The Changing Teacher Preparation Profession

AACTE
AMERICAN ASSOCIATION OF COLLEGES FOR TEACHER EDUCATION
SERVING LEARNERS

A Report from AACTE's Professional Education Data System (PEDS)

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About PEDS

The Professional Education Data System (PEDS) provides AACTE with member-specific data on enrollment, degrees, program completion, faculty, and resources. The collection of such data creates an authoritative, aggregate database of member institutions' professional education programs and research. AACTE will produce periodic reports drawing on PEDS data throughout the coming years. These reports will provide an opportunity to measure progress, target investments, and chart the path forward.

About AACTE

The American Association of Colleges for Teacher Education (AACTE) is a national alliance of educator preparation programs dedicated to the highest quality preparation and professional development of teachers, school leaders, and other school personnel in order to enhance PK–12 student learning. The over 800 institutions holding AACTE membership represent public and private colleges and universities in every state, the District of Columbia, the Virgin Islands, Puerto Rico, and Guam.

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Contents

A Letter from the President and CEO

Sharon P. Robinson

Dear Colleague,

On behalf of the American Association of Colleges for Teacher Education, I am pleased to present **The Changing Teacher Preparation Profession: A Report from AACTE's Professional Education Data System (PEDS)**. AACTE member institutions complete the PEDS annual survey every spring, providing a unique and rich set of data about educator preparation programs in higher education across the country.

Overall, this report paints a picture of a preparation profession that is in the midst of change—change that is and will result in a better education for our nation's PK–12 students. Within the data found in our PEDS survey, we can see that programs are incorporating what the research is telling us good preparation entails (clinical experiences, strong selectivity standards, performance-based exit measures). Yet we can also see from the data that there is still much work to be done to ensure that everything we do in our preparation programs is aligned to the PK–12 education workforce needs.

To serve all learners, we must all assume responsibility for the ways in which we prepare educators. The leaders of our institutions of higher education—our presidents and our provosts—must embrace educator preparation as an institutional priority. Our partners in the arts and sciences must see and act on their needed contributions to developing educators with deep content knowledge. PK–12 districts and schools must partner with us to provide rich clinical experiences for our educator candidates. State and federal policy makers must adopt policies that promote research-based reforms and the partnerships that are critical to success. Finally, the leaders and faculty in schools, colleges, and departments of education must conduct programs that reflect what we know about effective preparation practices and be ever mindful of preparing educators that meet PK–12 workforce needs.

As the field moves forward with reforms, the information in this report can provide benchmarks or guideposts to inform our progress. The report's findings will undoubtedly fuel conversation and—hopefully—action among educator preparation providers, education researchers, PK–12 practitioners, and other stakeholders.

I extend my heartfelt thanks to our colleagues in colleges and universities around the country who complete the PEDS survey each year. Their work allows us to present this report and to join with you in using these data to inform our deliberations and actions to realize a future where all PK–12 learners thrive.

Sincerely,

Sharon P. Robinson

Sharon P. Robinson
President and CEO, AACTE

Executive Summary

More than two decades ago, AACTE began an annual, longitudinal data collection on higher education-based educator preparation programs—capturing their characteristics and outcomes—to help inform critical decisions related to program improvement and policy development and to capture the state of the profession. **The Changing Teacher Preparation Profession: A Report From AACTE's Professional Education Data System (PEDS)** presents PEDS findings from the 2011 and 2012 surveys, which reported on the 2009–2010 and 2010–2011 school years.

The PEDS survey response rate has been consistently high. For the 2012 PEDS survey, for example, 95% of AACTE's member institutions responded. As such, PEDS is able to provide a unique and rich set of data about educator preparation across the United States.

This report is offered in an environment where educator preparation is undergoing significant scrutiny and reform. Some of the findings in this report counter common myths about higher education-based preparation programs. Others show that there is still much work to be done. For example, PEDS data reveal that contrary to many perceptions, higher education institutions are admitting academically competitive candidates into their programs. Yet PEDS data also show that programs are still underproducing candidates in key shortage areas such as mathematics, science, English as a second language, and special education. Additionally, these findings provide a snapshot of a field undergoing transformation in areas such as clinical preparation and accountability utilizing graduate performance data.

The goal of this report is to provide interested stakeholders with an accurate glimpse of the profession and to empower those in the field of educator preparation to lead change to improve results based on what is known about current practice and production. The report is intended to inform conversation and decision making among policy makers and other stakeholders around how to chart an effective course forward.

PEDS Findings

Following is a list of selected findings from recent PEDS data.

1. **The vast majority of new teachers continue to be prepared in institutions of higher education**. AACTE member institutions that responded to the PEDS survey prepared 150,913 new candidates for initial teacher certification during the 2009–2010 school year. During the 2009–2010 academic year, 88% of all teacher preparation program completers came through higher education-based programs.[1]

2. **Qualifications of teacher candidates are exceeding college admissions requirements**. Institutions reported that the grade point average (GPA) of students admitted in fall 2011 to teacher preparation programs at the initial certification level was significantly higher than the requirement for admission. For example, while the average undergraduate GPA entrance requirement into bachelor's-level teacher preparation programs was 2.6, the average GPA of students actually admitted was 3.24.

3. **Clinical preparation is part of all teacher preparation programs**. The average number of hours spent in early field experiences ranged from 114 to 189, and the average number of hours for student teaching/internships was between 480 and 586 (approximately 13–16 weeks).

4. **Infusion of technology use in preparation programs is ubiquitous**. Almost 100% of responding institutions said they prepared their candidates to incorporate technology in their instruction, with 62% requiring candidates to demonstrate their technology fluency for graduation or program completion.

5. **Online learning in preparation programs is widespread**. Three quarters of the institutions that responded to this section of the PEDS survey offered online, college-level, credit-granting courses to teacher candidates; in addition, close to one million candidates at the institutions enrolled in at least one online course.

6. **Teacher preparation programs are implementing performance-based exit measures**. At the bachelor's level, more than one third of responding teacher preparation programs required successful completion of a performance-based assessment for graduation. At the master's and postbaccalaureate levels, almost a quarter of the programs utilized performance-based exit measures.

7. **A majority of teacher preparation programs collect data on their graduates**. About 70% of responding institutions had started to track their graduates into the field. While

about half had been successful in obtaining placement data, only 8% had successfully secured state "value-added" data about their graduates.

8. **Teacher production shortages persist in key areas**. There are persistent shortages of teachers in fields such as mathematics, science, English as a second language, and special education. In 2009–2010, 13% of the bachelor's degrees in education and of nondegree certificates in education at the initial level were awarded in these areas at responding institutions. In addition, 23% of the master's-level education degrees and 26% of the nondegree certificates in education at the master's/postbaccalaureate level were awarded in the shortage areas. PEDS data also show that approximately 31% of all degrees and certificates awarded for initial licensure were in elementary education, a field in which shortages generally do not occur.

9. **Teacher candidates do not reflect the demographic make-up of students in PK–12 classrooms**. The PEDS survey found that bachelor's degrees in education were awarded predominantly to White candidates (82%). Programs that do not award education degrees but that fulfill the requirements for licensure at the bachelor's level produced slightly more diverse teacher candidates. Additionally, over 75% of the teacher candidates produced were female.

Using What We Know to Improve Results

Recommendations for a Path Forward in the Profession

The PEDS data convey the complexities facing educator preparation now and in the coming years. Institutions of higher education play an essential role in ensuring high-quality teacher preparation; however, they cannot do it alone. Alignment and partnership with PK–12 schools and evidence-based local, state, and national policies are critical.

