ Core Academic Skills for Educators: Writing: 162 ▪ Core Academic Skills for Educators: Mathematics: 150	https://www.ets.org/praxis/ar

State	Licensure Assessment Policy	Source
Delaware	Delaware Administrative Code, Rule 1510 establishes the requirement that all teacher candidates must pass a performance assessment to receive an initial license. The Delaware Professional Standards Board and State Board of Education have approved the following qualifying Praxis exams and passing scores. *General Testing Cut Scores* All Areas ▪ Core Academic Skills for Educators: Reading: 156 ▪ Core Academic Skills for Educators: Writing: 162 ▪ Core Academic Skills for Educators: Mathematics: 150 The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams.	Delaware Administrative Code, Rule 1510 https://www.ets.org/praxis/de/requirements/
Hawaii	The Hawaii Professional Teaching Standards Board has established the following required assessments for all licensure areas. *General Testing Cut Scores* Beginning teachers in all content areas must pass all three Core tests. ▪ Core Academic Skills for Educators: Reading: 156 ▪ Core Academic Skills for Educators: Writing: 162 ▪ Core Academic Skills for Educators: Mathematics: 150 Applicants who have completed a state approved teacher education program are no longer required to take a Principles of Learning and Teaching assessment. The Hawaii PTSB has established that the coursework and clinical experiences provided through the state-approved programs signifies andidate pedagogical competence. However, those who have not completed a state-approved program must take the PLT assessment required for their teaching field. ▪ Principles of Learning and Teaching: Early Childhood: 157 ▪ Principles of Learning and Teaching: Grades K–6: 160 ▪ Principles of Learning and Teaching: Grades 5–9: 160 ▪ Principles of Learning and Teaching: Grades 7–12: 157 The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams.	http://www.htsb.org/licensing-permits/licensure-tests/ https://www.ets.org/praxis/hi/

State	Licensure Assessment Policy	Source
Kansas	Kansas state regulation requires teacher candidates to pass one of the four Principles of Learning and Teaching (PLT) assessments and the appropriate content assessment(s) for the initial educator license. *General Testing Cut Scores* All Initial Teaching Licenses ▪ Principles of Learning and Teaching: Early Childhood: 160 ▪ Principles of Learning and Teaching: Grades K–6: 160 ▪ Principles of Learning and Teaching: Grades 5–9: 160 ▪ Principles of Learning and Teaching: Grades 7–12: 160 The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams.	https://www.ets.org/praxis/ks/requirements/
Louisiana	The Louisiana State Board of Education has established the following assessment requirements for teacher candidates. *General Testing Cut Scores* Elementary 1-5, Early Childhood PK-3, Early Interventionist Birth-5, Mild/Moderate 1-5, Hearing Impaired, Visually Impaired, Significant Disabilities ▪ Elementary Education: Content Knowledge (5018): 163; OR ▪ Elementary Education: Multiple Subjects (5001) ▪ Reading/Language Arts (5002): 157 ▪ Mathematics (5003): 157 ▪ Social Studies (5004): 155 ▪ Science (5005): 159 After 8/31/17 Applicants listed below must take the Elementary Education: Multiple Subjects (5001): Elementary 1-5, Early Childhood PK-3, Early Interventionist Birth-5, Mild/Moderate 1-5, Hearing Impaired, Visually Impaired, Significant Disabilities ▪ Elementary Education: Multiple Subjects (5001) ▪ Reading/Language Arts (5002): 157 ▪ Mathematics (5003): 157 ▪ Social Studies (5004): 155 ▪ Science (5005): 159	https://www.teachlouisiana.net/teachers.aspx?PageID=5605 https://www.ets.org/praxis/la/requirements/

State	Licensure Assessment Policy	Source

Louisiana—continued	Tests Required for All Licensure Areas
	▪ Teacher candidates in all content areas must pass all three Praxis® Core Academic Skills for Educators (Core) tests.
	  ○ Core Academic Skills for Educators: Reading: 156
	  ○ Core Academic Skills for Educators: Writing: 162
	  ○ Core Academic Skills for Educators: Mathematics: 15
	▪ The state also allows a candidate's ACT composite score of 22 or an SAT® combined verbal/critical reading and math score of 1030 may be used in lieu of Core exams by prospective teachers in Louisiana.
	▪ Alternate-route candidates admitted to a Louisiana alternative educator preparation program with an earned master's degree from a regionally accredited institution may be exempt from the Core admission requirement.
	The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams.	

