2014 Teacher Prep Review

A REVIEW OF THE NATION'S TEACHER PREPARATION PROGRAMS

Q National Council on Teacher Quality

Additional materials for *NCTQ's Teacher Prep Review* can be retrieved at: **www.nctq.org/teacherPrep/review2014**. This webpage provides access to a variety of materials, including more detailed findings by state, by standard and by individual program; resources for program improvement; rationales and scoring methodologies for each standard; and more information about outside advisory groups and expert evaluators.

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50CAN: The 50-State Campaign for Achievement Now

A+ Denver

ACLU of Maryland

Advance Illinois

Advocates for Children and Youth

Arkansas for Education Reform Foundation

Association of American Educators

Better Education for Kids, Inc.

Building Bright Futures

Center for American Progress Action Fund

Children at Risk

Children's Education Alliance of Missouri

Coletti Institute for Education and Career Achievement

Colorado Children's Campaign

Colorado Succeeds

ConnCAN

Council of Great City Schools

DC School Reform Now

Democrats for Education Reform

DFER Colorado

DFER Illinois

DFER Massachusetts

DFER Michigan

DFER New Jersey

DFER New York

DFER Rhode Island

DFER Tennessee

DFER Washington

DFER Wisconsin

Educate Texas

Education Reform Now

Education Trust

Education Trust - Midwest

Education Trust - West

Educators 4 Excellence

EdVoice

Foundation for Excellence in Education

Foundation for Florida's Future

Georgia Partnership For Excellence in Education

Haan Foundation for Children

Institute for a Competitive Workforce

International Dyslexia Association

Kansas Policy Institute

League of Education Voters

Literate Nation

MarylandCAN: Maryland Campaign for Achievement Now

Mass Insight Education & Research Institute

Massachusetts Business Alliance for Education

Michigan Association of School Administrators

MinnCAN: Minnesota Campaign for Achievement Now

Mississippi First

Missouri Chamber of Commerce and Industry

NYCAN: New York Campaign for Achievement Now

Oklahoma Business & Education Coalition

Partnership for Learning

PennCAN: Pennsylvania Campaign for Achievement Now

Platte Institute for Economic Research

Reading Matters to Maine

RI-CAN: Rhode Island Campaign for Achievement Now

Rodel Foundation of Delaware

Step Up for Students

Students for Education Reform

Students Matter

StudentsFirst

Teaching Trust

Tennessee SCORE

Texas Institute for Education Reform

The Grimes Reading Institute

The Mind Trust

Thomas B. Fordham Institute

Thomas B. Fordham Institute–Ohio

U.S. Chamber of Commerce

Uplift Education

Urban League of Greater Miami

Wisconsin Reading Coalition

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NCTQ Teacher Prep Review 2014
Executive Summary

Ever so slowly, the United States is taking a harder look at how its teacher preparation schools are improving the quality of the teachers they produce.

The signs are everywhere — from proposed federal action to state legislatures and school boards passing new oversight laws and regulations, to a newly marshaled push for stronger accreditation by the institutions themselves. The country is finally waking up to the critical importance of improving teacher preparation quality to produce more classroom-ready teachers.

But as *NCTQ Teacher Prep Review 2014* shows, far more needs to be done to expand the pool of teachers properly prepared to meet the challenges of the contemporary American classroom. In the graphic below, the mountain of low achievers on the left overshadows the sliver of high achievers on the right, making the distribution resemble a steep dive more than a bell curve. Still, an upsurge in quality has begun. It is good news indeed to be able to report some movement, however spotty, given the many attempts to improve teacher preparation that never even got off the ground.

Fig. 1   Distribution of raw scores of elementary and secondary teacher preparation programs (N=1612)
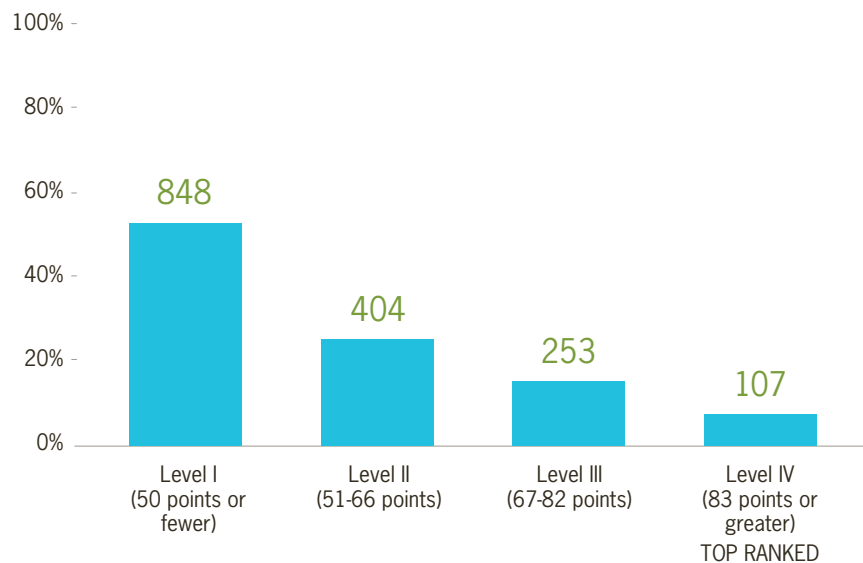
This graph displays the raw scores of the 1,612 ranked elementary and secondary teacher preparation programs in the Review. *The highest score is 121 on a 125-point scale. Fifty-three percent of programs fall within Level I in terms of performance (≤50 on a 125-point scale).*

The *Review 2014* builds on last year's report in several significant ways. First, it is bigger. The number of institutions whose programs we can evaluate on the core components of teacher preparation — selection, content preparation and practice teaching — has increased by almost 40 percent, to **836 institutions** housing at least one ranked program, compared with 608 institutions last year. The increase is due less to greater institutional cooperation than to our own efforts to secure course materials.

Next, we have discarded our system of *ratings* for a system of *rankings* to make it easier for users of our results to assess relative performance of programs in a crowded market. There are now both national rankings and regional rankings, out of consideration for aspiring teachers' tendency to attend teacher preparation programs relatively close to home.

Also this year, we include an analysis of alternative certification programs, a popular but poorly understood pathway into the classroom that supplies one of every five teachers in the United States. We begin this pilot effort with 85 programs not managed by any higher education institution also offering traditional programs, as these programs differ greatly from the traditional programs on which we focus much of our attention. Because alternative certification is particularly popular in Texas, one of the few states which permit for-profit companies to run programs, almost half of the sample providers are located in Texas. And in this first foray, we chose to evaluate secondary programs, as the original vision of alternative certification was to give high school students the benefits of teachers with talent and in-depth subject matter knowledge who chose not to go through an education school. The results of this analysis should put to rest concerns that NCTQ is attempting to dismantle traditional teacher preparation in favor of alternative approaches. If anything, our analysis of secondary programs shows that alternative certification is generally more broken than its traditional counterpart. These independent programs typically have very low admission standards, do not ensure that candidates are prepared to teach every subject to which they could be assigned, and provide insufficient support to candidates as they take on full-time teaching responsibilities. Only one was eligible for our highest mark: **Teach For America, Massachusetts**.

Finally, in response to suggestions from teacher educators and K-12 educators, we have made adjustments to several of our standards: selection criteria, classroom management and student teaching.

These changes have enabled NCTQ to take a closer, more definitive look at how teacher preparation programs are refining their efforts to raise the quality of their work and of the teachers they are sending into American classrooms.

These are among the key findings:

- Of the **1,668 programs** (housed in 836 institutions) ranked in the *Review*, only 26 elementary programs and 81 secondary programs make NCTQ's lists of Top Ranked programs. Seventeen states and the District of Columbia are without a Top Ranked program in either elementary or secondary education. There is much more work to do to ensure that future teachers are ready to lead the classroom when they graduate. Among the Top Ranked programs are 68 programs housed in public institutions that offer aspiring teachers an opportunity to enter the profession without overloading themselves with debt. Indeed, the fact that the Top Ranked list is dominated by institutions not traditionally considered elite or "high status" is telling. A number of programs worked hard and at lightning speed (within the context of the normal pace of higher education) to achieve Top Ranked status this year. **Ohio**, **Tennessee** and **Texas** — the last state the site of our first comprehensive statewide study on teacher prep in 2010 — are the three states with the most Top Ranked programs.

- Elementary programs continue to be far weaker than their secondary counterparts, with 1.7 times as many elementary programs as secondary programs found to be failing. Their poorer performance speaks to both the

specialized training elementary teachers need and its continuing neglect. We are disheartened that the teacher education field continues to disregard scientifically based methods of reading instruction: coursework in just 17 percent of programs equips their elementary and special education teachers to use all five fundamental components of reading instruction, helping to explain why such a large proportion of American school children (30 percent) never learn to read beyond a basic level. (However, we are gratified to report that of programs choosing to submit materials to NCTQ for the second edition, 38 percent improved their score on the Early Reading Standard.)

- The field also maintains a scattershot approach to mathematics preparation: 23 states cannot boast a single program that provides solid math preparation resembling the practices of high-performing nations. Looking across 907 undergraduate and graduate elementary programs, nearly half (47 percent) fail to ensure that teacher candidates are capable STEM instructors: these programs' requirements for candidates include little or no elementary math coursework and the programs also do not require that candidates take a single basic science course (with most giving candidates free rein to choose from a long list of narrowly focused or irrelevant electives).

- District superintendents tell us that elementary teachers simply don't know the core subjects of the elementary curriculum. We think it's no wonder that there's a "capacity gap" given the lack of guidance given to candidates about the content foundation they need before they even begin professional training.

Fig. 2 Is Teacher Preparation "College and Career Ready"?
(N=885 undergraduate elementary programs)

Subject	Proportion
American Literature	2%
Chemistry with lab	4%
World Literature	10%
World History Modern	11%
World History Ancient	14%
Physics with lab	16%
Biology with lab	24%
Geography	28%
Early American History	30%
Children's Literature	32%
Modern American History	37%
Writing, Grammar and Composition	90%

Proportion of programs with relevant course requirements
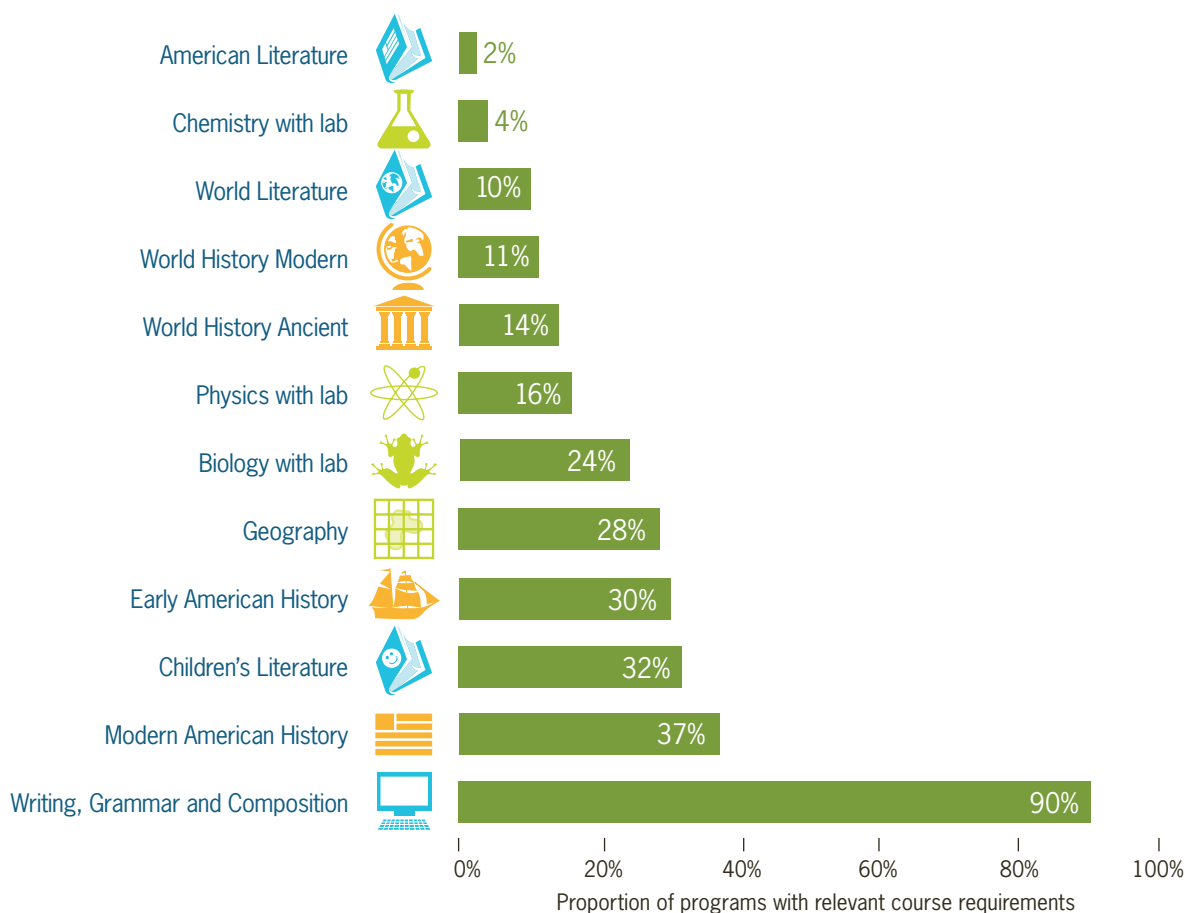
New college and career ready student learning standards require broad content knowledge of elementary teachers. Yet few programs require teacher candidates to demonstrate upon admission (through either testing or coursework) that they will be able to meet these higher demands, something we term a very real and disturbing "Capacity Gap."

- Three out of four programs fail even to insist that applicants be in the top half of the college-going population, a modest academic standard. One encouraging sign: nine institutions raised their admission standards after the release of the first edition of the *Review*. This issue is also being tackled at the state level, with two states — **Delaware** and **Rhode Island** — requiring their programs to raise the bar on admissions. The related situation of a low bar for performance will be addressed in more depth this fall, when NCTQ releases a new examination of how common it is for candidates to complete teacher preparation earning much higher grades than their peers on the same campus.

- 17 institutions had *both* an elementary and a secondary program on the lists of Top Ranked programs: **Arizona State University**, **CUNY-Hunter College** (NY), **Dallas Baptist University** (TX), **Eastern Connecticut State University**, **Fort Hays State University** (KS), **Gordon College** (MA), **Lipscomb University** (TN), **Miami University of Ohio**, **Montclair State University** (NJ), **Northwest Nazarene University** (ID), **Northwestern State University of Louisiana**, **Ohio State University**, **Southeastern Louisiana University**, the **University of Arkansas at Monticello**, the **University of Houston** (TX), the **University of Montana** and **Western Governors University** (UT).

- The proportion of programs that have all of the basic components in place for a strong student teaching experience fell to 5 percent from 7 percent last year, with performance suffering after an adjustment was made to correct a potential loophole in the methodology of evaluations in the *Review's* 2013 edition. Student teaching, which may be the most important element of teacher preparation, is the NCTQ standard that institutions struggle most to meet, particularly around ensuring that student teachers are placed with effective teachers.

- The most promising sign of progress is in the training teacher candidates receive in how to manage classrooms — an area that new teachers perennially describe as their most difficult challenge. Of the institutions that submitted new materials and asked to be rescored for this edition, 15 percent made important improvements to the guidance they give to their student teachers about how to set rules, how to minimize classroom disruption, and how to apply consequences to misbehavior fairly and effectively.

By applying the new ranking system for preparing teachers, NCTQ's *Review 2014* determined that **Dallas Baptist University** (TX) houses the top elementary program, while the top programs in the nation for training secondary teachers are at **Lipscomb University** (TN) and **Western Governors University** (UT), the latter of which had nearly perfect scores across the board and whose online training is accessible to any aspiring teacher in the nation. The commitment and focus on the part of these institutions, and indeed all of the institutions with Top Ranked programs, serves as a tremendous source of optimism that it is possible for all new teachers to receive the preparation needed to be classroom ready on day one.

The National Council on Teacher Quality advocates for reforms in a broad range of teacher policies at the federal, state and local levels to increase the number of effective teachers. In particular, we recognize the absence of much of the evidence necessary to make a compelling case for change and seek to fill that void with a research agenda that has direct and practical implications for policy. We are committed to transparency and increasing public awareness about the four sets of institutions that have the greatest impact on teacher quality: states, teacher preparation programs, school districts and teachers unions.

The Top of the Top Ranked Programs in each category are as follows:

Elementary

1. **DALLAS BAPTIST UNIVERSITY** (undergraduate)

2. **TEXAS A&M UNIVERSITY** (undergraduate)

3. **OHIO STATE UNIVERSITY** (graduate)

4. **NORTHWESTERN STATE UNIVERSITY OF LOUISIANA** (tie; undergraduate)

4. **UNIVERSITY OF DAYTON** (tie; undergraduate)

4. **UNIVERSITY OF HOUSTON** (tie; undergraduate)

6. **LOUISIANA STATE UNIVERSITY** (undergraduate)

8. **EASTERN CONNECTICUT STATE UNIVERSITY** (tie; undergraduate)

8. **MIAMI UNIVERSITY OF OHIO** (tie; undergraduate)

10. **MCDANIEL COLLEGE** (tie; undergraduate)

10. **UNIVERSITY OF TEXAS AT AUSTIN** (tie; undergraduate)

Secondary

1. **LIPSCOMB UNIVERSITY** (tie; undergraduate)

1. **WESTERN GOVERNORS UNIVERSITY** (tie; undergraduate)

3. **FORT HAYS STATE UNIVERSITY** (undergraduate)

4. **COLLEGE OF WILLIAM AND MARY** (tie; graduate)

4. **MONTCLAIR STATE UNIVERSITY** (tie; graduate)

5. **FURMAN UNIVERSITY** (tie; undergraduate)

5. **HENDERSON STATE UNIVERSITY** (tie; undergraduate)

5. **MIAMI UNIVERSITY OF OHIO** (tie; undergraduate)

5. **UNIVERSITY OF CALIFORNIA AT LOS ANGELES** (tie; graduate)

5. **UNIVERSITY OF HOUSTON** (tie; undergraduate)

5. **UNIVERSITY OF VIRGINIA** (tie; graduate)

8. **CUNY – HUNTER COLLEGE** (tie; graduate)

8. **EAST TENNESSEE STATE UNIVERSITY** (tie; undergraduate)

8. **MIAMI UNIVERSITY OF OHIO** (tie; graduate)

8. **UNIVERSITY OF CALIFORNIA – IRVINE** (tie; undergraduate)

8. **UNIVERSITY OF CALIFORNIA – SAN DIEGO** (tie; graduate)

8. **UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE** (tie; undergraduate)

8. **UNIVERSITY OF TENNESSEE** (tie; undergraduate)

I. Introduction

One year ago, NCTQ released the first edition of the *Teacher Prep Review*, sparking a national debate over how to improve what is at best a mediocre teacher preparation system in the United States. More than 1,000 news stories were published within 48 hours of the report's release. The report clearly struck a chord, shedding light on how much work needs to be done to give teachers the training they need to be classroom-ready upon graduation.

What happened after the media frenzy around the release died down is more important. The *Review* succeeded in moving to the top of the public agenda the need to reform teacher preparation as a way to strengthen our educational system. The drum beat was steady and persistent. A month after the *Review's* release, four California superintendents penned a passionate op-ed calling the *Review* "a roadmap for improvement." In September 2013, *New York Times* columnist Joe Nocera argued that teacher prep is precisely the reform movement on which people should be focused, followed just a month later by Bill Keller, who used our well-coined term "industry of mediocrity" as the title for his own op-ed about teacher preparation.

Teacher preparation has also become an agenda item for state school boards and legislatures, with 33 states passing significant new oversight laws or regulations and another seven states starting to make inroads over the last two years (see textbox on page 9). In addition, the Council of Chief State School Officers (CCSSO) is currently leading an initiative to help seven states develop stronger program approval standards. In terms of changes that have been achieved, Delaware and Rhode Island are standouts, both raising the bar of entry into the profession. It has been a refreshing turn of events, given that teacher preparation had been largely sidelined as an issue, even though the broader issue of teacher quality had been the "hot" topic in education reform for much of the decade.

Fig. 3   Big movement on the state teacher prep policy front

■ 33 states have made *significant* changes to laws and regulations

■ 7 states have taken steps in the right direction

■ No activity

● Member state in CCSSO Network for Transforming Educator Preparation
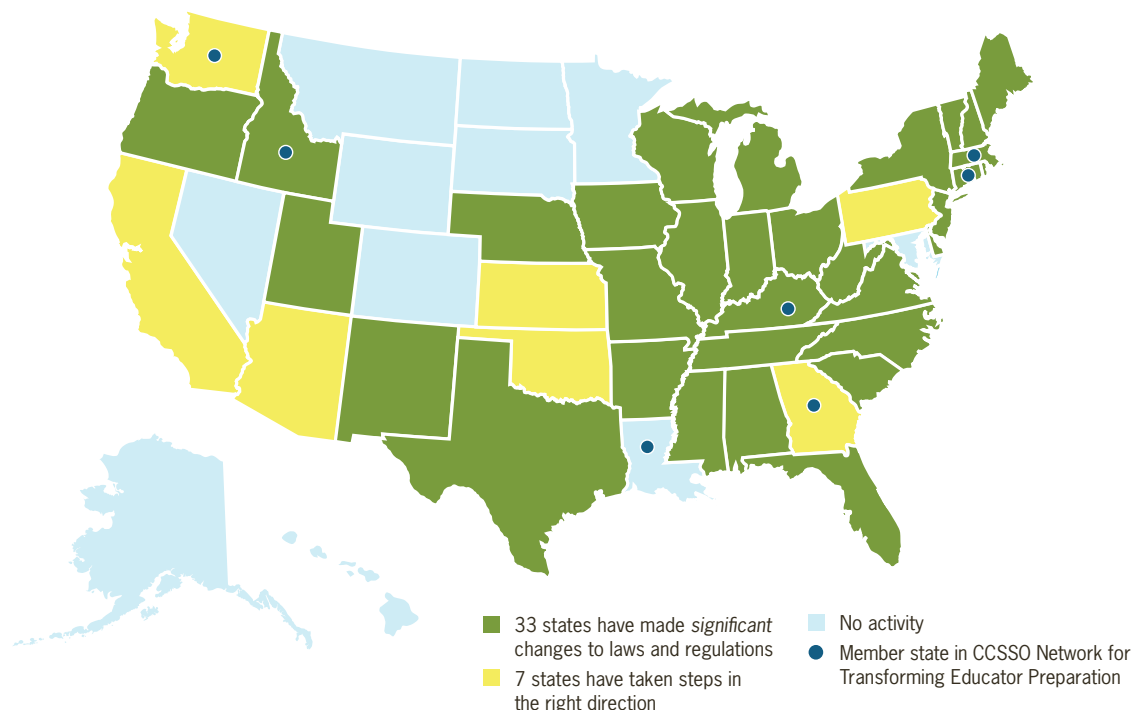
In the last two years, 33 states made significant changes in teacher prep policy and another 7 states made minor policy changes. The level of activity is all the more noteworthy as there was almost no activity in at least the preceding six years, when NCTQ started tracking this issue. For example, in 2009 not a single state required elementary teacher candidates to pass a strong multi-subject content test that would not allow a high score in one subject to compensate for a low score in another. Now 19 states have adopted such a test.