This report lays out several observations and recommendations based on the 2011 PEDS data collection. Three of these stand out as particularly important:

- Educator preparation programs are embracing research-based practices that produce effective educators: admitting academically competitive students, incorporating clinical experiences throughout their programs, and utilizing performance-based exit measures to assess the readiness of their candidates to be successful in the classroom.
- The vast majority of educators are prepared in institutions of higher education. Thus, in order to effect systemic change in educator preparation, federal, state, and philanthropic investments should be made in higher education to address chronic shortage areas, recruit and retain diverse candidates, and expand clinical preparation. State and federal policy should create a framework that promotes this investment.
- While preparation programs are making strides in meeting the workforce needs of PK–12 schools, more should be done to align the production and capacity of educators to the specific needs of school districts.

AACTE invites readers to use these PEDS findings and recommendations to continue the conversation about improving outcomes for teachers and PK–12 students and shaping the future of teacher preparation.

AACTE will continue to collect PEDS data annually and to revise and add new survey items. For example, future surveys may ask institutions for more data on the types of performance assessments they are using, the data literacy skills and technology skills of graduates, the results of programs' graduate and employer surveys, and further clarification around what types of data their states and districts provide them about their graduates.

Introduction

As a national organization that collects extensive data on 800 institutions of higher education that offer educator preparation programs, AACTE has a commitment to share its data with its members, partners, policy makers, and the public. Valid and reliable data are essential elements of the knowledge base required to understand the state of the profession and identify trends, challenges, progress, and excellence.

This report from AACTE's Professional Education Data System (PEDS) offers insights about how institutions of higher education can lead change to enhance teacher preparation program results. It is intended to inform conversation and decision making among stakeholders around how to chart an effective course forward.

About Higher Education-Based Teacher Preparation Programs

Currently, 88% of new teachers are prepared in institutions of higher education, and even those in nonprofit, state, or district preparation programs usually receive some of their preparation in higher education.[2] The schools and colleges of education at higher education institutions offer programs that lead to initial teacher licensure at the undergraduate, postbaccalaureate, and graduate levels. More than 1,400 institutions—and thousands of programs within them—prepare teachers, principals, school counselors, and other school personnel. These institutions range from small, private liberal arts colleges to religiously affiliated institutions to regional universities and research-oriented universities. In other words, preparation programs are very diverse.

Some of these programs are considered traditional programs, and others are alternative programs geared toward career changers. Teacher candidates, at the undergraduate level, typically enter preparation programs in their junior year. The majority of today's candidates also have a major in a content area for which course work is completed outside the education unit.[3] Thus, the entire institution contributes to the quality of the candidates' preparation. At the postbaccalaureate and graduate levels, programs for initial licensure typically last from 1 to 2 years.

About the PEDS Survey

Trend data about preparation programs—their characteristics, effectiveness, and results—can help inform critical decisions about program improvement and policy.

For the educator preparation field, PEDS is an important source of such data. The PEDS survey is completed annually by teacher preparation programs, the vast majority of which are in AACTE member institutions. PEDS provides member-specific data about enrollment, degrees, program completion, faculty, and resources.

The PEDS survey response rate has been consistently high. For the 2012 survey, for example, 95% of AACTE's approximately 800 member institutions responded. Seventy-three nonmember institutions also completed the survey. Comparable data are available from years 2004–2012.

PEDS data are currently available in the following areas:

- Institution information (e.g., accreditation, affiliations)
- Institutional enrollment, by gender and race/ethnicity
- Enrollment in the school of education, by gender and race/ethnicity
- Education degrees conferred and certificates completed, by level and discipline area
- Faculty demographics (e.g., gender, race/ethnicity, status, course loads)
- Selected financial information (e.g., research expenditures, endowment income)

- Technology and distance learning offerings and requirements
- Clinical preparation information (added in 2010)
- Program selectivity (added in 2010)
- Program impact data (new items added in 2010 and 2012)

PEDS data reports such as this one provide an overview of the field. Other findings and occasional data reports are used in a variety of ways:

- Detailed information on specific educator preparation fields allows researchers and policy makers to monitor the supply and demand in various fields. Because the unit of analysis is the institution, comparisons by several group variables (e.g., Carnegie classification, institutional size, regional affiliation) can be conducted. Also, PEDS data are disaggregated into gender and race/ethnicity components, which enables tracking of students and faculty diversity across programs.
- AACTE member institutions that participate in PEDS have access to their individual program data for current and previous years, which can inform their program planning and decision making.
- Select PEDS data are shared with the National Council for Accreditation of Teacher Education (NCATE) or Council for the Accreditation of Educator Preparation (CAEP) for annual accreditation reports.

Visit the AACTE web site (**http://aacte.org/Professional-Education-Data-System-PEDS/**) to learn more about PEDS.

About PEDS Respondents

- 88% indicated they are professionally accredited by either NCATE or the Teacher Education Accreditation Council (TEAC).
- 48% were private institutions and 52% were public institutions.
- 28% were doctorate-granting institutions, 46% were master's-granting institutions, and 24% were bachelor's-granting institutions.
- 37% were located in an urban setting, 20% in a rural setting, and 43% in a suburban setting.

Fast facts on the institutions that responded to the 2011 PEDS data collection.

About this Report

Several important findings surfaced in the 2011 PEDS data collection (for the 2009–2010 school year) as well as from the 2012 PEDS data collection (for the 2010–2011 school year). The findings that follow in this report are most salient to today's policy and practice needs regarding teacher production. They present data that can be acted upon immediately for the benefit of the profession. While PEDS captures information on all the preparation programs within institutions—school leaders, counselors, and more—the findings in this report are limited to programs preparing teachers.

"The PEDS data provide us a level of accountability that is helpful for longitudinal trend analysis, forecasting of future needs, and updates on how we are progressing toward our goals."

Corinne Mantle-Bromley, Dean
College of Education, University of Idaho
[February, 2012]

FINDING

1. The Vast Majority of New Teachers Continue to Be Prepared in Institutions of Higher Education

The 2011 PEDS data continue to confirm a long-standing fact: Higher education is the largest producer of beginning teachers, whether through its traditional or alternative-route programs. In fact, according to the U.S. Department of Education,[4] more than 67% of alternative-route programs are based in higher education.

In the 2009–2010 school year, there were 241,401 program completers at the initial teacher certification level.[5] Higher education institutions prepared 212,544 of these completers, of which 150,913 were prepared by institutions that responded to the 2011 PEDS survey. Of the latter, 87,202 were in bachelor's-level programs, and 63,711 were in master's-level programs.

How do these numbers relate to the job market? According to the National Center for Education Statistics, in 2007–2008 about 164,000 teachers were new hires who had never taught before—either those who came directly into teaching after finishing their preparation (97,500) or those who had delayed their entry after completing their preparation programs (66,500).[6] While these figures suggest a good match between supply and demand overall, they do not show a supply that could support predicted overall future shortages, shortages in geographic areas, or targeted needs in particular areas (e.g., special education). According to the U.S. Department of Education's Office of Postsecondary Education,[7] all states project shortages in selected areas. Nationally, the projected need is for more than 1 million new teachers overall during the next 10 years, inclusive of shortage areas.[8]

	Initial Certification Level		
	Bachelor's*	Post-baccalaureate or master's*	Total
Degree in education†	72,073	45,444	117,517
Nondegree program completer‡	15,129	18,267	33,396
Total	87,202	63,711	150,913

* Initial licensure level

† *Degree in education* refers to programs within the college of education/education unit (under CIP13.000 of the IPEDS classification for instructional programs)

‡ *Nondegree program completer* refers to students completing programs for teacher licensure, but who are getting a degree in programs other than education

The majority of candidates cited in the PEDS 2011 survey were awarded a degree in education.