Michigan	Michigan requires teacher candidates to pass the Michigan Test for Teacher Certification (MTTC) instead of using the Praxis assessments. ▪ All candidates for a Michigan provisional teaching certificate must pass the Professional Readiness Examination before enrolling in student teaching. This consists of three sub-tests: Reading, Mathematics, and Writing. However the state also provides alternatives to the PRE passing scores required: Professional Readiness Examination (PRE) Passing Score Alternatives. ▪ Candidates for an elementary-level teaching certificate must pass both the Elementary Education test and the Professional Readiness Examination. ▪ Candidates who want to teach specific subject areas in grades 6–8 must also pass the corresponding subject-area tests in order to qualify for the endorsements. ▪ Candidates for secondary-level teaching certificates must pass, in addition to the Professional Readiness Examination, the corresponding subject-area test for each subject area in which they are to be certified. ▪ Candidates seeking certification in more than one field of study must take the MTTC subject-area test for each field. ▪ Persons certified to teach in other states or trained at out-of-state institutions must pass the Professional Readiness Examination and appropriate subject-area tests to be certified in Michigan. ▪ Exceptions include candidates who have taught for at least three years in a position on an out-of-state license, candidates who have at least 18 semester hours of credit in approved masters or doctoral degrees, and candidates with elementary or secondary reading credit requirements established by the state board.	Michigan Teacher Certification Code http://www.mttc.nesinc.com/ https://www.ets.org/praxis/mi

State	Licensure Assessment Policy	Source
Montana	Montana does not use content test scores for licensure decisions.	https://www.ets.org/praxis/mt http://www.opi.mt.gov/cert/index.html
Nebraska	Nebraska has established the following requirements for teacher candidates, using the Praxis assessments. *General Testing Cut Scores* All Areas ▪ Core Academic Skills for Educators: Reading: 156 ▪ Core Academic Skills for Educators: Writing: 162 ▪ Core Academic Skills for Educators: Mathematics: 150 A composite score of 468 on all three portions of the Core Academic Test, with no single test score being more than one point below the score required above, and upon the recommendation of a standard institution of higher education. Content Testing ▪ As of September 1, 2015: Candidates applying for any initial endorsement(s) to be placed on a Nebraska certificate must provide evidence they have passed the required Praxis assessment ▪ Applicants for an entry level Nebraska certificate can use the Pre-Professional Skills test (Praxis I PPST) or the Core Academic Skills for Educators Test (Core Academic Test) to meet the Basic Skills Competency requirement. Praxis I PPST passing scores shall consist of the following: ▪ 170 or above on the reading portion of the Praxis I PPST ▪ 171 or above on the mathematics portion of the Praxis I PPST ▪ 172 or above on the writing portion of the Praxis I PPST; or ▪ A composite score of 513 on all three portions of the Praxis I PPST, with no single test score being more than one point below the score required above, and upon the recommendation of a standard institution of higher education. The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams.	https://www.ets.org/praxis/ne/requirements/ http://www.education.ne.gov/EducatorPrep/TopPages/SkillsTesting.html

State	Licensure Assessment Policy	Source
New Hampshire	New Hampshire requires the following assessments for teacher candidates. *General Testing Cut Scores* All Areas ▪ Core Academic Skills for Educators: Reading: 156 ▪ Core Academic Skills for Educators: Writing: 162 ▪ Core Academic Skills for Educators: Mathematics: 150 The Praxis website also details the exams and cuts scores required for additional content area assessments.	https://www.ets.org/praxis/nh/requirements/ http://education.nh.gov/certification/documents/edtestinginfo.pdf http://education.nh.gov/certification/
Ohio	As of September 1, 2013, the Ohio Assessments for Educators replaced many of the Praxis assessments. ▪ The State Board of Education adopted exams provided by Evaluation Systems group of Pearson (Pearson), Educational Testing Service (ETS), and the American Council on the Teaching of Foreign Languages (ACTFL). ▪ The ODE requires only ONE Pedagogical Knowledge Assessment test be successfully completed in an educator's career. However, new content or licensure areas require additional Pearson, ACTFL or Praxis II subject tests. The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams.	https://www.ets.org/praxis/oh http://education.ohio.gov/Topics/Teaching/Educator-Licensure/Prepare-for-Certificate-License/Educator-Licensure-Examinations http://www.oh.nesinc.com/
Oklahoma	Oklahoma policy identifies the following requirements for teacher candidates. *General Testing Cut Scores* All Areas ▪ Core Academic Skills for Educators: Reading: 156 ▪ Core Academic Skills for Educators: Writing: 162 ▪ Core Academic Skills for Educators: Mathematics: 150	https://www.ets.org/praxis/ok/requirements/
Oregon	The Oregon Teacher Standards and Practices Commission (TSPC) phased out the use of Praxis and the state requires the completion of the edTPA performance assessments for initial licensure.	https://www.ets.org/praxis/or http://www.oregon.gov/TSPC/pages/index.aspx http://www.edtpa.com/PageView.aspx?f=GEN_Oregon.html