The Obama Administration has also acted, announcing in April 2014 its intention to beef up accountability measures for teacher preparation and restrict grant money only to high-performing programs. Education Secretary Arne Duncan noted, "Programs that are producing teachers where students are less successful, they either need to change or do something else, go out of business."[1]

The *Review* did not fade quickly from public attention largely because it resonated with the experiences of many educators who felt their own preparation had failed them. Esther Cepeda, formerly a Chicago teacher specializing in bilingual education and now a columnist, asked "What other profession, effectively, tells its graduates that they can live on love?"[2] Maria Mendez, a Miami-Dade public school teacher, pointed out that "classrooms are changing; the teaching profession is changing and traditional teacher prep has done little to keep up."[3]

The generally low ratings earned by most institutions in the first *Review* fueled an already tense relationship between NCTQ and much of the field of teacher education. A healthy and civil debate can and should be had about our methodology, including our data collection methods and our insistence that institutions cannot "opt out" of participating. So too should there be a public debate about the standards that form the basis of the *Review*, the research behind them, and whether they collectively capture what truly matters. NCTQ welcomes ongoing feedback about our approach from all interested parties, including, and especially, the higher education community.

Improving teacher preparation is now a big priority for states

Although teacher effectiveness policies have dominated states' attention over the last few years, states are now turning their focus to teacher preparation policies. In fact, 33 states made significant improvements to their teacher preparation policies in the two-year period, 2011-2013.

- 8 states (**Alabama**, **Connecticut**, **Delaware**, **Indiana**, **Kentucky**, **New Jersey**, **New York** and **North Carolina**) made improvements that helped them to earn a full letter grade higher in the *2013 State Teacher Policy Yearbook* than in 2011.

- **Rhode Island** made so much progress that it improved by <u>two</u> full letter grades — from a D+ to a B+ — in that interval.

What kind of changes are states making?

Increased screening for entry into teacher preparation:

- **29 states now require a test of academic proficiency as an entry requirement** for teacher preparation programs, up from 21 states in 2011.

- In **Delaware**, new legislation unanimously passed that raises the state's admission standards to the highest in the country, also strengthening standards and accountability requirements.

- **Rhode Island** adopted new standards for teacher preparation programs that require that each cohort or class of candidates scores in the top half and ultimately the top third of college entrance exam-takers.

Improved testing of content knowledge:

- **The District of Columbia and 18 states (Alabama, Arkansas, Connecticut, Delaware, Florida, Idaho, Indiana, Kentucky, Maine, New Hampshire, New Jersey, Rhode Island, South Carolina, Texas, Utah, Virginia, Vermont** and **West Virginia**) now require an elementary content test with separate passing scores for each core subject as a condition of licensure. In 2009, *not a single state* had such a requirement.

- **Iowa** now requires that middle and secondary teachers pass comprehensive content tests as a condition of licensure.

Ensuring that teachers know how to teach early reading:

- **17 states** now require assessments to ensure that elementary teacher candidates understand effective reading instruction. The new states are **California**, **Florida**, **Indiana**, **New Hampshire**, **New York**, **North Carolina**, **Ohio**, **West Virginia** and **Wisconsin**.

Making the student teaching experience matter:

- **32 states** now require the student teaching experience to be an adequate length, up from 29 in 2011. The new states are **Delaware**, **Georgia**, and **Missouri**.

- **5 states (Florida, Illinois, Massachusetts, Rhode Island** and **Tennessee**) now require that student teachers only be assigned to cooperating teachers who have been found to meet some measure of effectiveness, up from 2 in 2011.

Setting measurable expectations for programs:

In **North Carolina**, value-added data that connect student achievement data to preparation programs is now part of programs' report cards. Ten states now connect student achievement data to teacher preparation programs.

Nonetheless, the *Review's* overall finding that four out of five teacher preparation programs are weak or even failing has not come as a big surprise to most of us, including many teacher educators, even if our methodology was seen as wanting. As John Merrow of the PBS Newshour observed, "It's a little bit like going to the doctor for your physical and she says, 'oh you don't have to bother coming into the office. Just walk by my window.' In this case the patient, teacher education, is limping and coughing badly, and the doctor probably can say something is wrong."[4] In 2010, Nancy Zimpher, Chancellor of the State University of New York system, said that the teacher preparation field needed to be turned "upside down."[5] And Sharon Robinson, president of the American Association of Colleges for Teacher Education (AACTE), recently stated that "If we [teacher prep] weren't so embattled on all sides, I would have to be out there inciting its reform."[6]

We recognize that the very elements that make the field so ill at ease with and ferocious in its criticism of NCTQ's *Review* also make this work so meaningful. Unlike any of the numerous past critiques of the field, NCTQ did not grant programs the luxury of anonymity. Following in the footsteps of Abraham Flexner, whose famous 1910 study of all 155 medical schools in North America revealed that all but one did a substandard job training doctors, the *Review* names names. Shining such a harsh spotlight on programs is highly motivating to them. But teacher educators understandably felt that the tactic opened them up to criticism that verged on the personal.

NCTQ believes that the more closely institutions look at NCTQ's methodology, the more they will see that we share much common ground. Our analyses of the root causes of the field's weaknesses and our proposed solutions are strikingly similar to their own assessments. To begin, there is general agreement that, as currently structured, the enormous size of the field makes it all but ungovernable. With just shy of 1,500 U.S. institutions of higher education (IHEs) housing an average of five relatively autonomous teacher preparation programs (one might even call them fiefdoms, so independent are their operations), there are simply too many institutions in the business of preparing teachers for *any* effort to enforce reasonable standards to succeed — unless we can fully engage the unparalleled power of the marketplace. Only by arming aspiring teachers and school districts with the knowledge necessary to distinguish among programs can the field be moved in the right directions.

The model for NCTQ's *Teacher Prep Review* is the famous 1910 "Flexner Report" in which Abraham Flexner, a former school headmaster, rated all 155 medical schools in North America. His painstakingly graphic critiques pointed to massive problems. Ten years later, a third of such schools were closed or merged with other institutions. More important, a substandard system of medical training was transformed into the world's finest.

Fig. 4 Number of distinct institutions preparing teachers for primary/
secondary system, adjusted to the U.S. population
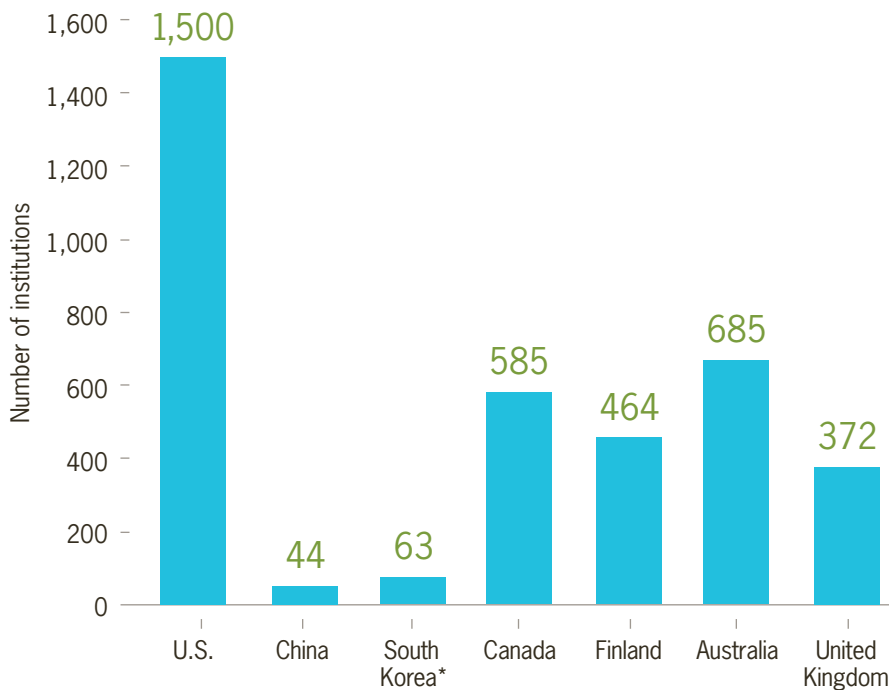
* For South Korea, the number of institutions refers to elementary only. For sources see endnote #7.

Even after adjusting for population differences, the U.S. generally has many times more institutions involved in teacher preparation than do other countries. For example, Canada has 60 percent fewer institutions per capita. NCTQ does not include 343 institutions in the Review *because collectively they produce less than 1 percent of the nation's traditionally trained teachers — some of them graduating only a couple of teachers a year.*

Looking within our borders, the field of teacher education stands out for its poor governance. Other professional fields use a strong accreditation system to bring order to member institutions. In engineering, nursing, medicine, law and accounting, training institutions cannot be viable without accreditation, because their graduates simply would not be employable. Yet professional accreditation has not been able to gain a foothold in the field of teacher education. It may be the only field of professional study in which it is genuinely a matter of institutional choice, and not necessarily an attractive one, to seek accreditation.

In spite of herculean efforts over a period of two decades by NCATE[9] and TEAC[10] (the two recently merged teacher accreditation bodies) to make accreditation mandatory, more than half of all programs remain unaccredited. The fact that unaccredited institutions can attract students and those students are just as likely to get teaching jobs as those graduating from accredited institutions is a tremendous source of frustration in the field. The primary challenge for the new accrediting body CAEP[11] is to make accreditation relevant and

Though only about half as big in both land area and population, Singapore provides a useful comparison with New York City. That country relies on a single school of education to meet its demand for new teachers. New York City, on the other hand, hired its new teachers for the 2012-2013 school year from no fewer than 300 schools of education across the country.[8]

therefore highly desirable. Starting from such a low level of participation, CAEP's immediate path forward is a difficult one; but if it can make headway in the face of fierce criticism by some of the most important figures in the field, its long-term role could be secured.

Finding common ground in other areas is harder, but not impossible.

Many teacher educators and others from the higher education community do not believe that an organization like NCTQ, one that is outside the academy, should have the right to review programs within. We accept our share of responsibility for a relationship that has sometimes been contentious; our resolve to complete the *Review* has been relentless, and not always sufficiently sensitive. As outsiders, we do not always observe the academy's conventions, and that undoubtedly contributed to a mistrust of our motivations, particularly among leaders in the field who considered themselves in its vanguard, but whose programs may have received a low rating.

But it is important for these institutions to know that NCTQ believes deeply in a system of teacher preparation based primarily in higher education. We strive for the highest degree of accuracy and reliability in our evaluations and want to work collaboratively with the field to improve it.

Take the controversial issue of whom to allow into teacher preparation programs. All participants in this debate (including NCTQ at times) have tended to retreat into hardened positions, inflaming rather than resolving this sensitive and complex issue. Some emphasize the importance of intelligence and would limit how intelligence should be measured to a narrow band of college aptitude tests. Opposing arguments from others, at least taken to the only possible conclusion, appear to suggest that the smarter someone is, the less likely he or she is to love children and belong in teaching. Our own view, much evolved over time and nicely aligned with the new CAEP standards, is that teachers should be reasonably smart. However, after that threshold is passed, there doesn't seem to be much evidence that someone qualified to enroll at Harvard is going to be any better in the classroom than someone who has a solid B average and attends the local college.

Varying camps are also closer on the issue of analyzing the collective results of program graduates, as measured by student test scores, to assess program quality. Although we don't go as far as some critics who argue that such data are invalid, we believe that high-stakes decisions about programs cannot be made solely on the basis of test scores of graduates' students, any more than the data should be used alone for the purpose of evaluating K-12 teachers. For one thing, the statistical power of models using test score data can do

More than half of the teacher preparation programs in the U.S. currently lack professional accreditation, relying only on their college's or university's general – and insufficiently focused – accreditation status to certify their quality.

little more currently than identify the very best and the very worst programs, shedding little light on the mass of programs in the middle. But even more important, outcome data alone can't tell program personnel or regulators what they need to do to improve.

> *Evaluating preparation programs based on student results is an important reform, but it is a limited reform, as most preparation programs achieve relatively similar statistical outcomes. We have evidence of what strategies work in educator recruitment, selection, and preparation. Comprehensive approaches will thus address not just statistical measurement but also the quality of what actually goes on in preparation programs day in and day out.*
> – John White, Superintendent of Education
> Louisiana

"Ed reformers" and teacher educators: two sides of the same coin?

What may not be appreciated is that our position runs counter to cherished beliefs found in our own tribe of the education reform movement. Although education reformers may welcome NCTQ's harsh critique of teacher preparation, they have tended not to share our position that formal teacher preparation *can* and *should* matter. Paradoxically enough, the fact that new teachers enter the classroom ill-prepared for what awaits them, while acknowledged by all as unfortunate, serves the political agenda of both teacher education and education reformers alike.

Both teacher educators and reformers tend to propose solutions that begin *after* the candidate has graduated and becomes the teacher of record (e.g., increasing supports, adding more professional development, and finding less challenging placements). Critics of teacher preparation argue that teaching can only be learned on the job, that learning loss and high attrition can perhaps be mitigated, but not much more.

For their part, a substantial portion of teacher educators believe it to be professionally irresponsible to use the time spent in preservice preparation to prepare the novice teacher for a seamless transition from student teacher to teacher of record. A majority of programs studiously avoid any content that suggests that their role is to "train" teacher candidates or to suggest that there is a right (or wrong) way to teach. Anything that might reduce a teacher's latitude and ability to make professional choices in the context of each unique classroom is off the table (which explains the aversion to focusing on any specific curricula). Anything that appears to be focused on training is perceived to increase the risk of a school of education being seen as a vocational entity. As one dean recently put it when talking about preparing teachers to teach to

The fact that new teachers enter the classroom ill-prepared for what awaits them serves the political agenda of both teacher education and education reformers alike.

the Common Core State Standards: "We can teach awareness of the Common Core, but prepping kids to teach it moves into job-specific training, which is unrelated to teaching and learning in an academic sense… If we start doing that as teacher-educators, we're no longer a profession."[12]

The current dynamic between education reformers and teacher educators is fascinating because both serve the status quo of teacher preparation so well. They are, in effect, different sides of the same coin: the argument by reformers that the profession should be deregulated, allowing anyone with a college degree to teach, relies on the field of teacher education remaining chaotic and ungovernable, refusing to employ the very preparation methods that are likely to improve its impact. On the flip side, because there is now a widespread assumption that the general incompetence of first-year teachers is unavoidable, teacher educators are given license (particularly by state departments of education) to prepare teachers any way they please, regardless of effectiveness or lack thereof.

> "Airline pilots don't say, 'My first few years of flying I was a wreck.' That needs to be gone from teacher preparation."
>
> – Deborah Loewenberg Ball, Dean School of Education, University of Michigan[13]

What's new in the *Teacher Prep Review*

This new edition of the *Review* arrives, considerably bigger and, we hope, more user friendly, with some important changes:

- Most notably, we have discarded our system of *ratings* for a system of *rankings*, to make it easier for users of our data to assess relative performance of programs in a crowded market. There are now both national rankings and regional rankings, out of consideration for aspiring teachers' tendency to attend preparation programs relatively close to home. In addition to a program's ranking, consumers can compare institutional performance on specific standards (e.g., early reading, classroom management). However, we have discarded the cumbersome stars system [★★★★, ★★★★, ★★★★, ★★★★, ★★★★] of last year's edition for the more efficient "Harvey balls" [●, ◕, ◑, ◔, ○].

- The number of institutions whose programs we can evaluate on the core components of teacher preparation — selection, content preparation and practice teaching — has increased by almost 40 percent, from 608 institutions with rankable programs to 836 institutions. Unfortunately, for the most part this increase does not reflect an increase in institutional cooperation. We remain optimistic that we can continue to reverse that trend, with more institutions choosing to cooperate for the next edition.

- An important addition this year is our analysis of 85 secondary alternative certification programs. In general, alternate routes, now training one out of every five teachers in the United States, are a popular but poorly

understood pathway. Despite an intentionally different structure in which candidates learn "on the job" as teachers of record, such programs' most fundamental features can be rated using much the same methodology as traditional programs. The results of this analysis as presented here should eliminate any speculation that NCTQ is out to dismantle traditional teacher preparation in favor of alternative preparation. If anything, our analysis shows that as a whole, alternative certification is more broken than its traditional counterpart.

- Due to many sensible suggestions from teacher educators, we have made adjustments to several of our standards: selection criteria, classroom management and student teaching. We hope that the productive exchanges of this type will become the norm in the future.

We are committed for the long haul to addressing the issue of poor teacher preparation. Problems that took many decades to create will not be fixed overnight. There are compelling reasons for teacher education to transform itself, in spite of the occasional blustery rhetoric to the contrary. Today's model of teacher preparation leads to widespread dissatisfaction from public school educators, aggravates the poor regard in which the field is held, and, as a consequence, ramps up interference by outsiders. A sizeable percentage of teacher educators are dissatisfied, as well as frustrated, by the many failed but genuine attempts (including those from within) to introduce greater coherence. It remains to be seen how teacher education will be able to shift away from a model of preparation that no doubt helped some faculty thrive within the confines of the academy. However, by integrating classroom readiness with professional readiness, much of what has plagued the field could be mitigated.

The *Review* gains strength by giving prominence to the genuine success stories taking place in institutions that were previously unknown to some of us. The collective wisdom that teacher educators in these settings have to offer will ultimately transform the nation's beleaguered system of teacher preparation, resulting in little reason for anyone to ever again hire an untrained teacher.

NCTQ Standards for Teacher Prep Review 2014

Standard 1: Selection Criteria.

The program screens for academic caliber when selecting teacher candidates.

Standard applies to: **Elementary**, **Secondary** and **Special Education** programs.

Standard 2: Early Reading.

The program trains teacher candidates to teach reading as prescribed by increasingly rigorous state student learning standards.

Standard applies to: **Elementary** and **Special Education** programs.

Standard 3: English Language Learners.

The program prepares elementary teacher candidates to teach reading to English language learners.

Standard applies to: **Elementary** programs.

Standard 4: Struggling Readers.

The program prepares elementary teacher candidates to teach reading skills to students at risk of reading failure.

Standard applies to: **Elementary** programs.

Standard 5: Elementary Mathematics.

The program prepares teacher candidates to successfully teach to increasingly rigorous state student learning standards for elementary math.

Standard applies to: **Elementary** and **Special Education** programs.

Standard 6: Elementary Content.

The program ensures that teacher candidates have the broad content preparation necessary to successfully teach to increasingly rigorous state student learning standards.

Standard applies to: **Elementary** programs.

Standard 7: Middle School Content.

The program ensures that teacher candidates have the content preparation necessary to successfully teach to increasingly rigorous state student learning standards.

Standard applies to: **Secondary** programs.

Standard 8: High School Content.

The program ensures that teacher candidates have the content preparation necessary to successfully teach to increasingly rigorous state standards for college and career readiness.

Standard applies to: **Secondary** programs.

Standard 9: Content for Special Education.

The program ensures that teacher candidates' content preparation aligns with increasingly rigorous state student learning standards in the grades they are certified to teach.

Standard applies to: **Special Education** programs.

Standard 10: Classroom Management.

The program ensures that teacher candidates practice specific techniques for managing the classroom.

Standard applies to: **Elementary**, **Secondary** and **Special Education** programs.

Standard 11: Lesson Planning.

The program trains teacher candidates how to plan lessons that enhance the academic performance of all students.

Standard applies to: **Elementary** and **Secondary** programs.

Standard 12: Assessment and Data.

The program trains teacher candidates how to assess learning and use student performance data to inform instruction.

Standard applies to: **Elementary** and **Secondary** programs.

Standard 13: Equity.

The program ensures that teacher candidates experience schools that are successful serving students who have been traditionally underserved.

Standard applies to: **Institutions**.

Standard 14: Student Teaching.

The program ensures that teacher candidates have a strong student teaching experience.

Standard applies to: **Elementary**, **Secondary** and **Special Education** programs.

Standard 15: Secondary Methods.

The program requires teacher candidates to practice instructional techniques specific to their content area.

Standard applies to: **Secondary** programs.

Standard 16: Instructional Design for Special Education.

The program trains candidates to design instruction for teaching students with special needs.

Standard applies to: **Special Education** programs.

Standard 17: Outcomes.

The program and institution collect and monitor data on their graduates.

Standard applies to: **Elementary**, **Secondary** and **Special Education** programs.

Standard 18: Evidence of Effectiveness.

The program's graduates have a positive impact on student learning.

Standard applies to: **Elementary** and **Secondary** programs in institutions in states with adequate data models.

Standard 19: Rigor. (Fall 2014)

The program holds teacher candidates to the same or a higher level of expectations regarding coursework and grading standards as that to which students in the rest of the institution are held.

Standard applies to undergraduate **Elementary**, **Secondary** and **Special Education** programs.
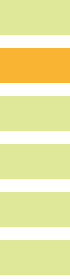
II. Overall Findings

Rankings of elementary, secondary and special education programs

Overall, the *Review's* 2014 findings paint a grim picture of teacher preparation in the United States, but that is hardly surprising given that the nation is only beginning to tackle this issue in earnest. New laws and regulations are just going into effect. Even if more higher education institutions were favorably disposed to NCTQ's *Review*, they had only six months after the release of the first edition to react and make changes before our deadline for submitting new data for the second edition.

The NCTQ *Teacher Prep Review* evaluates what a program *adds* in the way of solid training — nothing more, nothing less. Low-ranked programs can, and indeed often do, graduate teachers who end up being effective, even superstars.

A number of new features of evaluation of traditional teacher preparation in *Review 2014* bear explanation.

The findings are now presented in terms of rankings.

The *Teacher Prep Review* is intended to help the consumers of teacher preparation — aspiring teachers and school districts — make the best choices about which programs to patronize. By moving to rankings, we provide these consumers with an easy-to-understand system for determining which of the programs that they are considering will provide them with the greatest added value. A program's *ranking* is derived from its scores on our key standards (as was its *rating* last edition), but scores on additional "booster" standards can increase its ranking. We simply order the programs on how well they did. (Programs with the same underlying scores are awarded tied rankings.)

The scope of the *Review's* evaluation has grown significantly.

NCTQ's *Teacher Prep Review* was born big and keeps expanding. Covering every state and the District of Columbia, it provides at least some data on 2,400 elementary, secondary and special education programs housed in 1,127 institutions of higher education ("IHEs"). We've evaluated more programs on more standards in this edition, and we plan to continue to expand the scope of our evaluation until we have *fully* ranked all programs at all institutions.