Observations

- That higher education produces the majority of new teachers bodes well, as these preparation programs are making meaningful enhancements to their programs to effect improved PK–12 student learning. University-based preparation programs that incorporate certain elements (e.g., longer field placements and student teaching experiences, subject- or content-specific course work, field work in a location similar to the teacher's first job, field work in a grade level similar to the teacher's first job, and course work in child and adolescent development) have been linked to increased student achievement.[9] A literature base is emerging that documents the benefits of traditionally prepared teachers who enter the profession fully prepared; these teachers have been found to be more effective with PK–12 students than their less prepared peers.[10] In addition, fully prepared teachers leave the profession at a much lower rate than do those who have entered the profession not fully prepared.[11]
- Many policy makers at both the state and local levels have indicated a preference for addressing the challenges of quality teacher production by investing in providers other than higher education. The fact that the vast majority of new teachers continue to be prepared in higher education, despite significant investments in alternative providers, suggests that an investment in university-based educator preparation could speed the pace of change and greatly benefit PK–12 student learning.

Read More From AACTE

Evidence of Teacher Effectiveness by Pathway to Entry into Teaching found at **http://aacte.org/pdf/Publications/Reports_Studies/Evidence%20of%20Teacher%20Effectiveness%20by%20Pathway.pdf**

Where We Stand: Alternative vs. Traditional Teacher Education found at **http://aacte.org/pdf/Publications/Reports_Studies/Where%20We%20Stand%20-%20Alternative%20vs.%20Traditional.pdf**

FINDING

2. Qualifications of Teacher Candidates Are Exceeding College Admissions Requirements

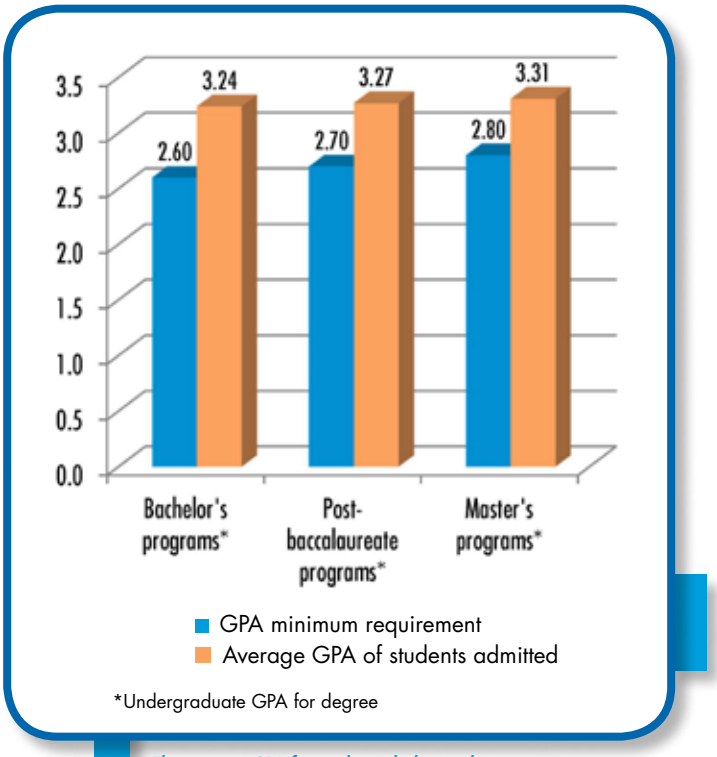
Despite the common perception that teacher preparation programs attract candidates who are not academically strong, PEDS data show just the opposite. Selectivity of candidates entering the teaching field has long been debated as to which candidate qualifications result in more effective new teachers. While there are many important factors that programs consider when selecting entering candidates, academic qualifications are an important criteria.

An applicant's grade point average (GPA) is one of several measures typically used to determine admission into teacher preparation programs. AACTE member institutions reported that the undergraduate GPA of students admitted in fall 2011 to teacher preparation programs at the initial licensure level was higher than the minimum requirement.

Students who are choosing to enter teacher preparation programs reflect strong academic preparation in their first 2 years of college. [*Note*: College students generally enter the teacher preparation program in their junior year.] The PEDS survey shows that

- Bachelor's degree candidates had a mean GPA of 3.24 (median 3.28; *n*=361 institutions reporting). The average minimum GPA entrance requirement was 2.6.
- Postbaccalaureate candidates had a mean GPA of 3.27 (median 3.28; *n*=140 institutions reporting). The average minimum GPA entrance requirement was 2.7.
- Master's degree candidates had a mean GPA of 3.31 (median 3.31; *n*=184 institutions reporting). The average minimum GPA entrance requirement was 2.8.

Virtually all of these GPAs are for course work taken by students throughout the university—before students declare their intention to become a teacher. These results suggest that teacher preparation programs are, in fact, attracting academically strong candidates.



The average GPA for students declaring their intention to become teachers exceeds program requirements.

Observation

Policy makers and other stakeholders should be aware that teacher preparation programs are more selective and competitive than is generally acknowledged. These data challenge the commonly held belief that selectivity of teacher preparation programs in higher education is quite low and that it is predominately students of lower caliber who enter preparation programs.

FINDING

3. Clinical Preparation Is Part of All Teacher Preparation Programs

Clinical preparation is a staple of teacher preparation programs—and for good reason. Preparation programs that are focused more on the work of the classroom and that allow teachers to engage in the actual practices involved in teaching tend to produce first year teachers who are more likely to remain in the profession than those from less clinically-based programs.[12]

PEDS data show that teacher preparation programs use varied settings for clinical experiences.[13] Virtually all programs require supervised student teaching or an internship for graduation, although the required duration varies: The average bachelor's-level clinical requirement ranges from 500 to 562 total clock hours (mean=14.50 weeks); the average master's-level clinical requirement ranges from 480 to 586 total clock hours (mean=14.52 weeks).

Preparation programs also require students to participate in early field experiences: The average bachelor's-level requirement ranges from 114 to 189 clock hours; the average master's-level requirement ranges from 111 to 164 clock hours.

Observations

- Recent high-profile reports, such as those from NCATE's Blue Ribbon Panel[14] and the National Research Council,[15] call for reorienting teacher preparation around supervised clinical preparation and for strengthening programs' partnerships with PK–12 schools. Even the U.S. Congress has joined the drive for this practical experience, stipulating that preservice programs include at least a year's worth of rigorous clinical experiences in order to be eligible for a Teacher Quality Partnership grant (authorized in Title II of the Higher Education Act).
- Offering clinical experience for a semester at a minimum and 1 year ideally requires careful alignment of policy and resources. Strong partnerships and shared commitment between PK–12 and higher education are essential for expanding clinical preparation.