State	Licensure Assessment Policy	Source
South Carolina	South Carolina has established the following assessment requirements for teacher candidates. Licensure Requirements: All Early Childhood Licenses ▪ Principles of Learning and Teaching: Early Childhood: 157 All Elementary Licenses ▪ Principles of Learning and Teaching: Grades K–6: 160 All Middle Grades Licenses ▪ Principles of Learning and Teaching: Grades 5–9: 160 All Secondary Grades Licenses ▪ Principles of Learning and Teaching: Grades 7–12: 157 All K–12 Licenses ▪ Principles of Learning and Teaching: Early Childhood: 157, or ▪ Principles of Learning and Teaching: Grades K–6: 160, or ▪ Principles of Learning and Teaching: Grades 5–9: 160, or ▪ Principles of Learning and Teaching: Grades 7–12: 157 The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams.	https://www.ets.org/praxis/sc/requirements/
South Dakota	South Dakota has established the following requirements for teacher candidate assessments. ▪ Beginning teachers and teachers without prior teaching experience must pass one of the Principles of Learning and Teaching (PLT) tests along with the appropriate content-specific test. *General Testing Cut Scores* All Areas (Beginning teachers & teachers without prior teaching experience) ▪ Principles of Learning and Teaching: Early Childhood: 157, or ▪ Principles of Learning and Teaching: Grades K–6: 160, or ▪ Principles of Learning and Teaching: Grades 5–9: 160, or ▪ Principles of Learning and Teaching: Grades 7–12: 157 The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams.	https://www.ets.org/praxis/sd http://www.doe.sd.gov/oatq/praxis.aspx

State	Licensure Assessment Policy	Source
Washington	The Washington Professional Educator Standards Board (PESB) manages all mandated educator assessments. The Washington State Legislature directed the PESB to establish the educator assessment system, including: ▪ Candidates applying for licensure from out of state must bass the WEST-B (Washington Education Skills Test) typically reserved for candidates applying to educator preparation programs. However, the state does allow for the following WEST-B exemptions: ○ National Board Teaching Certificate ○ Washington passing scores on all three tests (Reading, Mathematics, and Writing) of the Praxis I ○ A passing score on the California Basic Educational Skills Test™ (CBEST®) ○ A passing score on the NES Essential Academic Skills Test ▪ The WEST-E(Washington Educator Skills Tests Endorsements), an assessment of content knowledge required for an endorsement. ▪ edTPA (Teacher Performance Assessment), an online electronic portfolio assessment preservice candidates complete during student teaching. The state has also establishes the following pass rates for edTPA: ▪ The passing score for the edTPA is 35 ▪ The passing score for the World Language and Classical Language edTPAs will be 30 ▪ The passing score for the edTPA will be raised to 40 beginning the 2017/18 academic year. World and Classical Language edTPAs will be 34.	http://assessment.pesb.wa.gov/
West Virginia	West Virginia requires the following assessments for teacher candidates. Tests Required for All Licensure Areas ▪ Praxis Core Academic Skills for Educators (Core)Persons who meet one or more of the following criteria may be exempt from the Praxis® Core Academic Skills for Educators (Core): ○ Hold certification through the NBPTS ○ Hold or have held a West Virginia Professional Certificate ○ Hold a master's degree from an accredited institution of higher education ○ Attained, from a single administration, a composite score of 25 on the American College Test (ACT), 26 on the ACT enhanced (effective November 1989), 1035 on the Scholastic Achievement Test (SAT),1125 on the re-centered SAT (effective April 1995), or 1170 on the revised SAT using the combined Critical Reading and Math score (effective March 2005) Hold a valid out-of-state certificate in the content area	https://www.ets.org/praxis/wv

State	Licensure Assessment Policy	Source
West Virginia—continued	○ Successfully completed three years of experience within the last seven years in one or a combination of specializations recognized on an out-of-state professional certificate valid during those three years *General Testing Cut Scores* All Areas ▪ Core Academic Skills for Educators: Reading: 156 ▪ Core Academic Skills for Educators: Writing: 162 ▪ Core Academic Skills for Educators: Mathematics: 150 Professional Education ▪ Principles of Learning and Teaching: Grades K–6: 160, or ▪ Principles of Learning and Teaching: Grades 5–9: 160, or ▪ Principles of Learning and Teaching: Grades 7–12: 157 The Praxis website also details the exams and cuts scores required for additional content area assessments, including middle and high school subject and grade-level exams.	
Wyoming	Wyoming requires teacher candidates to submit passing scores for Praxis exams only for first time licensees in Elementary Education and Social Studies Comprehensive. *General Testing Cut Scores* First-time Licensure in Elementary School ▪ Elementary Education: Multiple Subjects (5001) ▪ Reading and Language Arts Subtest (5002): 157 ▪ Mathematics Subtest (5003): 157 ▪ Social Studies Subtest (5004): 155 ▪ Science Subtest (5005): 159 *To pass the Elementary Education: Multiple Subjects test you must receive a passing score on each subtest. First-time licensure in Middle School ▪ Social Studies Comprehensive 5–8: Middle School Social Studies (5089): 153 First-time licensure in Secondary School ▪ Social Studies Comprehensive 6–12: Social Studies: Content Knowledge (5081): 158	https://www.ets.org/praxis/wy/requirements/