Fig. 5   The *Review's* sample size is constant but the scope of its analysis is increasing
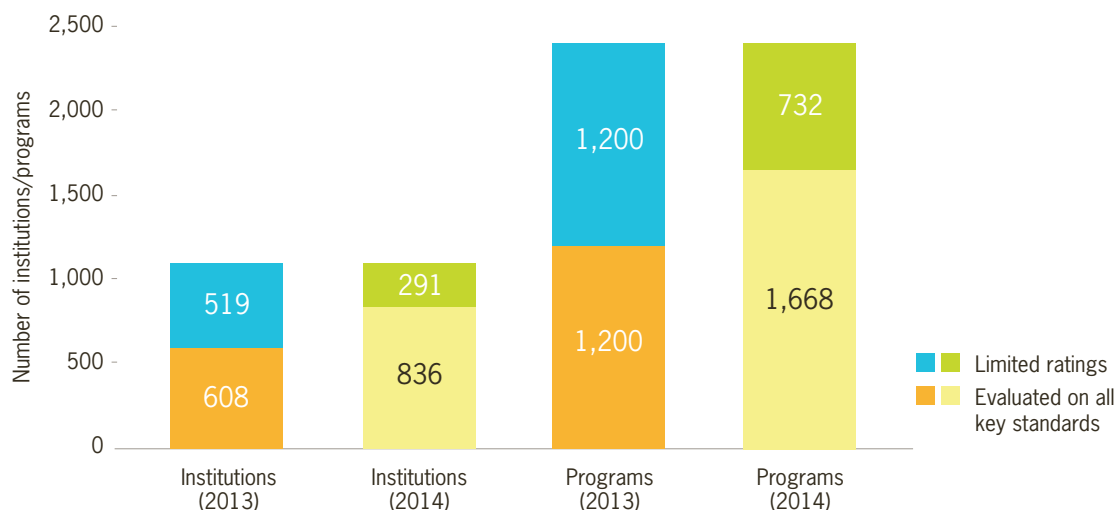
The 1,127 institutions housing 2,400 traditional teacher preparation programs that were established as the Review's *sample in March 2011 have remained "the sample." As the graphic shows, in the second edition we have expanded our evaluations to include an increased number of standards evaluated for an increased number of programs.*

Although there are findings data on every institution in our lens, not every institution can be ranked.

Only programs evaluated on all of our "key standards," which address selection, content preparation, and practice teaching — the most important aspects of teacher training — are ranked. That we have been able to increase from 608 to 836 the number of institutions for which we can rank at least one program (an increase of 38 percent)[14] is no mean feat, given that many institutions remain reluctant to share course materials with us.[15] Programs that we cannot rank are still evaluated on how selective they are and how well they ensure that candidates know the subjects they will teach because the information we need is publicly available, including being posted in institutional catalogs.

A program's ranking can be improved by its scores on our "booster" standards. Because they can only add to the scores that determine a program's ranking, scores on booster standards encourage institutions to provide us with more information that we can use to paint a richer portrait of their training.

The graphic below provides a more fine-grained picture of the numbers of programs we evaluated this year on each standard. By any measure, our coverage of the field is substantial and growing. And although private institutions remain underrepresented in evaluations on many standards,[16] we have expanded the number of rankable private programs in this edition by a factor of 2.5 (from 255 to 628). That our overall results have changed little from the first edition even with this growth in coverage suggests that private institutions as a rule do not perform any better or worse than their public counterparts.[17]

The growth of the number of private IHEs in the 2nd edition to well over twice the number in the 1st edition has not altered our original troubling conclusions.

Programs at the top of the rankings require coursework and clinical practice that make their teacher graduates better prepared to handle classroom responsibilities *than they would have been without such preparation*.

A program's low ranking does not suggest that many of its graduates don't go on to become capable teachers. What the low ranking *does* suggest is that the program isn't adding sufficient value, so that someone who wants to become a teacher would be better off investing time and tuition dollars elsewhere. Undoubtedly, plenty of great teachers graduate from lower ranked or unranked programs, perhaps because of innate capabilities, perhaps because they are lucky enough to be assigned to a talented classroom mentor during student teaching. But in weak programs, such positive outcomes are happenstance, not the result of deliberative, highly-managed program delivery. When positive outcomes are random occurrences, a teacher candidate's path to competency is left largely to experiences in the classroom, the help of teacher colleagues, and the interventions of the school district.

Fig. 6 Guide to rankings and standard scores

NCTQ *Teacher Prep Review* Standards
(not in numeric order)

	Standard	Category
Elementary Teacher Prep Program	Selection criteria	Key standards
	Early reading	
	Elementary mathematics	
	Elementary content	
	Student teaching	
	English language learners	Booster standards
	Struggling readers	
	Classroom management	
	Outcomes	
	Lesson planning	Not considered in ranking
	Assessment and data	
	Evidence of effectiveness	
	Equity	Reported
	Rigor (new in fall 2014)	Not considered in ranking
Secondary Teacher Prep Program	Selection criteria	Key standards
	Middle school content	
	High school content	
	Student teaching	
	Classroom management	Booster standards
	Secondary methods	
	Outcomes	
	Lesson planning	Not considered in ranking
	Assessment and data	
	Evidence of effectiveness	
	Rigor (new in fall 2014)	
Special Education Teacher Prep Program	Selection criteria	Key standards
	Early reading	
	Elementary mathematics	
	Content for special education	
	Student teaching	
	Instructional design for special education	
	Classroom management	Booster standards
	Outcomes	
	Rigor (new in fall 2014)	Not considered in ranking

This guide indicates which standards are applied to which programs and whether those standards are categorized as "key" or "booster."

Fig. 7   What percent of programs in our sample were scored on a standard?
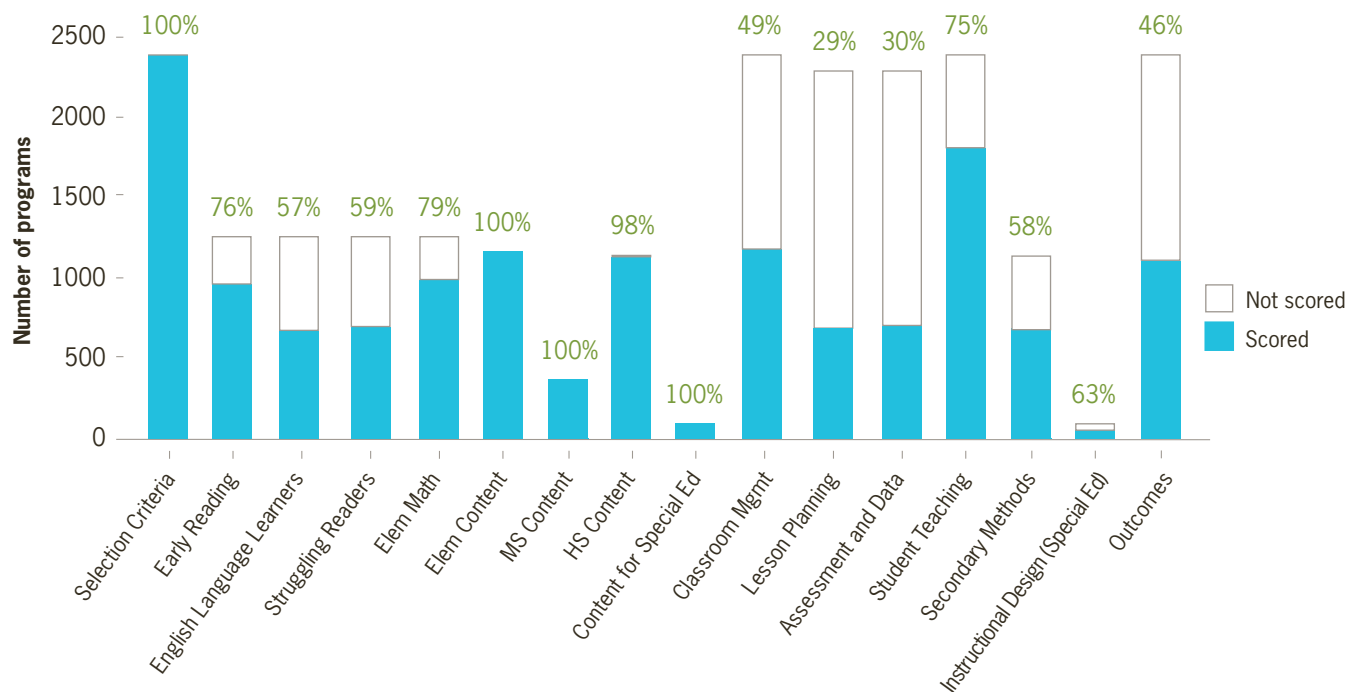
The size of the sample for each standard varies based on the type of program(s) to which it applies: elementary, secondary, and/ or special education. Largely because many institutions will not share data with NCTQ, there is a wide range in our capacity to report findings about each of our standards. For instance, because we are unable to easily collect the materials needed to rate our **Assessment and Data** *and* **Equity** *standards, they do not yet count towards a program's ranking. Over time, they will.*

There are three categories of programs, in terms of our ability to rank them.

1. Only programs that have a score in the top half of all rankable programs are actually listed as "ranked" in the following pages. The Top Ranked programs have scores that set them apart from lower ranked programs.

2. Programs we could rank but that fell in the bottom half of rankings are labeled as "rank not reported" and are listed here.

3. Programs that we could not rank because we could not obtain the necessary course materials are labeled "data insufficient to rank." They are listed here.

For a listing by state of all programs in our sample that indicates their ranking status (ranked, rank not reported or data insufficient to rank), see Appendix A.

Top Ranked Programs

Elementary

National ranking	INSTITUTION	Program	State	National ranking	INSTITUTION	Program	State
1	Dallas Baptist University	ug elem	TX	14	Gordon College	ug elem	MA
2	Texas A&M University	ug elem	TX	14	Lipscomb University	g elem	TN
3	Ohio State University	g elem	OH	14	Southeastern Louisiana University	ug elem	LA
4	Northwestern State University of Louisiana	ug elem	LA	14	Texas A&M University - Corpus Christi	ug elem	TX
4	University of Dayton	ug elem	OH	14	University of Arkansas at Monticello	ug elem	AR
4	University of Houston	ug elem	TX	16	Arizona State University	ug elem	AZ
6	Louisiana State University and Agricultural & Mechanical College	ug elem	LA	16	Northwest Nazarene University	ug elem	ID
8	Eastern Connecticut State University	ug elem	CT	16	Western Governors University	g elem	UT
8	Miami University of Ohio	ug elem	OH	18	Purdue University	ug elem	IN
10	McDaniel College	ug elem	MD	18	University of Colorado Boulder	ug elem	CO
10	University of Texas at Austin	ug elem	TX	18	University of Houston	g elem	TX
11	University of Delaware	ug elem	DE	19	Ball State University	ug elem	IN
12	Fort Hays State University	ug elem	KS	19	Delta State University	ug elem	MS
13	CUNY - Hunter College	ug elem	NY	22	Cedarville University	ug elem	OH
13	Montclair State University	ug elem	NJ	22	Elon University	ug elem	NC
13	University of Montana	g elem	MT	22	Johns Hopkins University	g elem	MD
				22	Southern Methodist University	ug elem	TX

Secondary

National ranking	INSTITUTION	Program	State	National ranking	INSTITUTION	Program	State
1	Lipscomb University	ug sec	TN	37	CUNY – Brooklyn College	g sec	NY
1	Western Governors University	ug sec	TN	37	Union University	ug sec	TN
3	Fort Hays State University	ug sec	KS	37	University of North Carolina at Wilmington	ug sec	NC
4	College of William and Mary	g sec	VA	41	Hope College	ug sec	MI
4	Montclair State University	g sec	NJ	41	Northwestern State University of Louisiana	ug sec	LA
5	Furman University	ug sec	SC	43	Ithaca College	ug sec	NY
5	Henderson State University	ug sec	AR	43	Marietta College	ug sec	OH
5	Miami University of Ohio	ug sec	OH	43	SUNY - Binghamton University	g sec	NY
5	University of Houston	ug sec	TX	43	University of Redlands	ug sec	CA
5	University of California at Los Angeles	g sec	CA	43	University of South Carolina - Columbia	ug sec	SC
5	University of Virginia	g sec	VA	43	Vanderbilt University	g sec	TN
8	CUNY – Hunter College	g sec	NY	43	Whitworth University	ug sec	WA
8	East Tennessee State University	ug sec	TN	50	East Tennessee State University	g sec	TN
8	Miami University of Ohio	g sec	OH	50	Eastern Connecticut State University	ug sec	CT
8	University of California - Irvine	ug sec	CA	50	Radford University	g sec	VA
8	University of California - San Diego	g sec	CA	50	University of Hartford	ug sec	CT
8	University of North Carolina at Asheville	ug sec	NC	50	University of Illinois at Urbana-Champaign	ug sec	IL
8	University of Tennessee	ug sec	TN	50	University of Minnesota - Morris	ug sec	MN
12	Austin Peay State University	ug sec	TN	50	University of Montana	g sec	MT
14	Northwest Nazarene University	ug sec	ID	56	Texas Southern University	ug sec	TX
14	University of Iowa	ug sec	IA	56	Tusculum College	ug sec	TN
15	James Madison University	g sec	VA	57	Ashland University	ug sec	OH
15	Virginia Commonwealth University	g sec	VA	57	Gustavus Adolphus College	ug sec	MN
15	Wright State University	g sec	OH	57	Gwynedd-Mercy College	ug sec	PA
17	Maryville College	ug sec	TN	57	Lebanon Valley College	ug sec	PA
17	University of North Carolina at Chapel Hill	g sec	NC	57	Marist College	ug sec	NY
19	Clemson University	ug sec	SC	57	Mills College	ug sec	CA
19	Mansfield University of Pennsylvania	ug sec	PA	57	Murray State University	ug sec	KY
19	Ohio State University	g sec	OH	57	North Carolina State University at Raleigh	ug sec	NC
19	University of Arizona	ug sec	AZ	57	Neumann University	ug sec	PA
23	Coe College	ug sec	IA	57	Ohio Wesleyan University	ug sec	OH
23	Indiana University - Bloomington	ug sec	IN	57	St. Edward's University	ug sec	TX
23	University of South Dakota	ug sec	SD	57	St. Olaf College	ug sec	MN
27	Arizona State University	ug sec	AZ	57	Tennessee Technological University	ug sec	TN
27	University of Arkansas at Monticello	ug sec	AR	57	University of Akron	ug sec	OH
28	CUNY – Hunter College	ug sec	NY	57	University of California – Berkeley	g sec	CA
28	Middle Tennessee State University	ug sec	TN	57	University of Minnesota – Duluth	ug sec	MN
28	Southeastern Louisiana University	ug sec	LA	57	University of Northwestern – St. Paul	ug sec	MN
28	University of Memphis	g sec	TN	57	University of Oklahoma	ug sec	OK
32	Bloomsburg University of Pennsylvania	ug sec	PA	57	University of Pittsburgh at Bradford	ug sec	PA
32	Clayton State University	g sec	GA	57	University of St. Thomas	ug sec	MN
32	College of Charleston	ug sec	SC	57	University of Tennessee – Martin	g sec	TN
32	Dallas Baptist University	ug sec	TX	57	William Jewell College	ug sec	MO
32	Gordon College	ug sec	MA	79	Kean University	g sec	NJ
32	University of Kentucky	ug sec	KY	79	Rider University	ug sec	NJ
37	Boise State University	ug sec	ID	79	Rowan University	ug sec	NJ

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Program guide: ug elem = undergraduate elementary; ug sec = undergraduate secondary; g elem = graduate elementary; g sec = graduate secondary

Published Elementary Rankings
Programs whose performance is too low to be ranked are found in Appendix A.

National ranking	INSTITUTION	Program	State	National ranking	INSTITUTION	Program	State
1	Dallas Baptist University	ug elem	TX	47	Furman University	ug elem	SC
2	Texas A&M University	ug elem	TX	47	Georgia Southern University	ug elem	GA
3	Ohio State University	g elem	OH	47	Murray State University	ug elem	KY
4	Northwestern State University of Louisiana	ug elem	LA	47	University of Utah	ug elem	UT
4	University of Dayton	ug elem	OH	51	Colorado Christian University	ug elem	CO
4	University of Houston	ug elem	TX	51	Purdue University – Calumet	ug elem	IN
6	Louisiana State University and Agricultural & Mechanical College	ug elem	LA	51	University of Alabama in Huntsville	ug elem	AL
8	Eastern Connecticut State University	ug elem	CT	55	Austin Peay State University	ug elem	TN
8	Miami University of Ohio	ug elem	OH	55	East Tennessee State University	ug elem	TN
10	McDaniel College	ug elem	MD	55	Radford University	g elem	VA
10	University of Texas at Austin	ug elem	TX	55	SUNY – Fredonia	ug elem	NY
11	University of Delaware	ug elem	DE	55	University of Houston – Clear Lake	ug elem	TX
12	Fort Hays State University	ug elem	KS	60	Tarleton State University	ug elem	TX
13	CUNY – Hunter College	ug elem	NY	60	Tusculum College	ug elem	TN
13	Montclair State University	ug elem	NJ	60	University of Maryland – College Park	g elem	MD
13	University of Montana	g elem	MT	60	University of Nebraska – Lincoln	ug elem	NE
14	Gordon College	ug elem	MA	63	Arcadia University	ug elem	PA
14	Lipscomb University	g elem	TN	63	Christopher Newport University	g elem	VA
14	Southeastern Louisiana University	ug elem	LA	63	Coastal Carolina University	ug elem	SC
14	Texas A&M University – Corpus Christi	ug elem	TX	63	Houston Baptist University	ug elem	TX
14	University of Arkansas at Monticello	ug elem	AR	63	Loyola University Chicago	ug elem	IL
16	Arizona State University	ug elem	AZ	63	University of Kansas	ug elem	KS
16	Northwest Nazarene University	ug elem	ID	63	University of Virginia	g elem	VA
16	Western Governors University	g elem	UT	63	Whitworth University	ug elem	WA
18	Purdue University	ug elem	IN	71	College of William and Mary	g elem	VA
18	University of Colorado Boulder	ug elem	CO	71	Delaware State University	ug elem	DE
18	University of Houston	g elem	TX	71	Regent University	ug elem	VA
19	Ball State University	ug elem	IN	71	Towson University	ug elem	MD
19	Delta State University	ug elem	MS	71	University of Rhode Island	ug elem	RI
22	Cedarville University	ug elem	OH	71	William Carey University	ug elem	MS
22	Elon University	ug elem	NC	78	Alvernia University	ug elem	PA
22	Johns Hopkins University	g elem	MD	78	Bethel University	ug elem	MN
22	Southern Methodist University	ug elem	TX	78	Concord University	ug elem	WV
27	Minnesota State University – Mankato	ug elem	MN	78	Kutztown University of Pennsylvania	ug elem	PA
27	Northwestern Oklahoma State University	ug elem	OK	78	Louisiana Tech University	ug elem	LA
27	University of Memphis	ug elem	TN	78	Nicholls State University	ug elem	LA
27	Winthrop University	ug elem	SC	78	Texas A&M University – Texarkana	ug elem	TX
27	Wright State University	ug elem	OH	78	University of Alabama	ug elem	AL
32	Missouri State University	ug elem	MO	78	University of North Carolina at Chapel Hill	ug elem	NC
32	Neumann University	ug elem	PA	78	Wilmington University	ug elem	DE
34	Montana State University	ug elem	MT	88	St. John Fisher College	ug elem	NY
34	Salisbury University	ug elem	MD	88	Tennessee Technological University	ug elem	TN
34	University of Louisiana at Lafayette	ug elem	LA	88	University of California – Santa Barbara	g elem	CA
34	University of North Carolina at Wilmington	ug elem	NC	88	University of Texas at Arlington	ug elem	TX
37	Iowa State University	ug elem	IA	88	Wittenberg University	ug elem	OH
37	Longwood University	ug elem	VA	92	Brigham Young University – Idaho	ug elem	ID
37	Michigan State University	ug elem	MI	92	CUNY – Hunter College	g elem	NY
40	Boise State University	ug elem	ID	92	University of California – Berkeley	g elem	CA
40	Henderson State University	ug elem	AR	92	University of Vermont	ug elem	VT
40	Oklahoma Baptist University	ug elem	OK	92	University of Wisconsin – Eau Claire	ug elem	WI
40	University of Mississippi	ug elem	MS	97	Florida State University	ug elem	FL
44	University of Iowa	ug elem	IA	97	Oklahoma State University	ug elem	OK
44	University of Maryland – College Park	ug elem	MD	97	University of Florida	ug elem	FL
44	University of South Dakota	ug elem	SD	97	University of Minnesota – Morris	ug elem	MN

Program guide: ug elem = undergraduate elementary; ug sec = undergraduate secondary; g elem = graduate elementary; g sec = graduate secondary

National ranking	INSTITUTION	Program	State
97	University of Oklahoma	ug elem	OK
97	University of Texas of the Permian Basin	ug elem	TX
101	Flagler College	ug elem	FL
101	Mercyhurst University	ug elem	PA
101	St. Edward's University	ug elem	TX
101	Texas Tech University	ug elem	TX
101	University of North Carolina at Charlotte	g elem	NC
101	University of St. Thomas	ug elem	MN
101	Utah Valley University	ug elem	UT
107	Auburn University	ug elem	AL
107	Central Connecticut State University	ug elem	CT
107	Florida State University	g elem	FL
107	SUNY – Oswego	ug elem	NY
107	University of Wyoming	ug elem	WY
113	Midwestern State University	ug elem	TX
113	Monmouth University	ug elem	NJ
113	SUNY – Geneseo	ug elem	NY
113	University of Washington – Seattle	g elem	WA
117	Arkansas State University	ug elem	AR
117	Marywood University	ug elem	PA
117	Mississippi University for Women	ug elem	MS
117	SUNY – New Paltz	ug elem	NY
117	University of Illinois at Chicago	ug elem	IL
117	University of Science and Arts of Oklahoma	ug elem	OK
117	University of Wisconsin – Madison	ug elem	WI
117	Utah State University	ug elem	UT
117	Winona State University	ug elem	MN
125	Central Michigan University	ug elem	MI
125	College of Charleston	ug elem	SC
125	Colorado State University – Pueblo	ug elem	CO
125	Drexel University	ug elem	PA
125	Fort Lewis College	ug elem	CO
125	Luther College	ug elem	IA
125	Southern Arkansas University	ug elem	AR
125	SUNY – Binghamton University	g elem	NY
125	University of California – Davis	g elem	CA
125	University of Colorado Colorado Springs	ug elem	CO
125	University of St. Francis	ug elem	IL
125	University of Tennessee	ug elem	TN
125	University of Wisconsin – La Crosse	ug elem	WI
125	Virginia Commonwealth University	g elem	VA
138	Anderson University	ug elem	IN
138	Arizona State University	g elem	AZ
138	Saint Joseph's University	ug elem	PA
138	University of Nebraska Omaha	ug elem	NE
138	Virginia Polytechnic Institute and State University	g elem	VA
138	West Virginia Wesleyan College	ug elem	WV
144	Florida Gulf Coast University	ug elem	FL
144	Humboldt State University	ug elem	CA
144	Indiana University – Bloomington	ug elem	IN
144	Kansas State University	ug elem	KS
144	King's College	ug elem	PA
144	Lindenwood University	ug elem	MO
144	McNeese State University	ug elem	LA
144	Notre Dame of Maryland University	g elem	MD
144	Southeast Missouri State University	ug elem	MO
144	University of California – San Diego	g elem	CA
144	Valdosta State University	ug elem	GA
155	Augsburg College	ug elem	MN
155	California State University – Dominguez Hills	ug elem	CA
155	Chaminade University of Honolulu	ug elem	HI
155	Knox College	ug elem	IL
155	Middle Tennessee State University	ug elem	TN
155	Minnesota State University Moorhead	ug elem	MN
155	North Central College	ug elem	IL
155	SUNY – New Paltz	g elem	NY
155	University of Arizona	ug elem	AZ
155	University of Maryland – Baltimore County	ug elem	MD
155	Western Kentucky University	ug elem	KY
165	Brigham Young University	ug elem	UT
165	CUNY – Brooklyn College	ug elem	NY
165	Emporia State University	ug elem	KS
165	Marietta College	ug elem	OH
165	Marist College	ug elem	NY
165	Northern State University	ug elem	SD
165	Ohio Wesleyan University	ug elem	OH
165	Texas Lutheran University	ug elem	TX
165	University of Alaska Fairbanks	ug elem	AK
165	University of Central Oklahoma	ug elem	OK
165	University of Georgia	ug elem	GA
165	University of Kentucky	ug elem	KY
165	University of New Orleans	g elem	LA
165	University of Northwestern–St. Paul	ug elem	MN
165	Widener University	ug elem	PA
181	CUNY – Lehman College	g elem	NY
181	East Stroudsburg University of Pennsylvania	ug elem	PA
181	Illinois State University	ug elem	IL
181	Morgan State University	ug elem	MD
181	University of Akron	ug elem	OH
181	University of Central Arkansas	ug elem	AR
181	University of Texas at El Paso	ug elem	TX
188	Cabrini College	ug elem	PA
188	Central Washington University	ug elem	WA
188	East Carolina University	ug elem	NC
188	Harding University	ug elem	AR
188	Lake Superior State University	ug elem	MI
188	Lebanon Valley College	ug elem	PA
188	Marshall University	ug elem	WV
188	Maryville College	ug elem	TN
188	Northern Kentucky University	ug elem	KY
188	Plymouth State University	ug elem	NH
188	Shippensburg University of Pennsylvania	ug elem	PA
188	Stephen F. Austin State University	ug elem	TX
188	Texas A&M International University	ug elem	TX
188	University of California – Los Angeles	g elem	CA
188	University of Cincinnati	ug elem	OH
203	Aurora University	ug elem	IL
203	Catholic University of America	ug elem	DC