Degree Program (*n*=institutions)	Duration and Intensity					
	Semesters		Weeks/semester		Hours/week	
	Mean	Median	Mean	Median	Mean	Median
Bachelor (*n*=642)	1.29	1.00	14.50	15.00	35.38	37.50
Post-baccalaureate (*n*=323)	1.43	1.00	14.45	15.00	36.01	39.00
Master (*n*=368)	1.40	1.00	14.52	15.00	34.77	37.00

Duration and Intensity of Student Teaching/Supervised Clinical Experiences, by Degree Program (PEDS 2011)

Montclair State University

One of the contributing factors to the success of the preparation programs at Montclair is that they revolve around clinical experiences. Candidates in the program typically engage in field experiences through the entire program, spanning 70–140 hours at the undergraduate level and 60–120 hours at the graduate level. The student teaching component alone is 14–16 weeks long at the undergraduate and graduate levels. One of Montclair's feature programs is its collaboration with Newark Public Schools on an initiative called Partnership for Instructional Excellence and Quality (PIE-Q). Initially, this program focused on recruiting, preparing, and supporting educators in seven public schools in the Newark district. Today, PIE-Q has expanded to 11 schools through the Newark-Montclair Urban Teacher Residency, a Teacher Quality Partnership-funded program to recruit, prepare, support, and employ new math, science, and special education teachers for Newark. The Urban Teacher Residency embeds residents full-time from day 1 in schools, focusing their master's degree course work on classroom experiences, and provides 3 years of professional induction support in the schools where they become teachers of record.[16]

California State University—Fresno

California State University at Fresno partnered with the Sanger Unified School District to design a teacher preparation program that would meet the personnel needs of the district and provide an intensive clinical experience for teacher candidates. The school district has a diverse student population comprising 82% from minority groups and 25% English language learners. Over the last 8 years, the school district has moved from the bottom of California's school index to the top, in part because of the partnership. Additionally, teacher attrition has dropped from 40% to 4.6% in 2011 and to 4.4% in 2012. Within this initiative, candidates spend a full year in the schools during their student teaching phase with extensive support from the university and the schools. Candidates practice coteaching and solo-teaching, they participate in school-based professional learning communities with practicing teachers, and they receive preparation in implementing a Response to Intervention model in mathematics and reading. The university course work is offered at the school sites.

FINDING

4. Infusion of Technology Use in Preparation Programs Is Ubiquitous

Educators should be prepared to use technology to support instruction, assessment, and data analysis required to implement 21st century curricular objectives. PEDS data suggest that preparation programs are rising to this challenge. Some 98% of teacher preparation programs prepare their students to use technology to deliver instruction, and 62% have a technology-related requirement for graduation or program completion.

This finding is a slight improvement over 2005 results. In that year, PEDS data showed that 95% of preparation programs expected their candidates to deliver instruction using technology, and 60% reported requiring their candidates to demonstrate technology use for program completion.

Observations

- Although it is useful to know that teacher preparation programs are infusing technology instruction and modeling technology applications as they teach candidates, this is an important topic for further inquiry.
- Specifically, information is needed on the types of instructional technology that teacher candidates are experiencing in their course work and which ones they are being taught to use with their own students. As evidence continues to emerge about the promising use of Web 2.0 tools and iDevices, and the potential of Universal Design for Learning to reshape how instruction is delivered in inclusive, diverse classrooms, teacher educators need to ensure that candidates are being prepared to incorporate cutting-edge, effective technology solutions with ease and proficiency. Future PEDS surveys will address these questions.

PEDS found that 74% of teacher education programs conducted some type of in-service training for teachers on technology use in 2011.

University of Central Florida

Innovation in the Use of Technology

"I feel more prepared to enter the actual classroom after practicing a lesson plan in front of the avatars."
Megan Jerant, teacher candidate and TeachLivE participant

At UCF's **TLE TeachLivE™ Lab**, students aspiring to be teachers can practice a range of teaching skills, and veteran teachers can try out innovative ideas, with avatars in a mixed-reality classroom.

Here's how it works: Teacher preparation students stand in front of a screen on which they see a classroom of students whose personalities include shy, defiant, and attention seeking. The avatars then respond to the teachers as would typical middle school students. For example, if a teacher fails to use appropriate content or instructional practices, the avatars react in a way that might challenge the teacher to make a different choice. Currently, UCF staff members are expanding the technology to allow for an increase in the number and diversity of the avatars and their interactive behaviors.

Since 2003, the technology has spread to a network of universities using similar labs to give teacher candidates the opportunity to practice what they are learning on virtual students before they face real children in a classroom. Partner universities include Florida State University, University of Kansas, West Virginia University, Old Dominion University, University of Wisconsin Milwaukee, Miami University of Ohio, Pace University, Western Michigan University, and University Center of Greenville's SimHub (which serves all South Carolina schools). The network is expected to grow to more than 30 sites over the next 3 years. The program estimates that 3,000 teacher candidates currently experience TeachLivE during their preparation, with approximately 600 of those candidates at UCF.

FINDING

5. Online Learning in Preparation Programs Is Widespread

Teacher preparation is making widespread use of online learning. Of the 674 institutions that responded to this section of the PEDS survey, 74% offered online, college-level, credit-granting courses to teacher candidates during the 2009–2010 school year. What's more, close to 1 million students at the institutions (*n*=497) enrolled in at least one online course.

Observation

Online courses offer many advantages. For teacher candidates, particularly career changers and paraprofessionals, who must balance their course work with jobs and family commitments, online learning affords them valuable flexibility. It also has the potential to expand access to new populations of candidates who otherwise may not be able to attend on-campus classes.

	Distance Learning, PEDS 2011*	
	Undergraduate	Graduate
Number of courses	16,776	40,388
Number of enrollments	392,524	591,895
Number of programs	343	3,024

*n = 497 institutions

There was an 11% increase in the number of institutions that reported offering online, college-level, credit-granting courses in teacher education between PEDS 2005 and PEDS 2011.

FINDING

6. Teacher Preparation Programs Are Implementing Performance-Based Exit Measures

Teacher readiness cannot be measured by multiple choice or selected response tests alone, yet many states still rely on these tests for licensure. AACTE has long advocated for states to require candidates to pass valid and reliable performance assessments to receive their initial license, for the federal government to invest in performance assessments, and for programs to incorporate performance measures into their exit assessment requirements.[17]

Recently, more voices are calling for the use of performance-based assessments in teacher education—including major national reports from the Council of Chief State School Officers (CCSSO)[18] and from the American Federation of Teachers,[19] as well as many higher education institutions across the country. The reasoning is straightforward: Practice is performance based, thus assessments also should be performance based.

The 2011 PEDS survey found that 38% of the programs at the bachelor's-degree level, 23% at the postbaccalaureate level, and 23% at the master's-degree level require performance-based exit assessments for program completion.

Observations

- Increasingly, teacher preparation programs are expanding their graduation requirements to include authentic assessments of how candidates generate and evaluate student learning, and some states are moving to requiring candidates to pass performance assessments to be eligible for initial certification.[20]
- Teacher educators use these assessments' results to strengthen their programs.[21] Many find that the data can be used to revamp courses and experiences to ensure that candidates are developing essential knowledge and skills and are focusing on areas of need. Data also can be used for candidate reflection on how well they are teaching and how well their students are learning.

edTPA™

Assessing Candidate Performance and Teaching Quality

edTPA is a summative, performance-based, preservice assessment process developed to answer the essential question, "Is this new teacher ready for the job?" edTPA is intended to be used for teacher licensure, to support state and national program accreditation, and to guide improvement in preparation programs. Focused on the act of teaching, edTPA is a nationally available, multiple-measure, performance-based assessment system aligned to state and national standards.

The edTPA assessment process—typically administered at the end of the student teaching or internship experience—requires candidates to submit a portfolio that documents teaching and learning in a 3- to 5-day learning segment with a class of students. The portfolio includes an unedited video of the candidate delivering instruction and examples of teaching materials that demonstrate how the candidate planned instruction, adapted it for diverse learners—attending both to content and the development of academic language—and assessed student work. Each assessment is scored by qualified and trained teachers and teacher educators who are subject-matter experts with experience supporting beginning teachers.

In June 2012, more than 7,000 teacher candidates in 22 states participated in a national field test of edTPA. Results showed the assessment is rigorous and valid and can be scored reliably.

edTPA is designed to help teacher preparation programs increase their focus on practice by providing a common standard of teaching quality that supports student learning. Teacher educators may use the edTPA process to examine their programs for possible areas of improvement. For example, teacher educators in Maryland are using edTPA data to refocus course content on areas where teacher candidates show need for improvement.