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National ranking	INSTITUTION	Program	State
203	Central State University	ug elem	OH
203	College of New Jersey	ug elem	NJ
203	Purdue University – North Central	ug elem	IN
203	St. Mary's College of Maryland	g elem	MD
203	Trinity Christian College	ug elem	IL
203	University of Texas at Tyler	ug elem	TX
212	Cairn University	ug elem	PA
212	California State University – Chico	ug elem	CA
212	Capital University	ug elem	OH
212	College of Saint Rose	ug elem	NY
212	Creighton University	ug elem	NE
212	Indiana University of Pennsylvania	ug elem	PA
212	Roberts Wesleyan College	ug elem	NY
212	Spring Arbor University	ug elem	MI
212	St. Cloud State University	ug elem	MN
212	University of Louisiana at Monroe	ug elem	LA
212	University of Louisville	ug elem	KY
212	University of Missouri – St. Louis	ug elem	MO
212	University of North Texas	ug elem	TX
212	University of Texas – Pan American	ug elem	TX
212	Wayne State College	ug elem	NE
212	Wesleyan College	ug elem	GA
229	Bethel College	ug elem	IN
229	California State University – Bakersfield	ug elem	CA
229	Cumberland University	ug elem	TN
229	Dakota State University	ug elem	SD
229	East Central University	ug elem	OK
229	Eastern Kentucky University	ug elem	KY
229	Elmhurst College	ug elem	IL
229	Evergreen State College	g elem	WA
229	Ferris State University	ug elem	MI
229	Lock Haven University of Pennsylvania	ug elem	PA
229	Rider University	ug elem	NJ
229	University of Northern Colorado	ug elem	CO
229	University of Wisconsin – Stevens Point	ug elem	WI
229	Vincennes University	ug elem	IN
242	Baptist Bible College and Seminary	ug elem	PA
242	Briar Cliff University	ug elem	IA
242	Dickinson State University	ug elem	ND
242	Drury University	ug elem	MO
242	Eastern Illinois University	ug elem	IL
242	Eastern Michigan University	ug elem	MI
242	Gustavus Adolphus College	ug elem	MN
242	Hope College	ug elem	MI
242	North Carolina State University at Raleigh	ug elem	NC
242	North Carolina State University at Raleigh	g elem	NC
242	Pennsylvania State University – Harrisburg	ug elem	PA
242	Robert Morris University	ug elem	PA
242	Shawnee State University	ug elem	OH
242	Temple University	ug elem	PA
242	University of Evansville	ug elem	IN
242	University of New Mexico	ug elem	NM
242	University of Pittsburgh at Bradford	ug elem	PA
260	Augustana College	ug elem	IL
260	Claremont Graduate University	g elem	CA
260	Frostburg State University	g elem	MD
260	Langston University	ug elem	OK
260	SUNY – Potsdam	ug elem	NY
260	SUNY College at Cortland	g elem	NY
260	University of North Carolina at Charlotte	ug elem	NC
260	University of Southern Mississippi	ug elem	MS
260	University of Texas at San Antonio	ug elem	TX
260	University of West Georgia	ug elem	GA
260	Virginia Wesleyan College	ug elem	VA
260	Wilson College	ug elem	PA
273	Alabama A&M University	g elem	AL
273	Baldwin Wallace University	ug elem	OH
273	Caldwell College	ug elem	NJ
273	Grand Valley State University	ug elem	MI
273	Marian University Indianapolis	ug elem	IN
273	Morehead State University	ug elem	KY
273	Muskingum University	ug elem	OH
273	National Louis University	ug elem	IL
273	North Carolina A&T State University	ug elem	NC
273	Old Dominion University	g elem	VA
273	Rockford College	ug elem	IL
273	University of Michigan – Ann Arbor	ug elem	MI
285	Canisius College	ug elem	NY
285	Cheyney University of Pennsylvania	ug elem	PA
285	Elizabethtown College	ug elem	PA
285	Fitchburg State University	g elem	MA
285	Georgetown College	ug elem	KY
285	Indiana University – Purdue University Fort Wayne	ug elem	IN
285	Linfield College	ug elem	OR
285	Mississippi College	ug elem	MS
285	Northern Illinois University	ug elem	IL
285	Pennsylvania State University	ug elem	PA
285	Southern Utah University	ug elem	UT
285	University of Houston – Victoria	ug elem	TX
285	University of South Carolina – Columbia	ug elem	SC
285	University of Toledo	ug elem	OH
299	Carlow University	ug elem	PA
299	Eureka College	ug elem	IL
299	Five Towns College	ug elem	NY
299	Illinois Wesleyan University	ug elem	IL
299	Indiana Wesleyan University	ug elem	IN
299	Lincoln University	ug elem	MO
299	Lindsey Wilson College	ug elem	KY
299	Mary Baldwin College	ug elem	VA
299	Seton Hall University	ug elem	NJ
299	SUNY College at Old Westbury	ug elem	NY
299	Truman State University	g elem	MO
299	University of Montevallo	ug elem	AL
299	Wilkes University	ug elem	PA
312	California State University – Dominguez Hills	g elem	CA
312	Cardinal Stritch University	ug elem	WI

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National ranking	INSTITUTION	Program	State
312	College of Saint Scholastica	ug elem	MN
312	Colorado State University	ug elem	CO
312	Florida Agricultural and Mechanical University	ug elem	FL
312	New Mexico State University	ug elem	NM
312	Rowan University	ug elem	NJ
312	Saint Xavier University	g elem	IL
312	Southeastern Oklahoma State University	ug elem	OK
312	Syracuse University	g elem	NY
312	University of Minnesota – Twin Cities	g elem	MN
312	Washington State University	g elem	WA
312	West Texas A&M University	ug elem	TX
327	Bloomsburg University of Pennsylvania	ug elem	PA
327	Blue Mountain College	ug elem	MS
327	Bowling Green State University	ug elem	OH
327	Florida International University	ug elem	FL
327	Mansfield University of Pennsylvania	ug elem	PA
327	Maryville University of St. Louis	ug elem	MO
327	Meredith College	ug elem	NC
327	Mills College	ug elem	CA
327	North Greenville University	ug elem	SC
327	Oregon State University	ug elem	OR
327	Pittsburg State University	ug elem	KS
327	Southern Illinois University Carbondale	ug elem	IL
327	SUNY College at Brockport	ug elem	NY
327	University of Chicago	g elem	IL
327	University of Nebraska at Kearney	ug elem	NE
327	University of Tennessee at Chattanooga	ug elem	TN
327	University of Texas at Dallas	ug elem	TX
345	Armstrong Atlantic State University	ug elem	GA
345	DePaul University	ug elem	IL
345	East Tennessee State University	g elem	TN
345	Long Island University – C. W. Post	ug elem	NY
345	Louisiana State University – Alexandria	ug elem	LA
345	Marian University	ug elem	WI
345	Mount Vernon Nazarene University	ug elem	OH
345	Ohio Northern University	ug elem	OH
345	Oklahoma Panhandle State University	ug elem	OK
345	Simpson College	ug elem	IA
345	University of Tennessee – Martin	g elem	TN
345	University of Virginia's College at Wise	ug elem	VA
345	University of Wisconsin – River Falls	ug elem	WI
345	West Virginia University – Parkersburg	ug elem	WV
345	Western Carolina University	ug elem	NC
345	Western Washington University	ug elem	WA
360	Alice Lloyd College	ug elem	KY
360	Appalachian State University	ug elem	NC
360	Bridgewater State University	ug elem	MA
360	Governors State University	ug elem	IL
360	Indiana University – South Bend	ug elem	IN
360	Indiana University – Purdue University Indianapolis	ug elem	IN
360	Keuka College	ug elem	NY
360	Louisiana State University – Shreveport	ug elem	LA
360	Loyola University Maryland	g elem	MD
360	Norfolk State University	ug elem	VA
360	Ohio University	ug elem	OH
360	Rutgers University – Camden	ug elem	NJ
360	Sam Houston State University	ug elem	TX
360	Texas A&M University – Kingsville	ug elem	TX
360	University of Findlay	ug elem	OH
360	University of Georgia	g elem	GA
360	University of Nevada – Las Vegas	g elem	NV
360	University of North Georgia (Gainesville State)	ug elem	GA
360	University of South Alabama	ug elem	AL
360	University of South Florida	ug elem	FL
360	University of West Florida	ug elem	FL
360	University of Wisconsin – Platteville	ug elem	WI
382	Concordia University St. Paul	ug elem	MN
382	Gonzaga University	ug elem	WA
382	Hamline University	ug elem	MN
382	Heidelberg University	ug elem	OH
382	Kent State University	ug elem	OH
382	Metropolitan State University of Denver	ug elem	CO
382	Quincy University	ug elem	IL
382	Southern Illinois University Edwardsville	ug elem	IL
382	Stanford University	g elem	CA
382	University of Houston – Downtown	ug elem	TX
382	University of Minnesota – Crookston	ug elem	MN
382	University of Missouri – Columbia	ug elem	MO
394	Alabama State University	ug elem	AL
394	Arkansas Tech University	ug elem	AR
394	Benedictine College	ug elem	KS
394	Berry College	ug elem	GA
394	Blackburn College	ug elem	IL
394	California Lutheran University	g elem	CA
394	Framingham State University	ug elem	MA
394	Georgia Southwestern State University	ug elem	GA
394	Midland University	ug elem	NE
394	Oral Roberts University	ug elem	OK
394	Piedmont College	ug elem	GA
394	Rockhurst University	ug elem	MO
394	Saginaw Valley State University	ug elem	MI
394	Shippensburg University of Pennsylvania	g elem	PA
394	Union College	ug elem	NE
394	University of Arkansas at Little Rock	ug elem	AR
394	University of Colorado Denver	ug elem	CO
394	University of South Florida St. Petersburg	ug elem	FL
394	University of Wisconsin – Superior	ug elem	WI
394	Worcester State University	ug elem	MA

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Published Secondary Rankings
Programs whose performance is too low to be ranked are found in Appendix A.

National ranking	INSTITUTION	Program	State	National ranking	INSTITUTION	Program	State
1	Lipscomb University	ug sec	TN	43	University of Redlands	ug sec	CA
1	Western Governors University	ug sec	UT	43	University of South Carolina – Columbia	ug sec	SC
3	Fort Hays State University	ug sec	KS	43	Vanderbilt University	g sec	TN
4	College of William and Mary	g sec	VA	43	Whitworth University	ug sec	WA
4	Montclair State University	g sec	NJ	50	East Tennessee State University	g sec	TN
5	Furman University	ug sec	SC	50	Eastern Connecticut State University	ug sec	CT
5	Henderson State University	ug sec	AR	50	Radford University	g sec	VA
5	Miami University of Ohio	ug sec	OH	50	University of Hartford	ug sec	CT
5	University of California at Los Angeles	g sec	CA	50	University of Illinois at Urbana – Champaign	ug sec	IL
5	University of Houston	ug sec	TX	50	University of Minnesota – Morris	ug sec	MN
5	University of Virginia	g sec	VA	50	University of Montana	g sec	MT
8	CUNY – Hunter College	g sec	NY	50	Winona State University	ug sec	MN
8	East Tennessee State University	ug sec	TN	56	Texas Southern University	ug sec	TX
8	Miami University of Ohio	g sec	OH	56	Tusculum College	ug sec	TN
8	University of California – Irvine	ug sec	CA	57	Ashland University	ug sec	OH
8	University of California – San Diego	g sec	CA	57	Gustavus Adolphus College	ug sec	MN
8	University of North Carolina at Asheville	ug sec	NC	57	Gwynedd–Mercy College	ug sec	PA
8	University of Tennessee	ug sec	TN	57	Lebanon Valley College	ug sec	PA
12	Austin Peay State University	ug sec	TN	57	Marist College	ug sec	NY
14	Northwest Nazarene University	ug sec	ID	57	Mills College	ug sec	CA
14	University of Iowa	ug sec	IA	57	Murray State University	ug sec	KY
15	James Madison University	g sec	VA	57	Neumann University	ug sec	PA
15	Virginia Commonwealth University	g sec	VA	57	North Carolina State University at Raleigh	ug sec	NC
15	Wright State University	g sec	OH	57	Ohio Wesleyan University	ug sec	OH
17	Maryville College	ug sec	TN	57	St. Edward's University	ug sec	TX
17	University of North Carolina at Chapel Hill	g sec	NC	57	St. Olaf College	ug sec	MN
19	Clemson University	ug sec	SC	57	Tennessee Technological University	ug sec	TN
19	Mansfield University of Pennsylvania	ug sec	PA	57	University of Akron	ug sec	OH
19	Ohio State University	g sec	OH	57	University of California – Berkeley	g sec	CA
19	University of Arizona	ug sec	AZ	57	University of Minnesota – Duluth	ug sec	MN
23	Coe College	ug sec	IA	57	University of Northwestern – St. Paul	ug sec	MN
23	Indiana University – Bloomington	ug sec	IN	57	University of Oklahoma	ug sec	OK
23	University of South Dakota	ug sec	SD	57	University of Pittsburgh at Bradford	ug sec	PA
27	Arizona State University	ug sec	AZ	57	University of St. Thomas	ug sec	MN
27	University of Arkansas at Monticello	ug sec	AR	57	University of Tennessee – Martin	g sec	TN
28	CUNY – Hunter College	ug sec	NY	57	William Jewell College	ug sec	MO
28	Middle Tennessee State University	ug sec	TN	79	Kean University	g sec	NJ
28	Southeastern Louisiana University	ug sec	LA	79	Rider University	ug sec	NJ
28	University of Memphis	g sec	TN	79	Rowan University	ug sec	NJ
32	Bloomsburg University of Pennsylvania	ug sec	PA	82	Arizona State University	g sec	AZ
32	Clayton State University	g sec	GA	82	Delaware State University	ug sec	DE
32	College of Charleston	ug sec	SC	82	Minnesota State University – Mankato	ug sec	MN
32	Dallas Baptist University	ug sec	TX	82	Minnesota State University – Mankato	g sec	MN
32	Gordon College	ug sec	MA	82	University of Georgia	g sec	GA
32	University of Kentucky	ug sec	KY	87	Christopher Newport University	g sec	VA
37	Boise State University	ug sec	ID	87	Dakota State University	ug sec	SD
37	CUNY – Brooklyn College	g sec	NY	87	Missouri University of Science and Technology	ug sec	MO
37	Union University	ug sec	TN	87	Northwestern Oklahoma State University	ug sec	OK
37	University of North Carolina at Wilmington	ug sec	NC	87	Ohio Northern University	ug sec	OH
41	Hope College	ug sec	MI	87	Southern Methodist University	ug sec	TX
41	Northwestern State University of Louisiana	ug sec	LA	87	Texas Tech University	ug sec	TX
43	Ithaca College	ug sec	NY	94	Oregon State University	g sec	OR
43	Marietta College	ug sec	OH	94	Purdue University – Calumet	ug sec	IN
43	SUNY – Binghamton University	g sec	NY	94	Saint Joseph's University	ug sec	PA

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National ranking	INSTITUTION	Program	State
94	University of Arkansas	g sec	AR
94	University of Cincinnati	ug sec	OH
98	Georgia Southern University	g sec	GA
98	Misericordia University	ug sec	PA
98	Valdosta State University	ug sec	GA
98	Valdosta State University	g sec	GA
103	Alice Lloyd College	ug sec	KY
103	Central Washington University	ug sec	WA
103	Gonzaga University	ug sec	WA
103	Long Island University – C. W. Post	ug sec	NY
103	Longwood University	ug sec	VA
103	North Carolina A&T State University	g sec	NC
103	Northern State University	ug sec	SD
103	St. Cloud State University	ug sec	MN
103	University of Texas – Pan American	ug sec	TX
103	University of Washington – Seattle	g sec	WA
113	Boise State University	ug sec	ID
113	Georgia Southwestern State University	ug sec	GA
113	Missouri State University	ug sec	MO
113	Mount Vernon Nazarene University	ug sec	OH
113	Rutgers University – Camden	ug sec	NJ
113	SUNY – Fredonia	ug sec	NY
113	University of Alabama in Huntsville	ug sec	AL
113	University of Maryland – College Park	ug sec	MD
113	University of Mississippi	ug sec	MS
113	University of Rhode Island	ug sec	RI
113	University of Wisconsin – River Falls	ug sec	WI
113	Utah Valley University	ug sec	UT
124	Old Dominion University	ug sec	VA
124	Old Dominion University	g sec	VA
124	Otterbein University	ug sec	OH
127	Alabama A&M University	g sec	AL
127	Arkansas Tech University	ug sec	AR
127	Bridgewater College	ug sec	VA
127	Chatham University	ug sec	PA
127	Cumberland University	ug sec	TN
127	Drury University	ug sec	MO
127	Goucher College	ug sec	MD
127	Johns Hopkins University	g sec	MD
127	Kansas State University	ug sec	KS
127	Louisiana State University and Agricultural & Mechanical College	ug sec	LA
127	Manhattanville College	ug sec	NY
127	North Greenville University	ug sec	SC
127	Pittsburg State University	ug sec	KS
127	Roberts Wesleyan College	ug sec	NY
127	Seton Hall University	ug sec	NJ
127	SUNY College at Brockport	ug sec	NY
127	Truman State University	g sec	MO
127	University of California – Irvine	g sec	CA
127	University of Massachusetts – Lowell	g sec	MA
127	Wittenberg University	ug sec	OH
147	Ball State University	ug sec	IN
147	Georgia State University	g sec	GA
147	North Dakota State University	ug sec	ND
147	University of Central Oklahoma	ug sec	OK
147	Winthrop University	g sec	SC

National ranking	INSTITUTION	Program	State
152	Minnesota State University Moorhead	ug sec	MN
152	Pennsylvania State University	g sec	PA
152	University of North Carolina at Wilmington	g sec	NC
152	University of South Carolina – Columbia	g sec	SC
157	Fayetteville State University	g sec	NC
157	Fitchburg State University	ug sec	MA
157	Indiana University – Bloomington	g sec	IN
157	Kennesaw State University	ug sec	GA
157	Morgan State University	ug sec	MD
157	Rutgers University – Newark	ug sec	NJ
157	Saginaw Valley State University	ug sec	MI
157	Shippensburg University of Pennsylvania	ug sec	PA
157	University of Kentucky	g sec	KY
157	University of Science and Arts of Oklahoma	ug sec	OK
157	University of Texas at Austin	ug sec	TX
157	Washington State University	ug sec	WA
170	Bowling Green State University	ug sec	OH
170	California State University – Long Beach	g sec	CA
170	Carson–Newman University	ug sec	TN
170	CUNY – Lehman College	g sec	NY
170	Purdue University	g sec	IN
170	Slippery Rock University of Pennsylvania	ug sec	PA
170	University of Houston	g sec	TX
170	University of Houston – Clear Lake	ug sec	TX
170	University of Michigan – Flint	ug sec	MI
170	University of West Georgia	ug sec	GA
178	Arcadia University	ug sec	PA
178	Cedarville University	ug sec	OH
178	Concord University	ug sec	WV
178	McDaniel College	g sec	MD
178	Montana State University	ug sec	MT
178	University of Maryland – College Park	g sec	MD
178	University of Michigan – Dearborn	g sec	MI
178	University of Southern Mississippi	ug sec	MS
187	North Georgia College and State University	ug sec	GA
187	North Georgia College and State University	g sec	GA
187	University of Central Arkansas	ug sec	AR
187	University of Louisville	ug sec	KY
187	University of Tennessee at Chattanooga	ug sec	TN
187	University of Toledo	g sec	OH
193	Alvernia University	ug sec	PA
193	Augsburg College	ug sec	MN
193	Avila University	ug sec	MO
193	Bethany College	ug sec	KS
193	Bethel University	g sec	MN
193	Buena Vista University	ug sec	IA
193	Cabrini College	ug sec	PA
193	Carroll University	ug sec	WI
193	College of Saint Rose	ug sec	NY
193	Concordia University Irvine	ug sec	CA
193	CUNY – Lehman College	ug sec	NY
193	East Central University	ug sec	OK
193	Faith Baptist Bible College and Theological Seminary	ug sec	IA
193	Houston Baptist University	ug sec	TX
193	Marian University Indianapolis	ug sec	IN
193	Midwestern State University	ug sec	TX

Program guide: ug elem = undergraduate elementary; ug sec = undergraduate secondary; g elem = graduate elementary; g sec = graduate secondary