Stanford University, in partnership with AACTE, led the development of edTPA with collaboration from more than 700 educators from 24 states and the District of Columbia and more than 160 institutions of higher education. Available in 27 initial licensure areas, edTPA complements existing entry-level assessments used by states that focus on basic skills or subject-matter knowledge. It is aligned to the new Interstate Teacher Assessment and Support Consortium (InTASC) standards, state standards, NCATE standards, and the Common Core State Standards.

FINDING

7. A Majority of Teacher Preparation Programs Collect Data on Their Graduates

Teacher education programs actively seek data that can be used to inform program improvement and demonstrate accountability. The most meaningful data capture their graduates' success in the field. PEDS 2012 data show that of the 717 institutions responding (to the section on impact data), about 70% (*n*=495) have started to track their graduates into their job placements. However, only about half of these have successfully obtained placement data. A closer look at the PEDS data shows that

- 34% (*n*=245) were able to successfully track their graduates into job placements.
- 35% (*n*=250) attempted to track their graduates, but had limited success.
- 19% (*n*=136) are planning to track their graduates in the future, but have not done so yet.
- 7% (*n*=53) are not tracking graduates.

Preparation programs also are tracking other specific types of data, again with varying degrees of success. Examples follow.

- 44% (*n*=315) know placement rates of program graduates.
- 11% (*n*=79) know persistence rates of program graduates beyond the first year of teaching.
- 60% (*n*=432) have information about graduate satisfaction with their preparation program.
- 50% (*n*=357) know principals' satisfaction with the quality of program graduates.
- 12% (*n*=89) have observational measures of the performance of their graduates.
- 5% (*n*=32) have PK–12 student growth measures related to their graduates.
- 8% (*n*=56) have PK–12 student value-added measures related to their graduates.

Observations

- Programs face significant challenges following teacher education graduates into their jobs: Most institutions do not have the human or financial resources to invest in a substantial database of their graduates, so they rely on state data systems. The graduates of many teacher preparation programs work in other states, and no state data system currently has the capacity to follow graduates out of state. Even when graduates stay in-state, few states track their job placements, evaluation results, and their impact on student learning.
- While states may have policies calling for such data systems, many are in early phases of development. Some states that already have such data systems do not share the data with teacher preparation programs. Finally, the quality of some of the data may render them inadequate or unusable for preparation programs. It is important to bear these limitations in mind as policies are considered that assume that data on program graduates are accurate and readily available.
- States are in various stages of building statewide data systems that can capture and link data on students, educators, preparation programs, and workforce outcomes. Educator preparation programs are stakeholders and should be involved in developing these data systems.

A Data-Sharing Template

In 2010, AACTE collaborated with the Data Quality Campaign, NCATE, and CCSSO to develop a data-sharing template to prompt discussion and strategic planning on this topic among stakeholders. *Leveraging State Longitudinal Data Systems to Inform Teacher Preparation and Continuous Improvement* lays out the types of longitudinal data items that states can share with teacher preparation programs and the analytic purpose of each. For example, it suggests collecting teacher data in the following areas:

- Career path (year hired, subjects taught and area of certification, characteristics of the school of employment, student characteristics, attrition, etc.)
- Induction experience (licensure status, satisfaction with preparation program, first-year support from district, principal satisfaction with teacher, etc.)
- Performance measures (value-added growth in student learning, performance evaluation, awards received, observational measures, etc.)

The data-sharing template document can be found at **http://www.dataqualitycampaign.org/resources/details/1008**

FINDING 8. Teacher Production Shortages Persist in Key Areas

According to an April 2012 report from the U.S. Department of Education's Office of Postsecondary Education,[22] the current high-need fields in schools that serve low-income students include English language acquisition, mathematics, science, and special education.

In 2009–2010, AACTE member institutions (*n*=617 institutions reporting) awarded 72,073 bachelor's degrees and 15,129 nondegree certificates in education at the bachelor's level for initial licensure. Of those:

- 5% of bachelor's degrees and 9% of completers were awarded in mathematics and sciences.
- 7% of bachelor's degrees and 2% of completers were awarded in special education.
- Less than 1% of bachelor's degrees and 2% of completers were in bilingual education or teaching English to speakers of other languages (TESOL).

In 2009–2010, AACTE member institutions (*n*=449 institutions reporting master's-level programs) awarded 45,444 education degrees and 18,267 nondegree certificates in education at the master's or postbaccalaureate initial licensure level. Of those:

- 6% of degrees and 10% of certificates were awarded in math and sciences.
- 15% of degrees and 14% of certificates were awarded in special education.
- 2% of degrees and 2% of certificates were awarded in bilingual education or TESOL.

The most frequently awarded degree in teacher preparation remains elementary education (31.4% of all degrees and certificates awarded in initial certification)—an area in which shortages generally do not occur.[23]

Observations

- These data suggest that better alignment is needed between teacher production and workforce needs. Programs that target recruitment in these fields should be expanded.
- While production is a part of the shortage challenge, so is attrition. Shortage areas experience notably high turnover rates. Thus, more can be done to improve induction programs and working conditions to ensure that highly trained professionals remain in the teaching field after 5 years.[24]

University of Cincinnati

The School of Education at the University of Cincinnati (UC) prepares STEM teachers to design, implement, and assess classroom activities that include project- and problem-based learning and involve deep inquiry, critical thinking, and multiple forms of communication and assessment. UC offers various options for candidates to pursue STEM certification.[25] In 2011–2012, UC prepared 71 candidates for initial licensure in the STEM fields. This represents a 13% increase over the last three years. UC has been integral to closing the STEM teacher shortage gap in the Cincinnati area. Of particular note are two partnerships that UC has with Hughes High School and Taft Elementary School, which are designated STEM schools in the local school district. UC professors teach their classes in the public school buildings, and the schools' STEM teachers also teach methods courses. Preservice teachers observe STEM teachers modeling best STEM practices and have opportunities to do field work and clinical internships in those classrooms. By integrating its preparation program into STEM teaching and learning experiences for PK–12 students, UC is creating innovative experiences where candidates can develop professional communication skills, apply technology to real-world situations, and become exposed to a wide range of STEM careers.

University of Northern Colorado

The University of Northern Colorado (UNC) School of Special Education has long produced high-quality special educators in significant numbers. In the 2009-2010 school year it graduated 105 special educators for initial certification. It currently has approximately 450 declared undergraduate special education majors and an additional 500 students enrolled in specialized graduate programs.

Two key features of the program include a strategic recruitment plan and ample support for the teacher candidates throughout the program. Due to the strong relationships the school maintains with area districts, faculty recruit heavily from high schools and utilize extensive online strategies. Faculty also participate in every university recruitment activity to promote special education as a "cool" teaching career to students on campus. One way the school has strengthened the support it provides candidates is through its implementation of an "early warning system" to identify early on those teacher candidates struggling in the program and to develop professional improvement plans to support them. UNC has significantly reduced special education shortages in its nearby school districts through its strong program.

FINDING

9. Teacher Candidates Do Not Reflect the Demographic Makeup of Students in PK–12 Classrooms

The 2008 Census Bureau reported that the school-aged population of students was growing more diverse and would continue to do so in future years. Census data also revealed that 47% of children younger than 5 are members of a racial or ethnic minority. Census Bureau projections indicate that by 2050, no group will constitute a 50% majority in the United States. While more diverse teachers have entered the profession in recent years, their numbers have not kept pace with the PK–12 population shift.[26] An analysis of the National Center for Education Statistics (2012) data[27] showed that students of color made up more than 45% of the PK–12 population, whereas teachers of color made up only 17.5% of the educator workforce.