National ranking	INSTITUTION	Program	State	National ranking	INSTITUTION	Program	State
193	Newman University	ug sec	KS	265	Bridgewater State University	ug sec	MA
193	Northern Arizona University	ug sec	AZ	265	Columbia University	ug sec	NY
193	Rhode Island College	g sec	RI	265	Edinboro University of Pennsylvania	g sec	PA
193	SUNY – New Paltz	g sec	NY	265	Framingham State University	ug sec	MA
193	SUNY College at Oneonta	ug sec	NY	265	Frostburg State University	g sec	MD
193	Union Graduate College	g sec	NY	265	George Mason University	g sec	VA
193	University of California – Davis	g sec	CA	265	Lander University	ug sec	SC
193	University of Central Florida	ug sec	FL	265	Lesley University	ug sec	MA
193	University of Georgia	ug sec	GA	265	Loyola Marymount University	ug sec	CA
193	University of Mary Hardin – Baylor	ug sec	TX	265	Mercyhurst University	g sec	PA
193	Virginia Wesleyan College	ug sec	VA	265	Pennsylvania State University – Harrisburg	ug sec	PA
193	Widener University	ug sec	PA	265	Purdue University	ug sec	IN
221	College of New Jersey	ug sec	NJ	265	University of Minnesota – Twin Cities	g sec	MN
221	CUNY – York College	ug sec	NY	265	University of South Alabama	g sec	AL
221	Millersville University of Pennsylvania	ug sec	PA	265	University of Texas at Dallas	ug sec	TX
221	Pennsylvania State University	ug sec	PA	265	University of Texas of the Permian Basin	ug sec	TX
221	Purdue University – North Central	ug sec	IN	265	Utah State University	ug sec	UT
221	Sam Houston State University	ug sec	TX	265	Wright State University	g sec	OH
221	SUNY College at Cortland	g sec	NY	285	Albany State University	ug sec	GA
221	University of North Carolina at Charlotte	g sec	NC	285	Daytona State College	ug sec	FL
221	University of Vermont	ug sec	VT	285	Drexel University	ug sec	PA
230	Ashland University	g sec	OH	285	Emporia State University	ug sec	KS
230	Northwest University	ug sec	WA	285	Jones International University	g sec	CO
230	University of Dayton	ug sec	OH	285	Mercer University	ug sec	GA
230	University of Utah	ug sec	UT	285	Southern Connecticut State University	g sec	CT
235	Brigham Young University – Idaho	ug sec	ID	285	SUNY – Fredonia	g sec	NY
235	California State University – Northridge	ug sec	CA	285	University at Buffalo	g sec	NY
235	Cameron University	ug sec	OK	293	Florida State University	ug sec	FL
235	Indiana University of Pennsylvania	ug sec	PA	293	Florida State University	g sec	FL
235	Louisiana State University – Alexandria	ug sec	LA	293	Oklahoma State University	ug sec	OK
235	Montana State University Billings	ug sec	MT	293	Stanford University	g sec	CA
235	Oakland University	g sec	MI	293	University of Texas at Arlington	ug sec	TX
235	Southwest Minnesota State University	ug sec	MN	297	Augusta State University (Georgia Regents University Augusta)	ug sec	GA
235	SUNY – Geneseo	ug sec	NY	297	Berry College	g sec	GA
235	SUNY College at Old Westbury	ug sec	NY	297	Bradley University	ug sec	IL
235	University of Wisconsin – Stout	ug sec	WI	297	California State University – Fresno	g sec	CA
235	Westfield State University	g sec	MA	297	Calumet College of St. Joseph	g sec	IN
247	CUNY – Brooklyn College	ug sec	NY	297	Central College	ug sec	IA
247	Florida Agricultural and Mechanical University	ug sec	FL	297	Chestnut Hill College	ug sec	PA
247	Fort Valley State University	ug sec	GA	297	College of Saint Scholastica	ug sec	MN
247	Langston University	ug sec	OK	297	Concordia University St. Paul	ug sec	MN
247	Michigan State University	ug sec	MI	297	Converse College	ug sec	SC
247	Morehead State University	ug sec	KY	297	Eastern University	ug sec	PA
247	Northeastern State University	ug sec	OK	297	Florida Atlantic University	g sec	FL
247	University of Illinois at Urbana – Champaign	g sec	IL	297	Florida Gulf Coast University	ug sec	FL
247	University of Michigan – Ann Arbor	g sec	MI	297	Francis Marion University	ug sec	SC
247	Virginia State University	ug sec	VA	297	Freed–Hardeman University	ug sec	TN
247	Western Kentucky University	ug sec	KY	297	Immaculata University	ug sec	PA
259	Central State University	ug sec	OH	297	Indiana Wesleyan University	ug sec	IN
259	Delta State University	ug sec	MS	297	Long Island University – C. W. Post	g sec	NY
259	Eastern Kentucky University	ug sec	KY	297	Loras College	ug sec	IA
259	Middle Georgia State (Macon State) College	ug sec	GA	297	Manchester University	ug sec	IN
259	Tennessee State University	ug sec	TN	297	Mercer University	g sec	GA
259	University of Akron	g sec	OH	297	Missouri Western State University	ug sec	MO
265	Aquinas College	g sec	MI	297	Morningside College	ug sec	IA
265	Augusta State University (Georgia Regents University Augusta)	g sec	GA	297	Northeastern Illinois University	g sec	IL

Program guide: ug elem = undergraduate elementary; ug sec = undergraduate secondary; g elem = graduate elementary; g sec = graduate secondary

National ranking	INSTITUTION	Program	State
297	Oakland City University	ug sec	IN
297	Oklahoma Baptist University	ug sec	OK
297	Oklahoma Panhandle State University	ug sec	OK
297	Palm Beach Atlantic University	ug sec	FL
297	Piedmont College	ug sec	GA
297	Reinhardt University	ug sec	GA
297	Roanoke College	ug sec	VA
297	Robert Morris University	ug sec	PA
297	Saint Vincent College	ug sec	PA
297	Siena College	ug sec	NY
297	South Dakota State University	ug sec	SD
297	Southern Adventist University	ug sec	TN
297	Springfield College	ug sec	MA
297	St. Catherine University	g sec	MN
297	St. John Fisher College	ug sec	NY
297	SUNY – New Paltz	ug sec	NY
297	Temple University	ug sec	PA
297	University of North Alabama	ug sec	AL
297	University of the Cumberlands	ug sec	KY
297	University of Virginia's College at Wise	ug sec	VA
297	Valparaiso University	g sec	IN
297	West Texas A&M University	ug sec	TX
297	Wilkes University	ug sec	PA
297	Worcester State University	ug sec	MA
346	Chipola College	ug sec	FL
346	Colorado State University	ug sec	CO
346	Indian River State College	ug sec	FL
346	Iowa State University	g sec	IA
346	Kent State University	ug sec	OH
346	McNeese State University	g sec	LA
346	SUNY College at Cortland	ug sec	NY
346	University of Arizona	g sec	AZ
346	Western Carolina University	g sec	NC
356	Dixie State College of Utah	ug sec	UT
356	East Carolina University	ug sec	NC
356	Elon University	ug sec	NC
356	Lock Haven University of Pennsylvania	ug sec	PA
356	Missouri State University	g sec	MO
356	Nova Southeastern University	ug sec	FL
356	Rutgers University – New Brunswick	g sec	NJ
356	Salem State University	g sec	MA
356	Southern Illinois University Carbondale	ug sec	IL
356	University of California – Santa Cruz	g sec	CA
356	University of Southern Maine	ug sec	ME
356	West Chester University of Pennsylvania	ug sec	PA
368	Bemidji State University	g sec	MN
368	Catholic University of America	g sec	DC
368	Clayton State University	ug sec	GA
368	Cleveland State University	ug sec	OH
368	Gordon State College	ug sec	GA
368	Michigan Technological University	ug sec	MI
368	San Francisco State University	g sec	CA
368	Southeast Missouri State University	ug sec	MO
368	Texas A&M University – Texarkana	ug sec	TX
368	University of California – Los Angeles	g sec	CA
368	Vincennes University	ug sec	IN

National ranking	INSTITUTION	Program	State
380	American University	ug sec	DC
380	Canisius College	ug sec	NY
380	Claremont Graduate University	g sec	CA
380	DeSales University	ug sec	PA
380	Edison State College	ug sec	FL
380	Plymouth State University	g sec	NH
380	Texas A&M University	ug sec	TX
380	University of Colorado Denver	ug sec	CO
389	Angelo State University	ug sec	TX
389	Harding University	ug sec	AR
389	Keene State College	ug sec	NH
389	Shawnee State University	ug sec	OH
389	Stony Brook University	ug sec	NY
389	SUNY – Oswego	ug sec	NY
389	University of California – Riverside	g sec	CA
389	University of New Orleans	g sec	LA
389	Western Carolina University	ug sec	NC
399	Bucknell University	ug sec	PA
399	Cleveland State University	g sec	OH
399	Northwest Missouri State University	ug sec	MO
399	University of Colorado Boulder	ug sec	CO
399	University of Louisville	g sec	KY
399	William Carey University	ug sec	MS
406	Athens State University	ug sec	AL
406	Briar Cliff University	ug sec	IA
406	Cairn University	ug sec	PA
406	Central Michigan University	ug sec	MI
406	Charleston Southern University	ug sec	SC
406	Concordia University Wisconsin	ug sec	WI
406	Grambling State University	ug sec	LA
406	Hamline University	g sec	MN
406	Heidelberg University	ug sec	OH
406	Heritage University	ug sec	WA
406	Holy Family University	g sec	PA
406	Indiana University – Purdue University Fort Wayne	ug sec	IN
406	Marian University	ug sec	WI
406	Miami Dade College	ug sec	FL
406	Moravian College	ug sec	PA
406	Mount Mercy University	ug sec	IA
406	National University	ug sec	CA
406	Ohio Dominican University	ug sec	OH
406	Saint Leo University	ug sec	FL
406	Southern Utah University	ug sec	UT
406	St. Petersburg College	g sec	FL
406	SUNY – University at Albany	g sec	NY
406	SUNY College at Brockport	g sec	NY
406	University of Massachusetts – Amherst	g sec	MA
406	University of New Hampshire	g sec	NH

Program guide: ug elem = undergraduate elementary; ug sec = undergraduate secondary; g elem = graduate elementary; g sec = graduate secondary

Special Education Program Rankings

The sample of special education programs has been small for the first two editions of the *Review* but will be enlarged considerably in the *Review's* third edition.

Based on their scores on key and booster standards, the 55 ranked special education programs in the sample are listed below; special education programs for which "data were insufficient to rank" are listed here. Note that the list below includes programs certifying special education teachers for the PK-12, elementary and secondary grade spans.

Special Education Rankings

National ranking	INSTITUTION	Program	State	National ranking	INSTITUTION	Program	State
1	Arizona State University	ug sped	AZ	30	CUNY – Brooklyn College	g sped	NY
2	University of Washington – Seattle	g sped	WA	31	Saginaw Valley State University	g sped	MI
3	Elon University	ug sped	NC	32	Kent State University	ug sped	OH
3	CUNY– Hunter College	g sped	NY	32	Indiana University – Bloomington	g sped	IN
5	Delaware State University	ug sped	DE	34	CUNY – City College	g sped	NY
6	Illinois State University	ug sped	IL	34	George Mason University	g sped	VA
7	Western Washington University	ug sped	WA	36	University of Northern Iowa	ug sped	IA
8	Indiana University – Bloomington	ug sped	IN	38	University of Southern Mississippi	ug sped	MS
9	Purdue University – Calumet	ug sped	IN	39	East Stroudsburg University of Pennsylvania	ug sped	PA
10	William Carey University	ug sped	MS	40	Washington State University	g sped	WA
11	University of Central Florida	ug sped	FL	41	Northeastern State University	ug sped	OK
12	East Carolina University	ug sped	NC	42	Eastern Kentucky University	ug sped	KY
12	High Point University	ug sped	NC	42	West Virginia University	g sped	WV
14	University of Maryland – College Park	g sped	MD	44	Midway College	ug sped	KY
15	Old Dominion University	g sped	VA	45	Northern Arizona University	ug sped	AZ
16	Bloomsburg University of Pennsylvania	ug sped	PA	45	University of Vermont	g sped	VT
16	University of South Florida	ug sped	FL	47	Francis Marion University	g sped	SC
18	Vincennes University	ug sped	IN	47	University of Arizona	g sped	AZ
18	University of Louisville	g sped	KY	49	University of Washington – Tacoma	g sped	WA
20	Fitchburg State University	g sped	MA	50	SUNY - College at Buffalo	ug sped	NY
21	SUNY – Geneseo	ug sped	NY	50	CUNY - Queens College	g sped	NY
21	West Chester University of Pennsylvania	ug sped	PA	52	Arkansas State University	g sped	AR
21	Southern Connecticut State University	g sped	CT	53	University of Nevada – Las Vegas	g sped	NV
24	Keene State College	ug sped	NH	54	Western Kentucky University	g sped	KY
24	Mississippi University for Women	ug sped	MS	55	California State University – Dominguez Hills	g sped	CA
26	Anderson University	ug sped	IN	55	University of Alaska Anchorage	g sped	AK
27	Bowling Green State University	ug sped	OH				
29	University of New Mexico	g sped	NM				

Program guide: ug sped = undergraduate special education; g sped = graduate special education

Non-cooperating institutions

Birmingham Southern College	AL	Thomas More College	KY	Carroll College	MT
Concordia College – Selma	AL	Union College	KY	Salish Kootenai College	MT
Miles College	AL	Louisiana College	LA	University of Great Falls	MT
Samford University	AL	Our Lady of Holy Cross College	LA	Barton College	NC
University of Mobile	AL	Southern University at New Orleans	LA	Belmont Abbey College	NC
John Brown University	AR	Assumption College	MA	Campbell University	NC
Ottawa University – Phoenix	AZ	Bay Path College	MA	Guilford College	NC
Alliant International University	CA	Boston College	MA	Lenoir-Rhyne College	NC
California Baptist University	CA	Boston University	MA	Mars Hill College	NC
Dominican University of California	CA	Brandeis University	MA	Methodist University	NC
Hope International University	CA	Cambridge College	MA	North Carolina Wesleyan College	NC
Mount Saint Mary's College	CA	Clark University	MA	Pfeiffer University	NC
Albertus Magnus College	CT	Eastern Nazarene College	MA	Saint Andrews Presbyterian College	NC
Quinnipiac University	CT	Elms College	MA	Salem College	NC
Saint Joseph College	CT	Emmanuel College	MA	Wake Forest University	NC
University of Bridgeport	CT	Endicott College	MA	Wingate University	NC
University of New Haven	CT	Harvard University	MA	Jamestown College	ND
Howard University	DC	Merrimack College	MA	Sitting Bull College	ND
Trinity Washington University	DC	Mount Holyoke College	MA	Concordia University	NE
Barry University	FL	Northeastern University	MA	Doane College	NE
Clearwater Christian College	FL	Simmons College	MA	Hastings College	NE
Florida Memorial University	FL	Smith College	MA	Antioch University New England	NH
University of Tampa	FL	Stonehill College	MA	Southern New Hampshire University	NH
Covenant College	GA	Stevenson University	MD	Bloomfield College	NJ
Emmanuel College	GA	Washington College	MD	Centenary College	NJ
Toccoa Falls College	GA	Bates College	ME	College of Saint Elizabeth	NJ
Brigham Young University – Hawaii	HI	Husson University	ME	Felician College	NJ
Clarke University	IA	Saint Joseph's College of Maine	ME	Georgian Court University	NJ
Cornell College	IA	University of New England	ME	Saint Peters College	NJ
Dordt College	IA	Albion College	MI	Alfred University	NY
Drake University	IA	Alma College	MI	Bank Street College of Education	NY
Graceland University – Lamoni	IA	Andrews University	MI	Bard College	NY
Grand View University	IA	Baker College	MI	Barnard College	NY
Iowa Wesleyan College	IA	Calvin College	MI	College of Mount Saint Vincent	NY
Northwestern College	IA	Concordia University – Ann Arbor	MI	College of New Rochelle	NY
Saint Ambrose University	IA	Cornerstone University	MI	Daemen College	NY
Upper Iowa University	IA	Madonna University	MI	Dominican College of Blauvelt	NY
Wartburg College	IA	Marygrove College	MI	Elmira College	NY
William Penn University	IA	Olivet College	MI	Fordham University	NY
Erikson Institute	IL	University of Detroit Mercy	MI	Hobart William Smith Colleges	NY
Kendall College	IL	College of Saint Benedict	MN	Houghton College	NY
Trinity International University	IL	Concordia College at Moorhead	MN	Iona College	NY
Butler University	IN	Crown College	MN	Long Island University – Brooklyn Campus	NY
Franklin College	IN	Saint Mary's University of Minnesota	MN	Long Island University – Riverhead	NY
Goshen College	IN	Walden University	MN	Long Island University – Rockland Campus	NY
Saint Josephs College	IN	Central Methodist University – College of Liberal Arts & Science	MO	Long Island University-Westchester Campus	NY
Saint Mary-of-the-Woods College	IN	College of the Ozarks	MO		
Saint Mary's College	IN	Columbia College	MO	Manhattan College	NY
Taylor University	IN	Evangel University	MO	Mercy College	NY
University of Indianapolis	IN	Saint Louis University – Main Campus	MO	Metropolitan College of New York	NY
University of Saint Francis – Ft Wayne	IN	University of Missouri – Kansas City	MO	Nazareth College	NY
Friends University	KS	Washington University in St Louis	MO	New York Institute of Technology	NY
Southwestern College	KS	Webster University	MO	New York University	NY
Sterling College	KS	Westminster College	MO	Nyack College	NY
Asbury College	KY	William Woods University	MO	Pace University	NY
Kentucky Christian University	KY	Millsaps College	MS	Saint Josephs College – Main Campus	NY
Kentucky Wesleyan College	KY	Tougaloo College	MS	Saint Thomas Aquinas College	NY
Pikeville College	KY				

Non-cooperating institutions

St. Francis College	NY	Thiel College	PA	Our Lady of the Lake University – San Antonio	TX
St. Lawrence University	NY	University of Pittsburgh – Johnstown	PA	Prairie View A & M University	TX
St. John's University – New York	NY	University of Scranton	PA	Rice University	TX
The Sage Colleges	NY	Valley Forge Christian College	PA	St Marys University	TX
Touro College	NY	Villanova University	PA	Texas Christian University	TX
Union Graduate College	NY	Washington & Jefferson College	PA	Texas Wesleyan University	TX
Utica College	NY	Waynesburg University	PA	University of St Thomas	TX
Wagner College	NY	Westminster College	PA	University of the Incarnate Word	TX
Antioch University McGregor	OH	York College Pennsylvania	PA	Westminster College	UT
Bluffton University	OH	Brown University	RI	Averett University	VA
College of Mount St Joseph	OH	Roger Williams University	RI	Hampton University	VA
Franciscan University of Steubenville	OH	Salve Regina University	RI	Lynchburg College	VA
John Carroll University	OH	Columbia College	SC	Marymount University	VA
Lourdes College	OH	Augustana College	SD	Shenandoah University	VA
Malone University	OH	Mount Marty College	SD	University of Richmond	VA
Notre Dame College	OH	Oglala Lakota College	SD	Virginia Intermont College	VA
The College of Wooster	OH	University of Sioux Falls	SD	College of St. Joseph	VT
University of Rio Grande	OH	Belmont University	TN	Saint Michael's College	VT
Urbana University	OH	Christian Brothers University	TN	City University of Seattle	WA
Ursuline College	OH	King College	TN	Pacific Lutheran University	WA
Walsh University	OH	Lee University	TN	Saint Martin's University	WA
Wilmington College	OH	Lincoln Memorial University	TN	Seattle Pacific University	WA
Xavier University	OH	Martin Methodist College	TN	Walla Walla University	WA
Southern Nazarene University	OK	Milligan College	TN	Alverno College	WI
University of Tulsa	OK	South College	TN	Edgewood College	WI
Eastern Oregon University	OR	Tennessee Wesleyan College	TN	Lakeland College	WI
George Fox University	OR	Trevecca Nazarene University	TN	Lawrence University	WI
Willamette University	OR	Abilene Christian University	TX	Maranatha Baptist Bible College	WI
Cedar Crest College	PA	Baylor University	TX	Marquette University	WI
Gannon University	PA	Concordia University Texas	TX	Saint Norbert College	WI
Geneva College	PA	East Texas Baptist University	TX	Viterbo University	WI
Grove City College	PA	Hardin-Simmons University	TX	Wisconsin Lutheran College	WI
Juniata College	PA	Howard Payne University	TX	Fairmont State University	WV
Messiah College	PA	Huston-Tillotson University	TX	Wheeling Jesuit University	WV
Muhlenberg College	PA	LeTourneau University	TX		
Point Park University	PA	Lubbock Christian University	TX		
Saint Francis University	PA	McMurry University	TX		

III. Findings by Standard

Findings for alternative certification programs are located in Section IV of this report.

This year's findings focus on what is new and different in *NCTQ Teacher Prep Review 2014* compared with the findings from last year's edition.

A wealth of extensive background and supporting information is readily available:

- For terms used in the *Review*, a glossary provides definitions.
- For each of our standards, we've developed a rationale that lays out the support found in research and other sources.
- For more detail on findings for any standard, including call-outs of exemplary programs and more detailed information on the graphics included in this section, see the individual findings report for each standard.
- For information on how to improve program quality relevant to our standards, consult our new "Standards Guidance."
- For more about how programs are scored on any standard, including how individual indicators are satisfied, see the scoring methodology.
- For examples of model materials on a variety of standards, see the resources section.

How did programs that submitted new materials for the second edition fare?

In spite of the widespread resistance to the *Review*, 118 institutions submitted new data for evaluation on one or more standards. These institutions have often taken considerable pains to orient themselves to the nature and framing of our standards.[18]

It is too early to expect significant changes in the field, but the following table on evaluations of the programs submitting new data for the second edition[19] contains promising news.[20]

How institutions that submitted new materials fared in *Review 2014*

Standard	Number of programs	⬆ Scores that went up		⬇ Scores that went down		↔ Scores that stayed the same	
Selection criteria*	201	57	28%	4	2%	140	70%
Early reading	122	46	38%	17	14%	58	48%
English language learners	104	15	15%	10	10%	79	76%
Struggling readers	104	15	15%	8	8%	81	78%
Elementary math	98	12	12%	2	2%	84	86%
Elementary content	96	11	11%	7	7%	78	81%
Middle school content	33	0	0%	0	0%	33	100%
High school content	62	7	11%	0	0%	55	88%
Special education content	14	1	7%	2	14%	11	79%
Classroom management*	130	71	55%	21	16%	38	29%
Assessment and data	140	76	54%	4	3%	60	43%
Student teaching*	232	80	35%	26	11%	126	54%
Secondary methods	50	6	12%	0	0%	44	88%
Instructional design for special education	6	3	50%	0	0%	3	50%
Outcomes	58	10	16%	0	0%	48	83%

* Standard and/or scoring also changed

Programs made the most significant improvements in two standards: **Early Reading** *and* **Assessment and Data**. *Scores in two other standards (***Classroom Management** *and* **Student Teaching***) present a more mixed improvement than the figures in the table suggest, but still demonstrated tangible gains.*

Standard 1: Selection Criteria

Std. revised

Standout State! Pennsylvania

Half of the 156 programs (51 percent) evaluated in **Pennsylvania** meet the **Selection Criteria Standard** because they choose to hold to the tougher of the two admissions options permitted by the state and require a minimum 3.0 GPA. The corresponding national figure is 22 percent.

Thirty-five percent of programs at the undergraduate level and nine percent of programs at the graduate level meet this standard.

The **Selection Criteria Standard** evaluates whether candidates in teacher preparation programs have the academic aptitude to be effective instructors. In evaluating this standard we look at admissions requirements to determine if they help ensure that programs are drawing from the top half of the college-going population. In the first edition of the *Review*, at the undergraduate level we looked to see if programs require that prospective teachers have above average SAT or ACT scores, or at least a 3.0 grade point average (GPA); at the graduate level, we looked for the requirement of a 3.0 or higher GPA paired with either an audition or a score on the same type of standardized test used generally in graduate education.