Current teacher candidates do not reflect the demographic makeup of PK–12 classrooms. The PEDS survey found that in 2009–2010, bachelor's degrees in education were awarded to the following:

- 82% White candidates
- 6% Black/African American candidates
- 4.2% Hispanic candidates
- 4.2% race/ethnicity unknown or more than 2 identifications
- 1.6% Asian/Pacific Islander candidates
- 0.9% American Indian candidates
- 0.4% candidates from outside the United States

Programs that do not award education degrees but that provide requirements for licensure at the bachelor's level produced slightly more diverse teacher candidates. Their program completers included

- 76.5% White candidates
- 7.3% Black/African American candidates
- 8.4% Hispanic candidates
- 5.1% race/ethnicity unknown or more than 2 identifications
- 1.8% Asian/Pacific Islander candidates
- 0.4% American Indian candidates
- 0.4% candidates from outside the United States

PEDS data also show that 75% of the candidates produced by institutions were female. Additionally, minority-serving institutions produced proportionately more minority teachers than other institutions. Programs for initial licensure at the postbaccalaureate or master's level produced more diverse candidates than bachelor's-level programs.

Observations

- Recruitment practices should be examined to understand whether they are facilitative or pose obstacles to entry into teacher preparation. Alternative routes to licensure have been more successful in recruiting minority and male candidates and could inform traditional programs' recruitment efforts.[28] The 2011 PEDS data provide additional evidence that alternative programs produced higher percentages of minority teachers. Future PEDS surveys will collect data on programs' recruitment practices.
- Retention methods should be studied to understand why minority teachers continue to leave the field at higher rates than their White peers.[29]

Call Me MISTER Initiative

Recruiting Teachers From Diverse Backgrounds

The Call Me MISTER (acronym for Mentors Instructing Students Toward Effective Role Models) initiative was established at Clemson University in 2000 to increase the pool of available teachers from a broader, more diverse background, particularly for the lowest performing elementary schools. In fact, the program estimates that it has increased the percentage of Black male teachers at elementary schools in South Carolina by 40% since the program began. The initiative provides

- Tuition assistance through scholarships and loan-forgiveness programs for admitted students pursuing approved programs of study in teacher education at participating colleges.
- An academic support system to help ensure their success.
- A peer cohort system for social and cultural support.

Now, 12 years since its inception, the initiative has graduated 84 MISTERs who are teaching in South Carolina schools, and another 178 MISTERs are currently enrolled in the program across 15 colleges in South Carolina. In addition, nearly 100 students are enrolled in 7 other participating states. (Source: Clemson University, **www.callmemister.clemson.edu**)

Using PEDS Data: Conclusion

The PEDS findings tell a story of the dynamic and rapidly changing work of preparing U.S. teachers. Teacher preparation programs are attracting students with GPAs that far exceed the minimum requirement for college entry and graduation. They are designing alternative routes to licensure to attract more qualified and diverse candidates. With the increasing use of performance-based measures, teacher educators are ensuring as never before that candidates are ready to teach. Technology is being integrated into course work and expanded to accommodate distance learners. Candidates universally participate in student teaching or other clinical experiences, which has been identified as one of the most important activities associated with future teacher success. And teacher educators are actively seeking program outcome data for the purpose of continuous improvement.

Moving Forward

The findings in this report also present an agenda for the profession to build on progress made so far and to resolve persistent challenges. AACTE has always used the data found in the PEDS collection to inform the programmatic and policy work it undertakes. The results of the 2011 PEDS data collection, in many ways, confirm that the Association's priorities have been rightly focused, but they also provide AACTE with impetus to act more urgently on challenges the findings underscore.

As a national association that represents over 800 institutions of higher education, AACTE is committed to furthering the following agenda:

- Collecting, synthesizing, and disseminating data on the preparation profession. AACTE will continually revise its PEDS survey to collect needed information related to emerging challenges and practices. Subsequent surveys will examine the types of performance assessments programs are using; the data literacy, assessment, and technology skills of programs' graduates; the results of programs' graduate and employer surveys; recruitment practices for minority candidates and men; and further clarification around what types of data states and districts provide programs about their graduates.
- Ensuring that every preparation program adopts performance-based exit measures as part of their educator candidate assessments. AACTE will support its members' implementation of these measures and urge those in its membership who have not yet incorporated performance assessments into their exit requirements to do so.
- Advocating for expanded clinical experiences during preparation with a goal of a full year residency program. Research indicates that extended clinical preparation has a significant impact on generating teachers who are effective in the classroom on day one. While the number of one-year residencies is growing, currently they are found in only 5% of programs.
- Advocating for closer alignment of teacher production with education workforce needs. AACTE will call on and support its membership and school districts to work closely together to ensure an ample teacher pipeline into shortage areas. Also, the Association will continue to advocate for stronger federal investments in supporting the preparation of teachers in critical shortage areas.
- Advocating for state initial educator licensure and program approval policies that are grounded in research. Such policies would require candidates to have—and programs to include—strong clinical preparation and performance assessments for initial certification.
- Creating, elevating, and supporting initiatives to diversify the profession so that educators better reflect the demographics of the PK–12 student population.
- Advocating for preparation programs and their partners to have access to data on programs' graduates, and advocating for the data to be used responsibly by states and others. This advocacy takes a high priority given that many states are moving to make high-stakes decisions about programs' quality based on outcome measures and that institutions need the data for program improvement purposes.
- Advocating for state and federal policies that promote and invest in research-based reform and innovation that address the pressing needs of today's educator workforce.

The educator preparation profession will strengthen as it examines its efforts and results and acts, in partnership, on what the data reveal. AACTE invites readers to use PEDS findings and recommendations to continue the conversation about improving outcomes for teachers and PK–12 students and inventing the future of teacher preparation.

ENDNOTES

[1] U.S. Department of Education, Office of Postsecondary Education. (2013). *2011 Title II State Reports* [special analysis]. Washington, DC: Author.

[2] Ibid.

[3] The College of Education at the University of Kentucky provides a compilation of certification requirements in all 50 states and the District of Columbia (**http://www.uky.edu/Education/TEP/usacert.html**). The National Association of State Directors of Teacher Education and Certification also provides a link to the state certification requirements (**http://www.nasdtec.org**).

[4] U.S. Department of Education, Office of Postsecondary Education. (2013). *2011 Title II State Reports* [special analysis]. Washington, DC: Author.

[5] Ibid.

[6] National Center for Education Statistics. (2010). *The condition of education 2010* (NCES 2010-028). Washington, DC: U.S. Department of Education. Retrieved from **http://nces.ed.gov/programs/coe/pdf/coe_nht.pdf**

[7] U.S. Department of Education, Office of Postsecondary Education. (2012). *Teacher shortage areas nationwide listing 1990–1991 through 2012–2013*. Washington, DC: Author.

[8] National Commission on Teaching and America's Future. (2010). *Who will teach? Experience matters*. Washington, DC: Author.