Achieving Diversity

One of the ways to earn "Strong Design" on this standard is to meet the academic criteria in this standard while successfully recruiting a diverse population of teacher candidates, exceeding the minority enrollment for the institution at large at the undergraduate level, or the diversity of the state's teachers at the graduate level. This year, 91 programs earned Strong Design, slightly up from 86 last year, because they hold to high academic expectations of teacher candidates without sacrificing diversity. The findings report for the Selection Criteria Standard lists these programs.

Fig. 8   Distribution of scores on Standard 1: Selection Criteria
(N=2,396 elementary, secondary and special education programs)

Undergraduate (N=1,722): 26%, 39%, 29%, 6%
Graduate (N=674): 45%, 46%, 4%, 5%
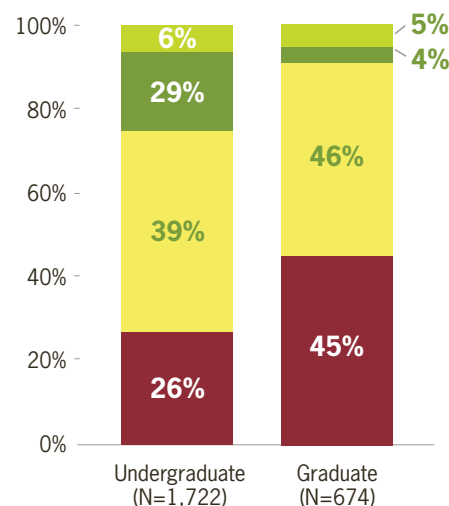
🏆 Likely drawing almost all candidates from the top half of students, and meets one or more Strong Design indicators, including achieving a high level of diversity.

● Likely drawing almost all candidates from the top half of students.

◐ May be drawing candidates from the top half of students.

○ (zero) Unlikely to be drawing more than a few candidates from the top half of students.

HOW MANY PROGRAMS TRIP UP

3.0 minimum GPA?
(N=2,396 programs)

18%
Yes

82%
No

Top half of college-goers?
(N=1,722 undergrad programs)

26%
Yes

74%
No

GRE, MAT or audition?
(N=674 graduate programs)

25%
Yes

75%
No
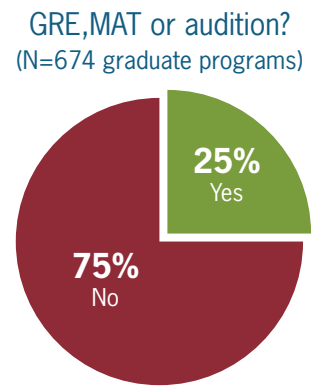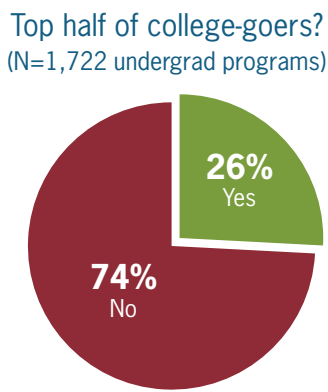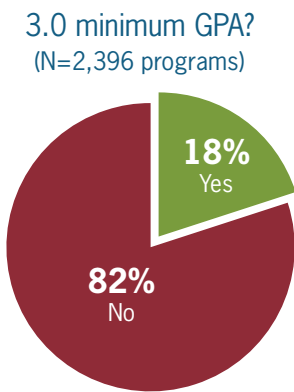
When the results of *Teacher Prep Review 2013* were released, deans at several programs suggested that we allow them to demonstrate program selectivity that might not be evident from these criteria by instead attesting to the high average GPA at admission of their successful applicants. This suggestion made sense and accordingly we have added an indicator to the standard to that effect, allowing an average cohort GPA of 3.3 or above to satisfy the standard. This average GPA *must* be computed on the grades of applicants before they enter teacher preparation, since the average GPA of teacher candidates when it is based solely or largely on education coursework is very high. (We will discuss the phenomenon of high grades in teacher preparation coursework in a report that will be issued in fall 2014.)

In response to this added indicator, 41 programs (31 undergraduate and 10 graduate) provided evidence that the average pre-admission GPA of their most recent cohort of candidates was 3.3 or above, thereby satisfying this standard (for undergraduate programs) and partly satisfying it (for graduate programs).[21] The average GPAs provided by programs ranged from 3.3 to 3.8, with an average across all 25 programs of 3.38.

> Following the release of *Teacher Prep Review 2013*, nine institutions moved swiftly to raise their admission standards: All now require that applicants to teacher preparation programs have a GPA of 3.0 or above. These institutions are: **Ball State University** (IN), **Delta State University** (MS), **Eastern Connecticut State University**, **Montclair State University** (NJ), **University of Massachusetts-Dartmouth**, **Wagner College** (NY), **Plymouth State University** (NH), **University of Memphis** (TN), and **Western Governors University** (UT).

Standard 2: Early Reading

> **Standout State! Louisiana**
> Every one of the 11 **Louisiana** programs evaluated on the **Early Reading Standard** "nearly meets" or "meets" the standard because of a 2001-2010 statewide "redesign" of teacher preparation that established a high floor for reading instruction. The corresponding national figure is 34 percent.

This standard is based on the findings of the landmark National Reading Panel (2000) report. The standard simply requires that candidates be provided coursework with adequate instruction in each of the five components of effective reading instruction, with at least two lectures dedicated to each component and an assignment in each to determine teacher

candidate understanding. Yet 14 years after the release of the National Reading Panel's authoritative delineation of these five components, and with more than half of the states (26) passing regulations that require programs to teach this approach to reading instruction, fully 56 percent of programs do not meet this low bar.

HOW MANY PROGRAMS TRIP UP

Cover all 5 components of effective reading?
(N=959 elementary and special education programs)

17%
Yes

83%
No
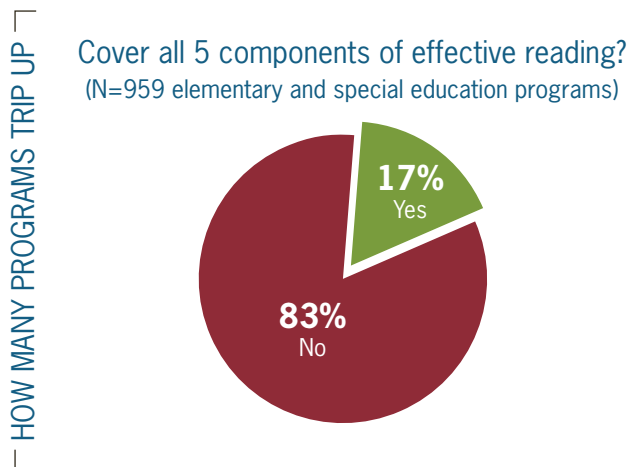
> Evidence for the second edition of a complete overhaul of the reading coursework in the **University of Alaska – Fairbanks'** undergraduate elementary program increased the program's scores in **Early Reading**, **English Language Learners** and **Struggling Readers** from not meeting any of the standards to meeting all three.

As evidence of the "anything goes" approach to reading instruction that we routinely encounter in syllabi, we have had to review a total of *962* different textbooks used in 2,671 courses, most of which convey a plethora of non-research based approaches to reading instruction.

Below is a list of the five textbooks most commonly used in courses evaluated in the *Review* that comprehensively and rigorously cover the scientific basis and instructional elements of the five essential components of effective reading instruction. Names of additional acceptable textbooks can be found in the full list of all evaluated texts.

Fig. 9   Distribution of scores on Standard 2: Early Reading
(N=959 elementary and special education programs)

100%

80%   34%

60%   10%

40%

20%   56%

0%

■ ● or ◗
Program coursework comprehensively prepares teacher candidates to be effective reading instructors by addressing at least four of the five essential components.

■ ◐
Program coursework addresses only three of the five essential components, providing teacher candidates with some preparation in reading instruction.

■ ◕ or ○ (zero)
Program coursework cannot prepare teacher candidates to be effective reading instructors as it addresses no more than two essential components.

Fig. 10 Distribution of scores on
Standard 3: English
Language Learners
(N=665 elementary programs)

Program literacy coursework adequately addresses
strategies for English language learners.

○ (zero)
Program literacy coursework does not adequately
address strategies for English language learners.
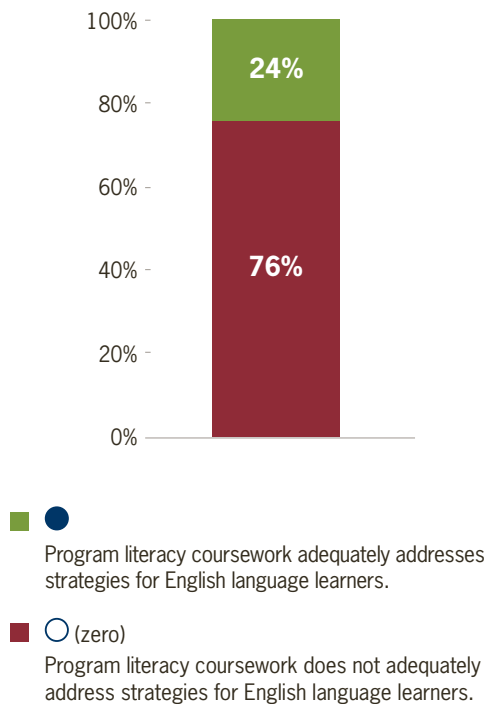
Fig. 12   Distribution of scores on
Standard 4: Struggling
Readers
(N=685 elementary programs)

Program coursework adequately addresses
strategies for struggling readers.

○ (zero)
Program coursework does not adequately
address strategies for struggling readers.
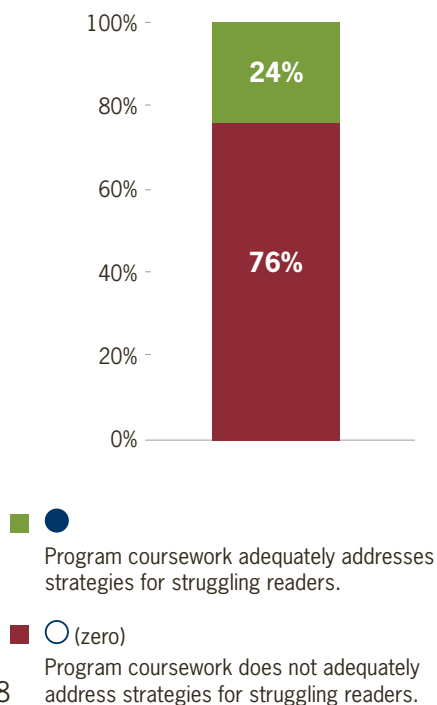
Fig. 11   The five most commonly used acceptable textbooks
covering all essential elements of effective reading

Title	Author(s)	Number of courses text is used	Frequency
Creating Literacy Instruction for All Students, 8th ed	Gunning, Thomas G.	108	4%
Teaching Children to Read: The Teacher Makes the Difference, 6th ed	Reutzel, D. Ray & Cooter, Robert D.	80	3%
Strategies for Reading Assessment and Instruction: Helping Every Child Succeed, 4th ed	Reutzel, D. Ray & Cooter, Robert	47	2%
CORE: Teaching Reading Sourcebook Updated 2nd ed	Honig, B., Diamond, L.; & Gutlohn, L.	43	2%
The Essentials of Teaching Children to Read: The Teacher Makes the Difference, 3rd ed	Reutzel, D. Ray & Cooter, Robert	35	1%

Standard 3: English Language Learners and Standard 4: Struggling Readers

These two standards are scored with the same materials used to evaluate **Early Reading** (Standard 2), but under different lenses. Both standards set a relatively low bar for passing. They seek to assess whether elementary teacher candidates are taught any strategies for teaching reading to students for whom English is a second language, as well as students who are not making adequate progress when learning to read. But as the score distributions in Figs. 9 and 11 show, only 24 percent of programs reach each of these low bars, meeting either standard.

Standard 5: Elementary Mathematics

Standout State! Oklahoma
Sixty percent of **Oklahoma's** 26 programs evaluated under the **Elementary Math Standard** nearly meet or meet the standard because most require at least two elementary math content courses and about half use one of the strongest math textbooks. The corresponding national figure is 20 percent.

This standard reflects a strong consensus that elementary and special education teacher candidates need extensive, well-designed coursework to confidently and competently teach math. Further, the number of credits (six to eight semester credit hours, depending on the selectivity of the program or of the institution in which it is housed) is not arbitrary in that it allows for sufficient lecture time to cover the 12 topics in mathematics that need to be covered. (In fact, the amount of coursework required by this standard is actually more modest than what professional associations of mathematicians and mathematics educators recommend.)

HOW MANY PROGRAMS TRIP UP

Sufficient coursework?
(N=994 elementary and special education programs)

55% No

45% Yes
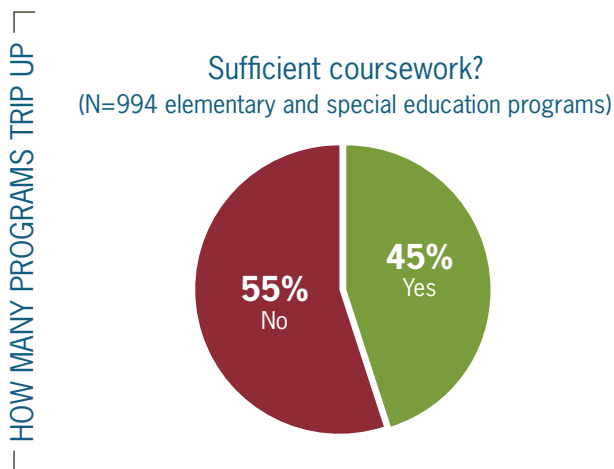
Only 20 percent of programs nearly meet or meet the standard. This means that only one in five elementary and special education teacher preparation programs evaluated are ensuring that their candidates have the conceptual understanding of elementary math necessary for effective instruction. In many programs that score poorly, the elementary content is spread too thinly in courses that are designed to train teachers for the full K-8 grade span (rather than for the elementary grade span of K-5) or that mix elementary math methods with math content without doing adequate justice to content.

Because graduate programs are generally shorter in length than undergraduate programs, they tend to turn a blind eye to the need for preparation in elementary math, even where the undergraduate programs on their own campuses may require it. Almost 9 in 10 (89 percent) graduate programs preparing elementary teachers for the classroom tally undergraduate credits for college algebra or statistics — valuable collegiate courses, but not ones that provide the knowledge needed by elementary teachers — as counting for adequate preparation.

Fig. 13 Distribution of scores on Standard 5: Elementary Mathematics
(N=994 elementary and special education programs)

Undergraduate (N=713): 28%, 8%, 65%
Graduate (N=281): 1%, <1%, 98%
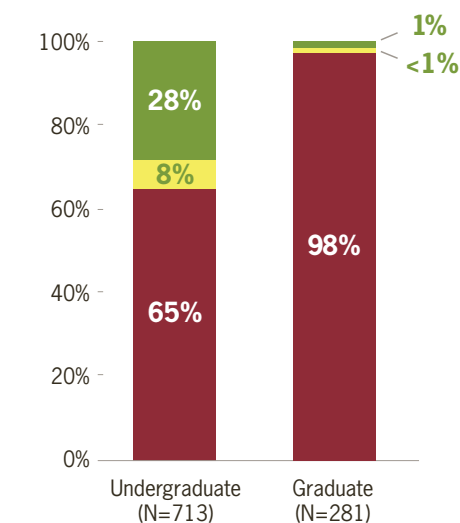
■ ● or ◐
Program coursework addresses essential math topics in adequate breadth and depth.

■ ◐
Program coursework addresses essential math topics in adequate breadth but not depth.

■ ◑ or ○ (zero)
Program coursework addresses essential math topics in inadequate breadth and depth.

Both **Wright State University** (OH) and **Montana State University** improved in our evaluations, each now achieving nearly top scores on the Elementary Math Standard. The former program added a course and changed a textbook for the better, and the latter replaced two elementary math courses with three courses, thereby enabling instruction of sufficient depth.

Fig. 14 Distribution of scores on Standard 6: Elementary Content
(N=1,165 elementary programs)
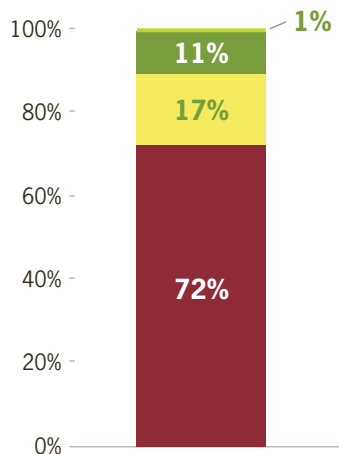
The program's elementary teacher candidates are well-prepared in content spanning the full elementary curriculum.

The program's elementary teacher candidates are well-prepared in content that almost completely spans the full elementary curriculum.

The program's elementary teacher candidates' content preparation spans only a part of the full elementary curriculum.

The program's elementary teacher candidates' content preparation spans only a small part or none of the full elementary curriculum.

Standard 6: Elementary Content

Standout States! Louisiana, Virginia and West Virginia
It's almost a tie: 63 percent of **Louisiana's** 11 programs and 61 percent of **Virginia's** 28 programs evaluated on the **Elementary Content Standard** nearly meet or meet the standard compared to the national figure of only 12 percent. Programs in both states do a good job pointing teacher candidates to the general education coursework that will best prepare them for teaching to the level required of new college and career readiness standards. We also note that 23 percent of **West Virginia's** 13 programs evaluated on this standard not only meet the standard, but earn Strong Design.

The current crop of teacher candidates has emerged from a broken PK-12 system which increasingly rigorous learning standards are designed to fix. Unfortunately, it is these same teacher candidates who are now charged with teaching students to the level required by rigorous standards. Breaking the cycle requires that teacher candidates get more guidance from teacher preparation programs via appropriate coursework in literature and composition, history and geography, and the sciences (with labs).[22] But the fact that only 12 percent of programs evaluated nearly meet or meet this standard (see Fig. 14) means that the cycle of weak content knowledge (and its attendant negative impacts on reading comprehension) is *not* likely to be broken.

Science requirements are a particular area of weakness. For example, our evaluation indicates that 68 percent of programs do not require that teacher candidates take a single general audience science course that covers content centrally relevant to elementary grades. More often, candidates spend a full 3-credit course covering a topic that represents a tiny fraction of the content needed or is simply irrelevant.

For example, candidates can often fulfill general education science requirements with courses such as *Natural Disasters: Hollywood vs. Reality, Earthquakes and Society,* or *The Science of Gemstones.*[23]

Delta State University's (MS) and **Fort Hays State University's** (KS) undergraduate elementary programs improved to earn nearly top scores on the **Elementary Content Standard**. Both outline new explicit course requirements among general education courses. (In the case of Delta State this involves specifying the choice of world literature, American history, and political science courses in which candidates should enroll, and adding new requirements for world history, physics, and music.) **Lipscomb University** (TN) also now has a nearly top score because it has a very thorough transcript review process for applicants to its graduate elementary program.

Standard 7: Middle School Content

Our means of evaluating middle school programs for content preparation aligns with the recommendations found in NCTQ's *State Teacher Policy Yearbook,* in which well-constructed state licensing tests are judged to be the most efficient means for state licensing officials to decide if a middle school teacher candidate is prepared to teach the subject matter. Because most states have such tests, a very high proportion (82 percent) of middle school programs satisfy the **Middle School Content Standard** (see Fig. 15).

Standard 8: High School Content

Standout States! Minnesota and Tennessee
Every one of the 25 secondary programs in **Minnesota** and the 28 secondary programs in **Tennessee** evaluated on the **High School Content Standard** meets the standard, compared to the national figure of 35 percent. Both states require content licensing tests that ensure that all secondary teacher candidates have an adequate knowledge of every subject they will be certified to teach.

Fig. 15 Distribution of scores on Standard 7: Middle School Content
(N=375 middle school programs)
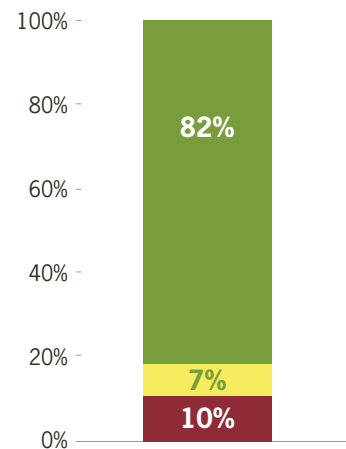
The combination of state licensing tests and program coursework requirements ensures that all middle school candidates have content knowledge in the subjects they will teach.

The combination of state licensing tests and program coursework requirements ensures that most, but not all, middle school candidates have content knowledge of the subjects they will teach.

(zero)
The combination of state licensing tests and program coursework requirements ensures that only a small share of middle school candidates have content knowledge in the subjects they will teach.

This standard is based on the simple proposition that high school teacher candidates should have adequate content knowledge in every subject they are certified to teach. If this content knowledge is not assured by a licensing test, then coursework requirements must be sufficient. The problem with high school preparation is what lurks in the more obscure corners of certification in the sciences and social sciences (or what is generally called "social studies"). The majority of states certify candidates to teach all subjects within these fields without adequately testing the candidate's mastery of each subject and without ensuring that teacher preparation programs require at least a minor in two of them. This lapse largely accounts for the fact that only 35 percent of programs evaluated meet the standard (see Fig. 16).

While programs can always step up to the plate and go above and beyond state regulations — and many that meet our standard do — states should follow the lead of **Tennessee** and **Indiana**, which now require certification and subject matter testing in every subject area to be taught, including the sciences and social sciences.

Each state's certification and testing structure is explained here.

> **Delta State University** (MS) documented a change in coursework requirements for secondary social science education majors: Whereas teacher candidates with this major previously only had to take coursework constituting a single minor (in history), they are now required to take an additional nine credits of political science and have two minors, which will definitely prepare them more thoroughly for high school classrooms.

Standard 9: Special Education Content

By and large, special education teacher preparation programs have not come to grips with the need to ensure that their candidates know the content of the subjects they will teach. Only 2 percent of programs nearly meet or meet the standard. Even if a program did an excellent job preparing its special education candidates in techniques to modify instructional materials, their lack of content mastery across some, or all, of the curriculum might handicap them enormously and jeopardize the success of their students.

Fig. 16 Distribution of scores on Standard 8: High School Content
(N=1,110 high school programs)

The combination of state licensing tests and program coursework requirements ensures that all high school candidates have content knowledge in the subjects they will teach.

The combination of state licensing tests and program coursework requirements ensures that most, but not all, high school candidates have content knowledge of the subjects they will teach.

(zero) The combination of state licensing tests and program coursework requirements ensures that only a small share of high school candidates have content knowledge in the subjects they will teach.

HOW MANY PROGRAMS TRIP UP

Sufficient content preparation
for PK-12 instruction?
(N=51 undergraduate and graduate special
education programs offering PK-12 license)

100%
No

The most striking manifestation of the content knowledge problem occurs in the 35 states that certify special education teachers for grades PK-12, a span that makes it unlikely candidates sufficiently know the subjects they will teach or co-teach.

We will be expanding the number of special education programs evaluated on this standard in the third edition of the *Review*.

Std. revised Standard 10: Classroom Management

Standout State! Tennessee

91 percent of **Tennessee's** 23 programs evaluated on the **Classroom Management Standard** nearly meet or meet the standard, compared to the figure of 38 percent for all programs in the sample. Many of **Tennessee's** programs use the state's TEAM evaluation as the basis for their own student teacher evaluation form, which lends the strength of the TEAM to the feedback they offer.

This standard evaluates the feedback that programs give to student teachers on how well they manage their classrooms. Classroom management is a set of skills that few novice teachers possess — and both they and their students suffer when it is lacking. We know from previous studies that many teacher educators do not place much stock in actual training on classroom management. Usually classroom management coursework involves little more than introducing teacher candidates to a variety of models and techniques and then asking that they develop their own "personal philosophies" of classroom management. There is also an underlying presumption among some teacher educators

Fig. 17 Distribution of scores on Standard 9: Content for Special Education
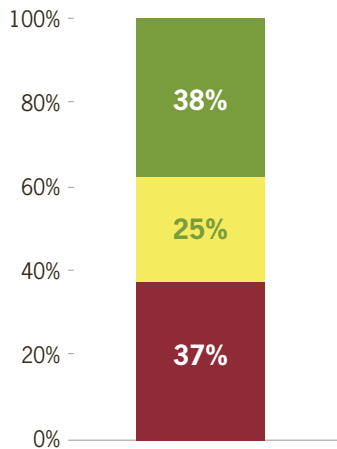(N=96 special education programs)
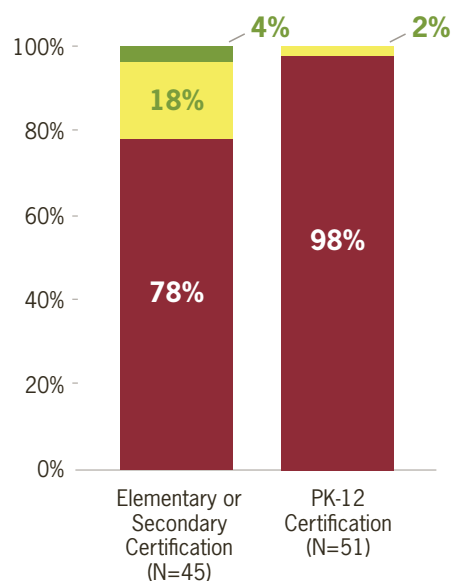
- **(green)** ● or ◕
  The program requires adequate or nearly adequate preparation in the content spanning the curriculum for the grade levels for which the candidate will be certified to teach.

- **(yellow)** ◑
  The program requires some coverage of the content spanning the curriculum for the grade levels for which the candidate will be certified to teach.

- **(red)** ◔ or ○ (zero)
  The program requires little or no coverage of the content spanning the curriculum for which the candidate will be certified to teach.

that if teachers teach well, students will be engaged in learning and no classroom management problems will develop. This standard requires that programs give feedback on specific techniques.
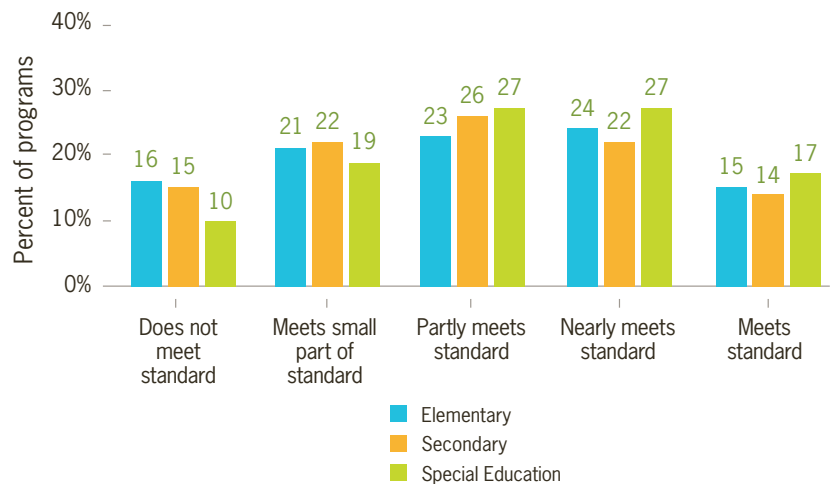
HOW MANY PROGRAMS TRIP UP

Feedback on reinforcing appropriate behavior?
(N=1,181 undergraduate and graduate programs)

26% Yes

74% No
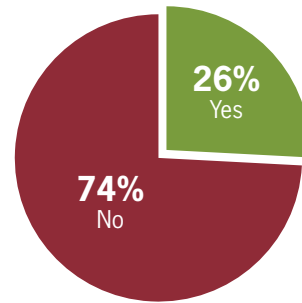
We substantially changed the nature and scope of this standard in this edition of the *Review*, providing better clarity and more detailed guidance to programs on the "Big Five," the fundamental research-supported techniques we identified in our December 2013 report *Training Our Future Teachers: Classroom Management*: rules, routines, positive reinforcement (e.g., praise), handling misbehavior, and engagement.

All programs evaluated on this standard in the 2013 *Review* have been *re-evaluated* in 2014 using the revised indicators.[24] In this edition, we've also included special education programs.

Fig. 18 Distribution of scores on Standard 10: Classroom Management
(N=1,181 elementary, secondary and special education programs)

38%

25%

37%

● or ◑
The program provides student teachers with feedback on critical classroom management techniques.

◐
The program provides student teachers with feedback on their use of some, but not all, critical classroom management techniques.

◔ or ○ (zero)
The program does not provide student teachers with feedback on their use of critical classroom management techniques.

Fig. 19 Distribution of Classroom Management Standard scores by program type

Percent of programs

|	Does not meet standard	Meets small part of standard	Partly meets standard	Nearly meets standard	Meets standard
Elementary	16	21	23	24	15
Secondary	15	22	26	22	14
Special Education	10	19	27	27	17

Compared to elementary and secondary programs, a larger proportion (44 percent) of special education programs nearly meet or meet the standard.

In general, the distribution of scores on the **Classroom Management Standard** in the second edition of the *Review* is better than the distribution of scores in the first edition. A large minority of all programs (42 percent) increased their scores, partially because of scoring changes.[25] Above and beyond this reason for score improvements, however, were the disproportionate score gains of programs that submitted new data for the second edition, indicating real program improvements and not simply the effects of scoring changes. Programs that submitted new data do not have higher scores in the second edition simply because they had higher scores in the first edition — there is no statistically significant relationship between scores on the first edition and the submission of new data. However, there is a statistically significant relationship between submission of new data and improved scores in the second edition.[26]
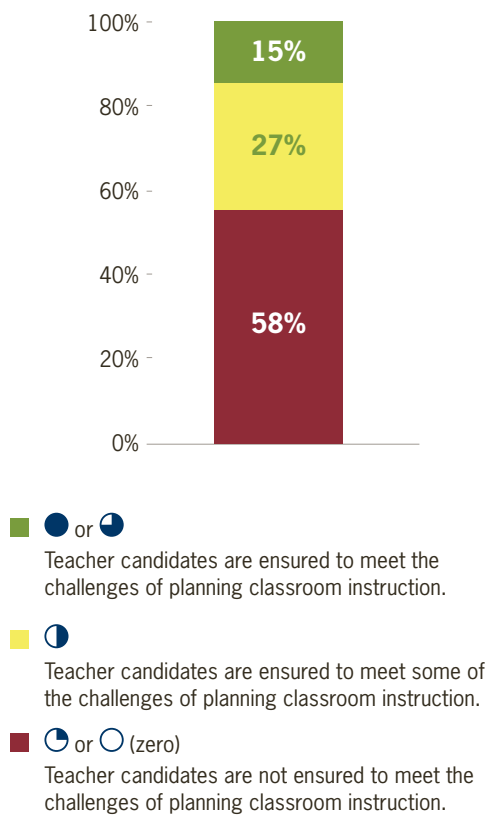
Fig. 20 Do Classroom Management Standard scores reveal program improvements?

Programs that did not submit new data (N=704)
Programs that did submit new data (N=130)
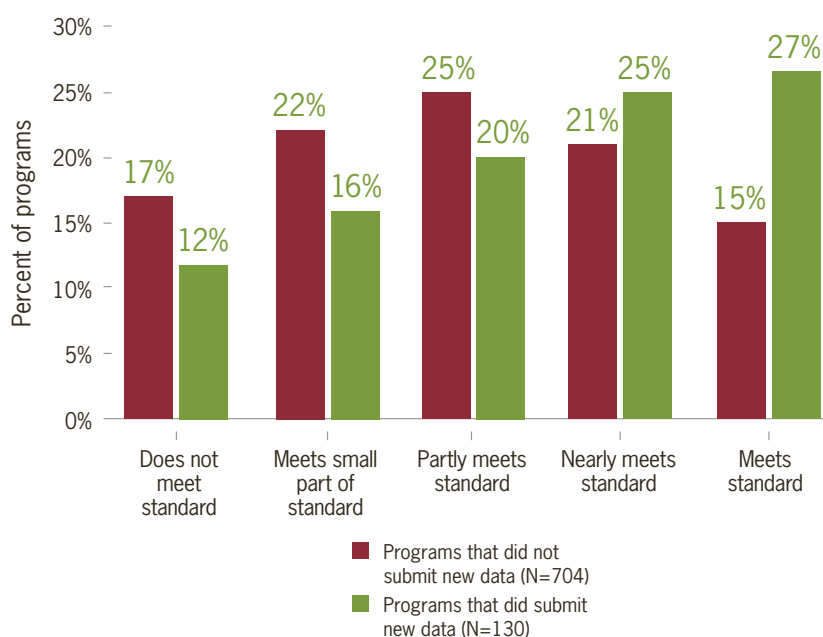
*Compared to programs which did not submit new data for the second edition, a higher proportion of programs that submitted new data earned high scores on the **Classroom Management Standard**.*

It is especially commendable that the **Classroom Management Standard** scores for **East Central University** (OK) and **Murray State** (KY) went from the basement to the penthouse with completely revamped student teacher observation forms. Here's a graphic example of how Murray State clarified language to provide better feedback to student teachers on their classroom management skills: "Uses methods of respectful classroom discipline" is out and is replaced by: "Uses proximity and other non-verbal communication to redirect off-task behavior…. Consistently applies consequences when a student misbehaves…. Uses effective classroom management to reinforce standards of behavior through praise, rules, routines and/or procedures."

Standard 11: Lesson Planning

Because new data were not accepted for evaluation of this standard in this second edition of the *Review*, the findings from the last edition stand. In addition, scores for this standard are not reported on program ranking sheets.

With the evidence provided by our evaluation that lesson planning skills are weak, it is fortunate that the teacher education field is making headway on providing consistent guidance on lesson planning: Teacher performance assessments such as the edTPA are growing in popularity and should provide institutions with a much-needed means to create a central organizing principle elucidating what teachers should be able to do in planning lessons before exiting teacher preparation.

Fig. 21 Distribution of scores on Standard 11: Lesson Planning
(N=668 elementary and secondary programs)

■ ◐ or ◑
Teacher candidates are ensured to meet the challenges of planning classroom instruction.

■ ◐
Teacher candidates are ensured to meet some of the challenges of planning classroom instruction.

■ ◑ or ○ (zero)
Teacher candidates are not ensured to meet the challenges of planning classroom instruction.

Standard 12: Assessment and Data

For better or worse, PK-12 education is awash in classroom and standardized tests and the data they produce. Yet just 24 percent of the elementary and secondary programs we evaluated adequately address assessment topics so as to ensure that novice teachers will be able to work productively within their classrooms, departments, and schools to assess students and use results to improve instruction.

Perhaps the most glaring issue is that while the respective state's standardized tests are a lecture topic in coursework in nearly half of all programs, few programs have assignments in coursework or capstone projects that require teacher candidates to grapple with data derived from those tests and to practice using the data to plan instruction. Also, although teaching is an increasingly collaborative profession, we find little evidence of collaborative practice in assessment-related assignments in most of the coursework evaluated.
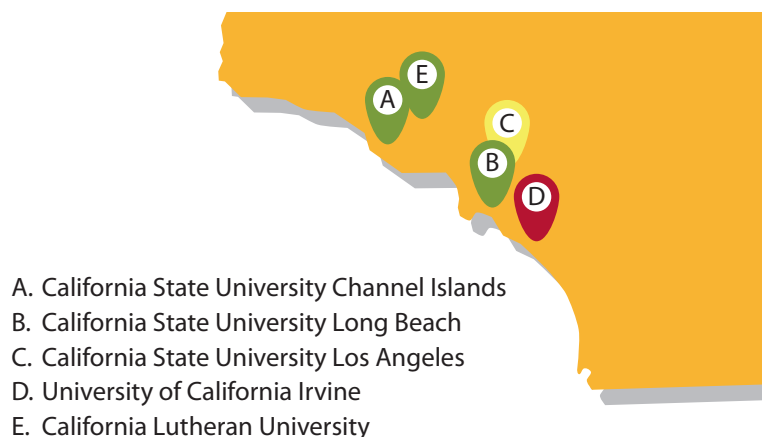
After evaluations of 690 programs on the **Assessment and Data Standard**, we commend the undergraduate elementary program at **Fort Hays State University** (KS) for the first evidence of comprehensive preparation of candidates for the data analysis tasks they will face from their earliest days on the job. This program stands out because it requires its candidates (working both individually and collaboratively) to practice analyzing and assessing the instructional implications of sets of mock data from both classroom and standardized assessments, rather than simply classroom assessments.

Standard 13: Equity

This standard is designed to get at the important issue of cultural competency of teacher candidates. As there are no findings from solid, large-scale and non-anecdotal research that coursework dedicated to eliminating gender and racial biases has any impact,[27] we concluded that the best way for teacher candidates to internalize appropriate values is to spend time in high-poverty schools that are at least relatively high-performing. There is evidence from strong research that student teaching in such a school makes the apparently rhetorical statement that "every child can learn" something a candidate can believe. The same research provides evidence that teacher candidates who student teach in such schools become more effective teachers in *any* school environment.[28]
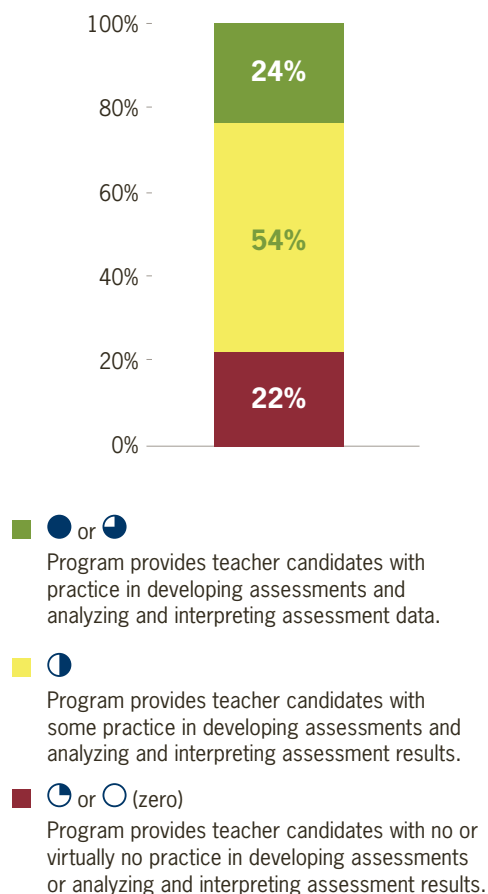
Because the availability of high-poverty, high-performing schools for student teaching placements differs by program due to their geographical locations, our evaluation does not set an absolute standard of, say, 20 percent or 40 percent of placements. Instead, we report on programs using geography: Our results are mapped, allowing the reader to evaluate the results for programs that are in close geographical proximity as determined by shared schools/districts used for placements. The static map below illustrates how results are displayed:

Fig. 23 How we display Equity Standard reports

A. California State University Channel Islands
B. California State University Long Beach
C. California State University Los Angeles
D. University of California Irvine
E. California Lutheran University

To date, we have posted results on the Equity Standard for two locales. For the five institutions in Los Angeles shown in the graphic above, the proportion of placements in high-performing and high-poverty schools ranges from 19 percent at **University of California – Irvine** to 57 percent at **California State University – Los Angeles**. In New York City, the range in the proportion of placements in high-performing and high-poverty schools for one cluster of institutions (**CUNY City College**, **CUNY Hunter College** and **New York University**) is small (30-35

Fig. 22 Distribution of scores on Standard 12: Assessment and Data
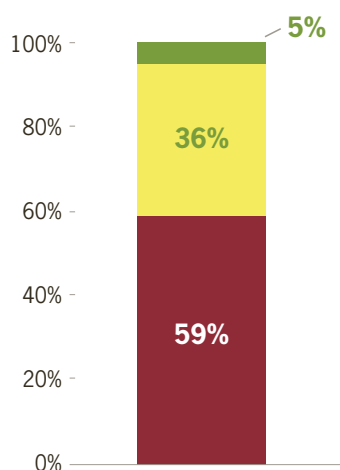(N=690 elementary and secondary programs)

■ ● or ◐
Program provides teacher candidates with practice in developing assessments and analyzing and interpreting assessment data.

■ ◑
Program provides teacher candidates with some practice in developing assessments and analyzing and interpreting assessment results.

■ ◕ or ○ (zero)
Program provides teacher candidates with no or virtually no practice in developing assessments or analyzing and interpreting assessment results.

47

percent); in another cluster (**CUNY Queens College**, **CUNY York College** and **CUNY Brooklyn College**), the range in placements in high-performing and high-poverty schools is larger (43-54 percent).

Std. revised Standard 14: Student Teaching

Fig. 24 Distribution of scores on Standard 14:
Student Teaching
(N=1,796 elementary, secondary and special education programs)

Standout State! Arizona
24 percent of the 21 **Arizona** programs evaluated on the **Student Teaching Standard** meet the standard, compared to only 5 percent nationally.

With only 5 percent of programs satisfying the standard (see Fig. 24), the **Student Teaching Standard** is the toughest NCTQ key standard. Why is this? At its roots, for too long teacher educators have been content simply to do the necessary clerical back-and-forth with school districts to arrange for classroom placements, relying on school principals to select cooperating teachers by whatever means principals saw fit. Indeed, especially given the fact that there is an overabundance of elementary teacher candidates in most programs, teacher educators have been grateful for *any* placements for their candidates.

Teacher candidates have only one chance to experience the best possible student teaching placement. The goal of this standard is to set the minimum conditions for the best placement. We look for policies that require student teachers be placed in classrooms with an effective classroom teacher and also to receive sufficient support and feedback from their university supervisor.

Many groups clamor for teacher preparation to increase candidates' time in classrooms. In fact, nearly every new initiative to improve teacher preparation calls for more and earlier clinical work. However, there are very few initiatives promoting the importance of teacher candidates being placed in the *right kind* of classrooms. More clinical practice may create a more *polished* novice teacher, but it does not necessarily create a more *effective* novice.
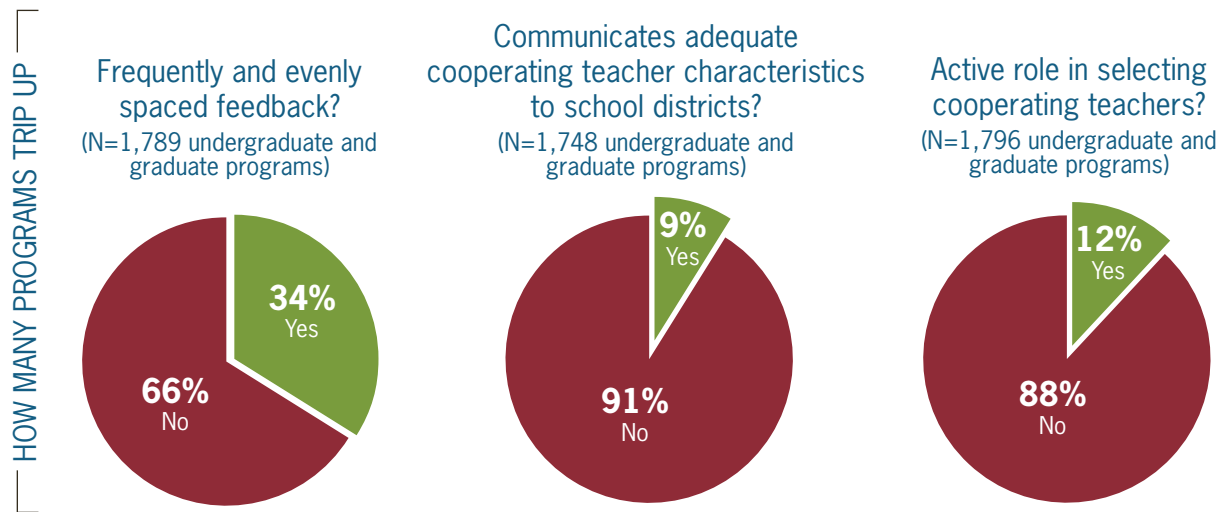
What's been evaluated. Partial credit is now provided for programs that provide four observations with written feedback by program supervisors. In the first edition of the *Review*, credit was only awarded for five or more observations.

Also, due to the increasing number of states whose regulations set forth the requirements of the cooperating teacher,[29] we lost confidence that the credit we were awarding programs on the basis of sometimes

● or ◗
Student teachers are ensured of receiving strong support from program staff and cooperating teachers.

◑
Student teachers are ensured of receiving some support from program staff and cooperating teachers.

◔ or ○ (zero)
Student teachers are not ensured of support from program staff and cooperating teachers.

cryptic citations to state regulations was warranted.[30] Program requirements for characteristics of cooperating teachers are no longer factored into scoring, but are reported.

HOW MANY PROGRAMS TRIP UP

Frequently and evenly spaced feedback?
(N=1,789 undergraduate and graduate programs)

34% Yes

66% No

Communicates adequate cooperating teacher characteristics to school districts?
(N=1,748 undergraduate and graduate programs)

9% Yes

91% No

Active role in selecting cooperating teachers?
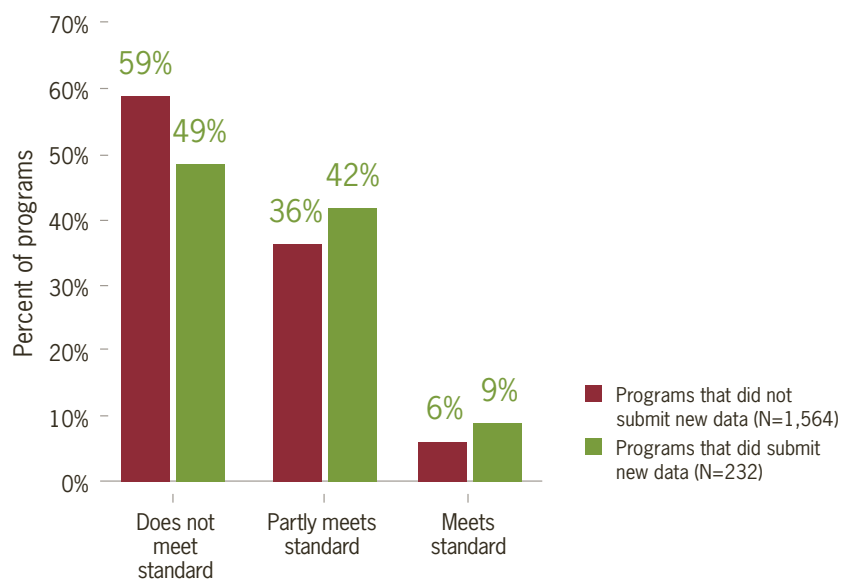(N=1,796 undergraduate and graduate programs)

12% Yes

88% No

The standard also evaluates whether the program plays an active role in selecting cooperating teachers, as signified by the information collected about those nominated for this role. This indicator has been refined to provide more credit to programs that seek information regarding whether the nominees are capable mentors and/or effective instructors, as opposed to only seeking information on any other professional skills.