[9] Eduventures, Inc. (2011). *What are the components of teacher preparation programs that positively impact teacher performance and P–12 student achievement?* Catalog No. 17SOECRI0211. Retrieved from **http://www.units.muohio.edu/eap/deansmessge/documents/SOECRI_SOERsrchBrief_NonSOESpecific__211.pdf**

[10] AACTE. (2012). *What we know: How teacher preparation affects student achievement*. Washington, DC: Author. Retrieved from **http://aacte.org/pdf/Publications/Reports_Studies/What%20We%20Know%20-%20Student%20Achievement.pdf**; AACTE. (2009). *Teacher preparation makes a difference*. Washington, DC: Author. Retrieved from **http://aacte.org/pdf/Publications/Resources/Teacher%20Preparation%20Makes%20a%20Difference.pdf**; Boyd, D., Lankford, H., Loeb, S., Rockoff, J. & Wyckoff, J. (2008, May). *The narrowing gap in New York City teacher qualifications and its implications for student achievement in high-poverty schools*. (Working Paper 14021). Cambridge, MA: National Bureau of Economic Research. Retrieved from **http://papers.nber.org/papers/w14021**; Darling-Hammond, L., Holtzman, D., Gatlin, S. J., & Heilig, J. V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. *Education Policy Analysis Archives, 13*(42). Retrieved from **http://epaa.asu.edu/ojs/article/view/147**

[11] Glass, G. V. (2008, May). *Alternative certification of teachers*. East Lansing, MI: Great Lakes Center for Education Research & Practice. Retrieved from **http://greatlakescenter.org/docs/Policy_Briefs/Glass_AlternativeCert.pdf**; Henke, R., Chen, X., & Geis, S. (2000). Progress through the teacher pipeline: 1992-93 college graduates and elementary/secondary school teaching as of 1997. NCES 2000-152. Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved from **http://nces.ed.gov/pubs2000/2000152.pdf**; Ware, A., LaTurner, R. J., Okulicz-Kozaryn, A., Garland, M., & Klopfenstein, K. (2011, January). *Teacher preparation programs and Teach for America research study*. The University of Texas at Dallas, Education Research Center.

[12] AACTE. (2012). *Where we stand: Clinical preparation of teachers*. Washington, DC: Author. Retrieved from **http://aacte.org/pdf/Publications/Reports_Studies/Where%20We%20Stand%20-%20Clinical%20Preparation.pdf**; AACTE. (2010). *The clinical preparation of teachers: A policy brief*. Washington, DC: Author. Retrieved from **http://aacte.org/pdf/Government_Relations/Clinical%20Prep%20Paper_03-11-2010.pdf**

[13] Institutions reported using Title I schools, low-performing schools, and high-performing schools in equal proportions for candidates' clinical experiences. Suburban schools were used slightly more frequently than urban and rural schools as clinical sites. Fewer clinical experiences took place in professional development schools, especially those in rural areas. Full-time teacher residencies are offered in only 5% of teacher preparation programs.

ENDNOTES

[14] National Council for Accreditation of Teacher Education. (2010, November). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. Washington, DC: Author. Retrieved from **http://www.ncate.org/LinkClick.aspx?fileticket=zzeiB1OoqPk%3D&tabid=715**

[15] National Research Council, Committee on the Study of Teacher Preparation Programs in the United States. (2010). *Preparing teachers: Building evidence for sound policy*. Washington, DC: The National Academies Press.

[16] The residency will continue through the Woodrow Wilson Teaching Fellowship and send graduates to more high-need New Jersey school districts beginning in 2014.

[17] AACTE. (2011). *Transformations in educator preparation: Effectiveness and accountability*. Washington, DC: Author; AACTE. (2010). *The clinical preparation of teachers*. Washington, DC: Author.

[18] Council of Chief State School Officers. (2012). *Our responsibility, our promise: Transforming educator preparation and entry into the profession*. Washington, DC: Author.

[19] American Federation of Teachers. (2012). *Raising the bar: Aligning and elevating teacher preparation and the teaching profession*. Washington, DC: Author.

[20] The following states require passage of edTPA as either an initial certification, program approval, or program completion requirement: IL, MN, NY, OH, TN, WA, and WI. A limited number of other states require candidates to pass a teacher performance assessment for initial certification.

[21] Peck, C., & McDonald, M. (2013). Creating cultures of evidence in teacher education: Context, policy and practice in three "high data use" programs. *The New Educator, 9*,12–28; Peck, C., Gallucci, C., Sloan, T., & Lippincott, A. (2009). Organizational learning and program renewal in teacher education: A socio-cultural perspective on learning, innovation and change. *Education Research Review, 4*, 16–25.

[22] U.S. Department of Education, Office of Postsecondary Education. (2012). *Teacher shortage areas nationwide listing 1990–1991 through 2012–2013*. Retrieved from **http://www2.ed.gov/about/offices/list/ope/pol/tsa.doc**. Although the report revealed regional differences among various shortage areas, special education shortages were noted in nearly every state. Shortages may be even more pronounced in hard-to-staff rural and urban schools with students from disadvantaged backgrounds. As a result, students with the greatest needs may not have licensed teachers.

[23] Some 42% of bachelor's degrees, 21% of nondegree certificates at the bachelor's level, 22% of master's degrees, and 30% of certificates at the postbaccalaureate level were in elementary education.

[24] For example, the attrition rate of special education teachers is twice that of general educators (see Center on Personnel Studies in Special Education. [2004]. Retaining qualified special education teachers: Understanding why teachers leave and what school districts can do about it. *Special Education Workforce Watch: Insights from Research*. Gainesville, FL: Author). Science and math teachers are often drawn from the classroom to more lucrative opportunities in the private sector.

[25] Options include the Woodrow Wilson Fellowship program, which supports teacher residencies to prepare STEM teachers, an NCATE-accredited online Master of Education in STEM, graduate certificates, and continuing education programs.

[26] Boser, U. (2011). *Teacher diversity matters: A state-by-state analysis of teachers of color*. Washington, DC: Center for American Progress.

[27] National Center for Education Statistics. (2012). *The condition of education 2012* (NCES 2012-045). Washington, DC: U.S. Department of Education. Retrieved from **http://nces.ed.gov/pubs2012/2012045.pdf**

[28] Feistritzer, C. E. (2011). *Profile of teachers in the U.S. 2011*. Washington, DC: National Center for Education Information.

[29] Bireda, S., & Chait, R. (2011). *Increasing teacher diversity: Strategies to improve the teacher workforce*. Washington, DC: Center for American Progress.

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Framingham State University
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University of Nebraska at Omaha
University of Nebraska Lincoln
Wayne State College
York College

Nevada
Nevada State College
University of Nevada Las Vegas
University of Phoenix Las Vegas

New Hampshire
Keene State College
Plymouth State University
Southern New Hampshire University
University of New Hampshire

New Jersey
Caldwell College
College of New Jersey
Felician College
Georgian Court University
Kean University
Monmouth University
Montclair State University
New Jersey City University
Princeton University
Ramapo College of New Jersey
Richard Stockton College of New Jersey
Rider University
Rowan University
Rutgers University New Brunswick
Seton Hall University
William Paterson University of New Jersey

New Mexico
Eastern New Mexico University
New Mexico Highlands University
New Mexico State University
University of New Mexico
Western New Mexico University

New York
Adelphi University
Bank Street College of Education
Brooklyn College of City University of New York
City College of New York
College of Saint Rose
College of Staten Island City University of New York

AACTE MEMBER INSTITUTIONS

Columbia University
Dowling College
D'Youville College
Five Towns College
Fordham University Lincoln Center
Hofstra University
Hunter College of City University of New York
Iona College
Ithaca College
Lehman College of City University of New York
Manhattanville College
Medgar Evers College of City University of New York
Mercy College
Molloy College
New York City College of Technology CUNY
New York Institute of Technology
New York University
Niagara University
Pace University
Queens College of City University of New York
Sage Colleges
Saint Bonaventure University
Saint John Fisher College
Saint Thomas Aquinas College
Siena College
State University of New York at Fredonia
State University of New York at Geneseo
State University of New York at New Paltz
State University of New York at Oswego
State University of New York Buffalo State College
State University of New York College at Brockport
State University of New York College at Cortland
State University of New York College at Oneonta
Syracuse University
Touro College
Utica College
Wagner College
York College of City University of New York

North Carolina

Appalachian State University
Barton College
Bennett College
Campbell University
Chowan University
Davidson College
East Carolina University
Elizabeth City State University
Elon University
Fayetteville State University
Gardner-Webb University
Greensboro College
Johnson C. Smith University
Lees McRae College
Lenoir Rhyne University
Livingstone College
Meredith College
Methodist University
North Carolina A&T State University
North Carolina Central University
North Carolina State University
Saint Augustine's College
Salem College
Shaw University
University of North Carolina at Chapel Hill
University of North Carolina at Charlotte
University of North Carolina at Greensboro
University of North Carolina at Pembroke
University of North Carolina Wilmington
Wake Forest University
Western Carolina University
William Peace University
Wingate University
Winston-Salem State University

North Dakota

Dickinson State University
Mayville State University
Minot State University
North Dakota State University
United Tribes Technical College
University of North Dakota
Valley City State University

Ohio

Baldwin-Wallace College
Bluffton University
Bowling Green State University
Capital University
Case Western Reserve University
Central State University
Cleveland State University
College of Wooster
Heidelberg University
Hiram College
John Carroll University
Kent State University
Lourdes University
Malone University
Marietta College
Miami University
Mount Vernon Nazarene University
Notre Dame College
Ohio Dominican University
Ohio Northern University
Ohio State University
Ohio University
Ohio Wesleyan University
Otterbein University
Shawnee State University
University of Akron
University of Cincinnati
University of Dayton
University of Findlay
University of Rio Grande
University of Toledo
Urbana University
Walsh University
Wittenberg University
Wright State University
Xavier University

AACTE MEMBER INSTITUTIONS

Youngstown State University

Oklahoma
Cameron University
East Central University
Langston University
Northeastern State University
Northwestern Oklahoma State University
Oklahoma Baptist University
Oklahoma Christian University
Oklahoma City University
Oklahoma Panhandle State University
Oklahoma State University
Oklahoma Wesleyan University
Oral Roberts University
Southeastern Oklahoma State University
Southern Nazarene University
Southwestern Oklahoma State University
University of Central Oklahoma
University of Oklahoma
University of Science and Arts of Oklahoma

Oregon
Concordia University
Corban University
George Fox University
Lewis and Clark College
Oregon State University
Pacific University
Portland State University
Southern Oregon University
University of Oregon
University of Portland
Western Oregon University
Willamette University

Pennsylvania
Alvernia University
Bloomsburg University of Pennsylvania
Cabrini College
California University of Pennsylvania
Cheyney University
Clarion University of Pennsylvania
Duquesne University
Edinboro University of Pennsylvania
Gannon University
Indiana University of Pennsylvania
King's College
Kutztown University
Lincoln University of Pennsylvania
Lock Haven University
Mansfield University
Millersville University of Pennsylvania
Penn State Harrisburg
Penn State University
Robert Morris University
Saint Joseph's University
Shippensburg University
Slippery Rock University of Pennsylvania
Temple University
University of Pittsburgh
University of Scranton
Villanova University
West Chester University of Pennsylvania
Widener University

Puerto Rico
University of Puerto Rico Rio Piedras

Rhode Island
Providence College
Rhode Island College
Roger Williams University
University of Rhode Island

South Carolina
Anderson University
Benedict College
Charleston Southern University
Citadel Military College of South Carolina
Claflin University
Clemson University
Coastal Carolina University
College of Charleston
Erskine College
Francis Marion University
Furman University
Lander University
Limestone College
Morris College
Newberry College
Presbyterian College
South Carolina State University
University of South Carolina
University of South Carolina Aiken
University of South Carolina Beaufort
University of South Carolina Upstate
Winthrop University
Wofford College

South Dakota
Augustana College
Black Hills State University
Dakota State University
Dakota Wesleyan University
Mount Marty College
Northern State University
Presentation College
South Dakota State University
University of South Dakota

Tennessee
Aquinas College
Austin Peay State University
Belmont University
Bethel University
Carson-Newman College
Christian Brothers University
Cumberland University
East Tennessee State University
Fisk University
Freed Hardeman University
Lane College
Lee University
LeMoyne Owen College
Lincoln Memorial University
Lipscomb University
Middle Tennessee State University
Milligan College
South College
Southern Adventist University
Tennessee State University

AACTE MEMBER INSTITUTIONS

Tennessee Technological University
Trevecca Nazarene University
Union University
University of Memphis
University of Tennessee at Chattanooga
University of Tennessee at Martin
University of Tennessee Knoxville
Vanderbilt University Peabody College
Victory University

Texas

Abilene Christian University
Angelo State University
Austin College
Baylor University
Lamar University
Midwestern State University
Our Lady of the Lake University of San Antonio
Prairie View A&M University
Sam Houston State University
Southwestern University
St. Edward's University
Stephen F. Austin State University
Texas A&M International University
Texas A&M University Commerce
Texas A&M University Kingsville
Texas Christian University
Texas Southern University
Texas State University San Marcos
Texas Tech University
Texas Woman's University
Trinity University
University of Houston
University of Houston Clear Lake
University of Houston Victoria
University of Mary Hardin Baylor
University of North Texas
University of Saint Thomas
University of Texas at Arlington
University of Texas at El Paso
University of Texas of the Permian Basin

Utah

Brigham Young University
University of Utah
Utah State University
Utah Valley University
Western Governors University

Vermont

University of Vermont

Virgin Islands

University of the Virgin Islands

Virginia

Bridgewater College
College of William and Mary
Eastern Mennonite University
George Mason University
Hampton University
James Madison University
Liberty University
Longwood University
Mary Baldwin College
Marymount University
Norfolk State University
Old Dominion University
Radford University
Regent University
Saint Paul's College
University of Mary Washington
University of Virginia
Virginia Commonwealth University
Virginia Polytechnic Institute and State University
Virginia State University
Virginia Union University

Washington

Central Washington University
Eastern Washington University
Evergreen State College
Gonzaga University
Pacific Lutheran University
Saint Martin's University
Seattle Pacific University
Seattle University
University of Puget Sound
University of Washington Seattle
Washington State University
Western Washington University
Whitworth University

West Virginia

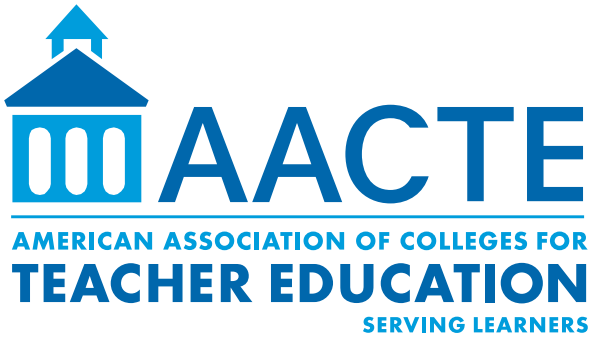
Alderson Broaddus College
Bethany College
Bluefield State College
Concord University
Davis & Elkins College
Fairmont State University
Glenville State College
Salem International University
Shepherd University
West Liberty University
West Virginia State University
West Virginia University
West Virginia University at Parkersburg
West Virginia Wesleyan College

Wisconsin

Alverno College
Cardinal Stritch University
Edgewood College
Marian University
Marquette University
Mount Mary College
Ripon College
Silver Lake College
University of Wisconsin Eau Claire
University of Wisconsin Green Bay
University of Wisconsin La Crosse
University of Wisconsin Madison
University of Wisconsin Milwaukee
University of Wisconsin Oshkosh
University of Wisconsin Parkside
University of Wisconsin Platteville
University of Wisconsin River Falls
University of Wisconsin Stevens Point
University of Wisconsin Stout
University of Wisconsin Whitewater
Viterbo University

Wyoming

University of Wyoming



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