All elementary, secondary and special education programs evaluated on this standard in *Teacher Prep Review 2013* have been *reevaluated* using revised indicators.

A combination of standard changes, scoring changes and new data submitted by 232 programs makes it more difficult to determine the contributions of each factor to any new score distribution on the standard.

Fig. 25 Do Student Teaching Standard scores reveal program improvements?

Percent of programs

- Does not meet standard: 59% / 49%
- Partly meets standard: 36% / 42%
- Meets standard: 6% / 9%

■ Programs that did not submit new data (N=1,564)
■ Programs that did submit new data (N=232)

Compared to programs that did not submit new data for the second edition, a higher proportion of programs that submitted new data earned high scores on the **Student Teaching Standard***.*

As in the case of the **Classroom Management Standard** (see page 45), these disaggregated results point to promising improvements in the nature of student teaching arrangements in at least a share of the programs included in our evaluation. And again, as in the case of the Classroom Management Standard, our analysis indicates that there is a statistically significant relationship between submission of new data and improved scores in the second edition, and that programs that provided new data do not have higher scores on the **Student Teaching Standard** in this edition simply because they had higher scores on the standard in the first edition.[31]

The way forward on improving student teaching is a changed perspective on the part of both teacher educators and school district personnel: On the preparation side, student teaching should be viewed as the culminating experience provided only for those teacher candidates who have met a high bar for competency. On the school district side, student teaching should be viewed as a human capital development vehicle in which recruiting and rewarding talented teachers for their role as cooperating teachers improves prospects for hiring novice teachers who are effective on day one.

Communicating to districts the required characteristics of cooperating teachers

Fort Hays State University (KS) now includes both cooperating teacher criteria required by the NCTQ standard in contracts with school districts: "The District agrees…[t]o nominate outstanding licensed cooperating teachers or other appropriate school personnel who meet the following criteria: a) have skills as mentors of teacher candidates (including observing, providing feedback, and working collaboratively), b) exemplify excellence in teaching by demonstrating a positive impact on student learning."

The **University of Montana** has introduced a nomination form for potential cooperating teachers in which a principal must use evidence to support his/her judgment of a teacher's mentorship skills and instructional ability: "I nominate the following teachers to mentor the UM candidates discussed at this semester's placement meeting. My judgment for nomination is based on the teachers' mentoring abilities (as demonstrated through workshop participation or (blank)) and their positive impact on student learning (as demonstrated through curricular or standardized test)."

Playing an active role in cooperating teacher selection by collecting substantive information

Miami University of Ohio (OH) has begun asking school districts to submit six-item questionnaires regarding teachers nominated as cooperating teachers. Questions include requests for narratives addressing mentorship skills and impact on student learning.

With data submitted for the second edition, the **University of Houston** (TX) is now one of only four institutions in the country whose programs fully satisfy all of the **Student Teaching Standard's** indicators. Its four evaluated programs previously required only three observations of student teachers, but now require five. It also

- clearly communicates to school districts the necessary characteristics of cooperating teachers ("The prospective Cooperating Teacher must be recommended by the building principal under whom he/she works, and in that principal's determination be 1) an effective teacher, based on student performance, with 2) demonstrated mentorship abilities"); and
- requires that the above characteristics be documented on a questionnaire.

Standard 15: Secondary Methods

It is one thing to know a subject and quite another to teach it. Beyond knowing content, candidates should have skills enabling them to introduce content to students. Best practices differ among content areas, so methods courses should be tailored to a candidate's chosen subject area. Conservatively estimated, at least 31 percent of the secondary programs evaluated (n=664) earn a score fully meeting the **Secondary Methods Standard** for requiring three semester credit hours or more of subject-specific methods coursework that includes (or aligns with a practicum including) actual classroom instruction.[32] (See Fig. 26) Nonetheless, we note that a large proportion of programs (25 percent) do not even require a single 3-credit subject-specific methods course.

HOW MANY PROGRAMS TRIP UP

Subject-specific methods course?
(N=1,135 undergraduate and graduate programs)

25%
No

75%
Yes
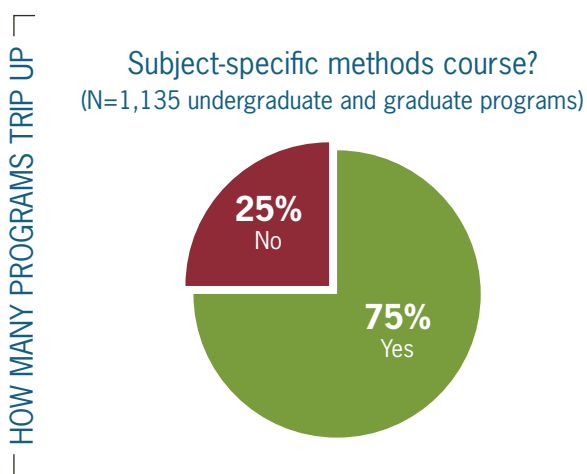
Standard 16: Instructional Design in Special Education

The standard evaluates how programs train special education candidates to adapt and modify curriculum to ensure that students with special needs can access content in core academic subjects. In general, scores are relatively high, with 48 percent of programs nearly meeting or meeting the standard. (See Fig. 27) However, for lower scoring programs, our evaluations revealed a substantial amount of outsourcing of training of special education teacher candidates to elementary methods coursework. Courses not overseen by special education faculty contribute significantly to preparation in instructional design in 85 percent of the undergraduate programs for which a comprehensive review of coursework is possible. Given that special education experts do not teach such coursework, candidates are unlikely to learn curriculum

Fig. 26 Distribution of scores on Standard 15: Secondary Methods
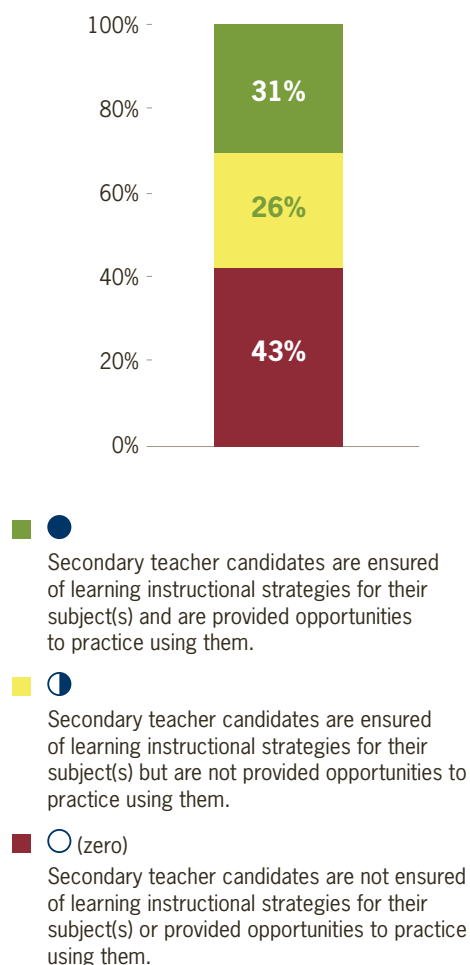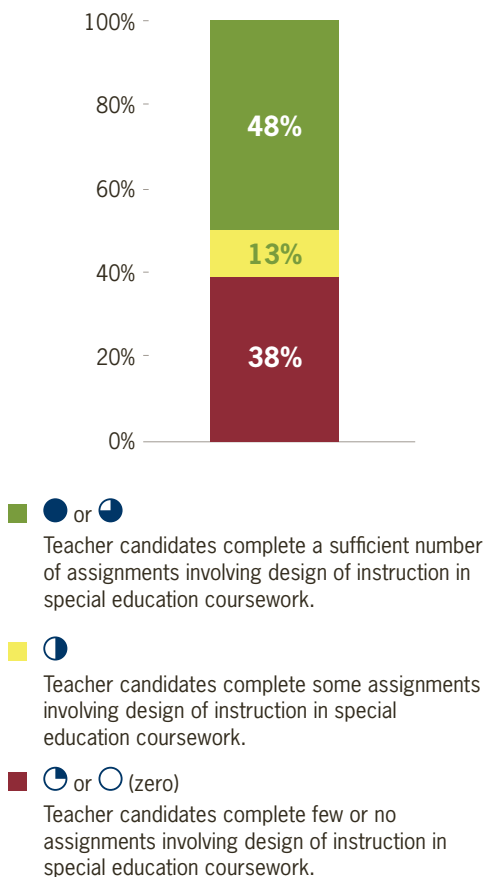(N=664 secondary programs)

31%

26%

43%

Secondary teacher candidates are ensured of learning instructional strategies for their subject(s) and are provided opportunities to practice using them.

Secondary teacher candidates are ensured of learning instructional strategies for their subject(s) but are not provided opportunities to practice using them.

(zero)
Secondary teacher candidates are not ensured of learning instructional strategies for their subject(s) or provided opportunities to practice using them.
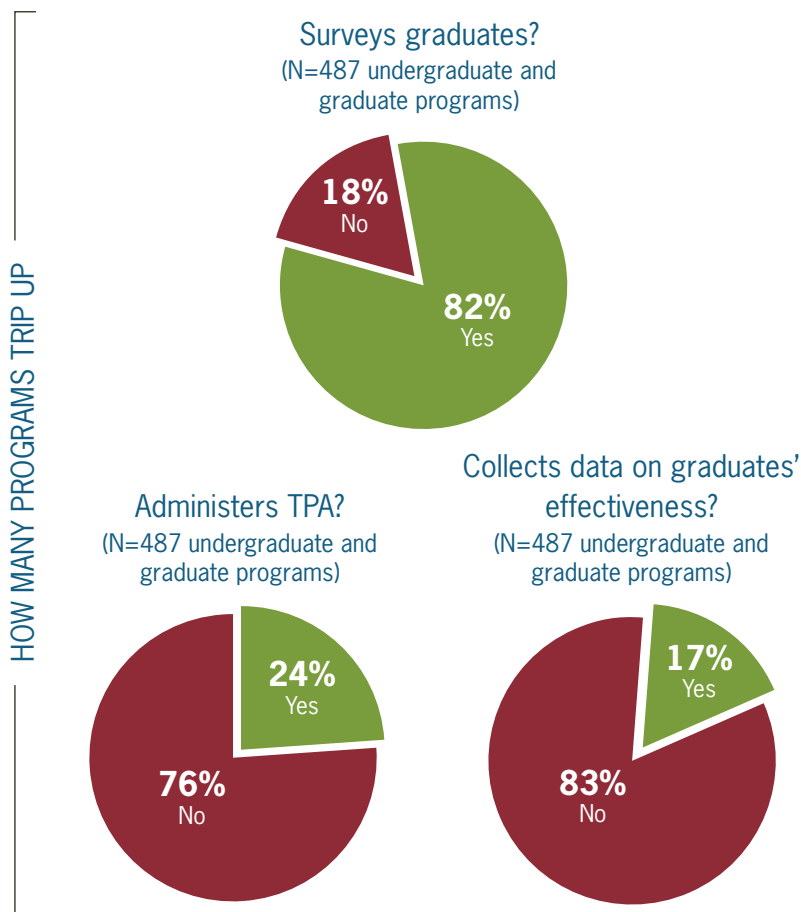
adaptation and modification approaches in the depth and with the nuances that should be provided.

We will be expanding the number of special education programs evaluated on this standard in the third edition of the *Review*.

Standard 17: Outcomes

Because no institution can improve without information on how well it is performing, NCTQ's standard looks at whether and how often institutions collect data regarding their teacher graduates.[33] Only about 26 percent of institutions meet this standard.

Fig. 27 Distribution of scores on Standard 16: Instructional Design for Special Education
(N=60 special education programs)

■ ● or ◗
Teacher candidates complete a sufficient number of assignments involving design of instruction in special education coursework.

■ ◐
Teacher candidates complete some assignments involving design of instruction in special education coursework.

■ ◕ or ○ (zero)
Teacher candidates complete few or no assignments involving design of instruction in special education coursework.

HOW MANY PROGRAMS TRIP UP

Surveys graduates?
(N=487 undergraduate and graduate programs)

18% No

82% Yes

Administers TPA?
(N=487 undergraduate and graduate programs)

24% Yes

76% No

Collects data on graduates' effectiveness?
(N=487 undergraduate and graduate programs)

17% Yes

83% No

Admittedly, state data systems often create obstacles to obtaining data on graduates' effectiveness, but a number of motivated institutions have demonstrated with initiative and ingenuity that these obstacles are not as insurmountable as they may appear. For example, despite the lack of a public report providing VAM results for teacher preparation programs in South Carolina, **Clemson University** obtains data on graduates' classroom performance by special request and conducts its own value-added analysis.

On the **Outcomes Standard**, **Johns Hopkins University** (MD) and the **University of Nebraska – Omaha** have begun administering surveys of both graduates and graduates' employers that will provide data useful for program improvement.

University of Wyoming and **University of Maryland – College Park** have adopted the national edTPA for use in their programs in the absence of any state edTPA initiative, demonstrating a commitment to obtaining data on their teacher candidates' classroom performance.

Standard 18: Evidence of Effectiveness

Standout State! North Carolina

North Carolina has developed a teacher preparation program "student performance data model" that provides program-specific rather than institution-specific results.

Last edition's attempt to use outcome measures themselves to evaluate programs was unfortunately extremely limited due to the fact that our standard is wholly dependent on data produced by each state. Further, the little public data that exist are even more severely reduced when we seek data that can be used to evaluate *specific* teacher preparation programs (such as data on graduates from an undergraduate elementary program, as opposed to data on graduates from both an undergraduate and a graduate elementary program combined).

There are four states that currently publish such data (**Louisiana**, **North Carolina**, **Ohio** and **Tennessee**), but only North Carolina reports the data at the specific program level. Because it is only fair to evaluate a program when results about its graduates are statistically significant and consistent for several years, the number of programs qualifying for an evaluation shrank to a handful. Of that handful, *only one* last year was in the *Teacher Prep Review's* sample. Accordingly, only one elementary program (out of 214 programs in these four states that publish reports on teacher preparation value-added data models) was evaluated using these data. In this edition of the *Review*, five **North Carolina** programs (three elementary and two middle school) are evaluated: **Appalachian State**, **East Carolina University** and the **University of North Carolina – Greensboro** (undergraduate elementary); the **University of North Carolina – Chapel Hill** and the **University of North Carolina – Wilmington** (undergraduate middle school).

Fig. 28 Distribution of scores on Standard 17: Outcomes
(N=487 institutions of higher education)
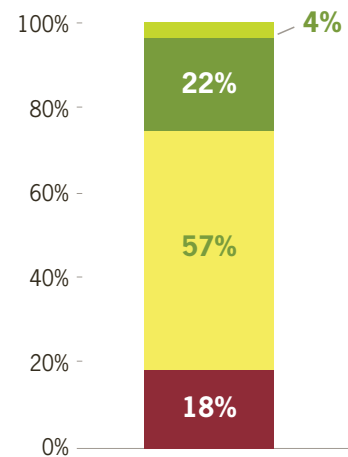
■ 🏆 Institutions collect appropriate outcomes data and provide evidence of its use for program improvement.

■ ● Institutions collect appropriate outcomes data.

■ ◑ Institutions collect some appropriate outcomes data.

■ ○ (zero) Institutions do not collect appropriate outcomes data.

Fig. 29 One or more of these institutions' programs earn the highest score on standards

Institution	State	Satisfy the standard and the standard's strong design indicator:					Satisfy the standard by earning all possible points. Programs indicated satisfy both the standard and the standard's indicators:		
		Standard 1: Selection Criteria	Standard 2: Early Reading	Standard 5: Elementary Math	Standard 6: Elementary Content	Standard 17: Outcomes	Standard 10: Classroom Management	Standard 12: Assessment and Data	Standard 14: Student Teaching
Alma College	MI	ug elem/ug sec							
Arcadia University	PA	ug elem/ug sec							
Arizona State University	AZ	ug elem/ug sec/ug sped							
Auburn Univeristy	AL	ug elem/ug sec							
Augustana College	IL	ug elem/ug sec							
Augustana State University (Georgia Regents University Augustana)	IL						ug elem/ug sec/g elem/g sec		
Austin Peay State University	TN					all			ug elem/ug sec
Barnard College	NY	ug elem/ug sec							
Belmont University	TN	ug elem							
Boston College	MA	ug elem/ug sec							
Bucknell University	PA	ug elem/ug sec							
California Polytechnic State University – San Luis Obispo	CA						g elem/g sec		
Carroll College	MT	ug elem/ug sec							
Cedarville University	OH	ug elem/ug sec							
Central Washington University	WA					all			
Cheyney University of Pennsylvania	PA	ug elem							
Clayton State University	GA	g sec		ug elem/ug sec					
College of Charleston	SC	ug elem/ug sec	ug elem						
College of William and Mary	VA	g elem/g sec							
Colorado State University	CO	ug elem/ug sec							
Colorado State University – Pueblo	CO		ug elem						
Columbia University	NY	ug elem/ug sec							
Concord University	WV				ug elem				
CUNY – Hunter College	NY					all		ug sec/g elem/g sec	
Dallas Baptist University	TX	ug elem/ug sec				all			
Dalton State College	GA						ug elem		
DePaul University	IL	ug elem/ug sec							
Dreallel University	PA	ug elem/ug sec							
Duquesne Univeristy	PA	ug elem							
Elon University	NC			ug elem					
Emporia State University	KS						ug elem/g sec		
Fort Hays State University	KS							ug elem	
Francis Marion Univeristy	SC						ug elem		
Gardner-Webb University	NC				ug elem				
Geneva College	PA	ug elem/ug sec							
Georgia College and State University	GA	ug elem							
Glenville State College	WV				ug elem				
Gonzaga University	WA	ug elem/ug sec							

Program guide: ug elem = undergraduate elementary; ug sec = undergraduate secondary; g elem = graduate elementary; g sec = graduate secondary; ug sped = undergraduate special education; g sped = graduate special education

Institution	State	Satisfy the standard and the standard's strong design indicator:					Satisfy the standard by earning all possible points. Programs indicated satisfy both the standard and all the standard's indicators:		
		Standard 1: Selection Criteria	Standard 2: Early Reading	Standard 5: Elementary Math	Standard 6: Elementary Content	Standard 17: Outcomes	Standard 10: Classroom Management	Standard 12: Assessment and Data	Standard 14: Student Teaching
Greensboro College	NC	g elem/g sec							
Grove City College	PA	ug elem/ug sec							
Illinois State University	IL						ug sped		
Iona College	NY	ug elem							
Iowa State University	IA	g sec							
Ithaca College	NY	ug sec							
Juniata College	PA	ug elem/ug sec							
Kean University	NJ	g elem/g sec							
Knoall College	IL	ug elem/ug sec							
LeTourneau University	Tall	ug elem/ug sec							
Lewis and Clark College	OR						g elem/g sec		
Lincoln University of Pennsylvania	PA	ug sec							
Long Island University – C. W. Post	NY	ug elem/ug sec							
Loyola Marymount University	CA	ug elem/ug sec							
Madonna University	MI	ug elem/ug sec							
Martin Methodist University	TN				ug elem				
Mercer University	GA	ug elem/ug sec							
Mercyhurst University	PA	g sec							
Messiah College	PA	ug elem							
Miami University of Ohio	OH					all			
Middle Georgia State (Macon State) College	GA						ug elem/ug sec		
Middle Tennessee State University	TN					all			
Montana State University	MT	ug elem/ug sec							
Montclair State University	NJ	g sec							
Morgan State University	MD				ug elem				
Muhlenburg College	PA	ug elem/ug sec							
Murray State University	KY						ug elem/ug sec/ug sped		
National Louis University	IL	g elem/g sec							
Northern Illinois University	IL	ug elem/ug sec							
Northwest University	WA					all			
Northwestern State University of Louisiana	LA						ug elem/ug sec		
Notre Dame of Maryland University	MD				g elem				
Ohio State University	OH	g elem/g sec					g elem		
Oral Roberts University	OK	g sec							
Pennsylvania State University	PA	g elem/g sec							
Point Park University	PA	ug elem							
Prairie View A&M University	TX	ug sec							
Rice University	TX	ug sec							
Rockford College	IL		ug elem						
Rutgers University – Newark	NJ						ug sec		
Saint Joseph's University	PA	ug elem/ug sec							
Saint Martin's University	WA	g sec							
Saint Michael's College	VT	ug sec							
Samford University	AL	ug elem							

55

Program guide: ug elem = undergraduate elementary; ug sec = undergraduate secondary; g elem = graduate elementary; g sec = graduate secondary; ug sped = undergraduate special education; g sped = graduate special education

Institution	State	Satisfy the standard and the standard's strong design indicator:					Satisfy the standard by earning all possible points. Programs indicated satisfy both the standard and all the standard's indicators:		
		Standard 1: Selection Criteria	Standard 2: Early Reading	Standard 5: Elementary Math	Standard 6: Elementary Content	Standard 17: Outcomes	Standard 10: Classroom Management	Standard 12: Assessment and Data	Standard 14: Student Teaching
Seattle Pacific University	WA	ug sec							
Shepherd University	WV				ug elem				
Smith College	MA	ug elem							
Southern Methodist University	TX	ug elem	ug elem						
St. John Fisher College	NY			ug elem					
SUNY College at Old Westbury	NY	ug elem							
Teallas A&M University	TX						ug elem/ug sec		
Teallas Christian University	TX								
Touro College	OH	ug elem							
University of Akron	OH					all			
University of Arkansas	AR						g elem/g sec		
University of California – Davis	CA					all			
University of California – Irvine	CA	g sec							
University of California – San Diego	CA					all			
University of California – Santa Cruz	CA						g sec		
University of Detroit Mercy	MI	ug elem							
University of Georgia	GA								
University of Hawaii – Manoa	HI					all			
University of Houston	TX	g elem/g sec					ug elem/ug sec		ug elem/ug sec/g elem/g sec
University of Illinois at Chicago	IL					all			
University of Illinois at Urbana – Champaign	IL	ug elem/g sec							
University of Iowa	IA						ug elem		
University of Maryland – College Park	MD					all			
University of Minnesota – Morris	MN		ug elem						
University of North Carolina at Asheville	NC	ug sec							
University of North Carolina at Charlotte	NC	g elem/g sec							
University of North Carolina at Greensboro	NC					all			
University of Redlands	CA	ug elem/ug sec							
University of Rhode Island	RI						ug elem/ug sec		ug elem/ug sec
University of Scranton	PA	ug elem/ug sec							
University of Teallas at San Antonio	TX						ug elem/ug sec/g elem/g sec		
University of Utah	UT			ug elem					
University of Virginia	VA	g elem/g sec					g elem/g sec		
University of Washington – Seattle	WA	g elem/g sec				all			
University of Wisconsin – La Crosse	WI	ug elem							
University of Wisconsin – River Falls	WI						ug elem/ug sec		
University of Wyoming	WY			ug elem					
Valdosta State University	GA						ug elem/ug sec/g sped		
Vanderbilt University	TN	g elem/g sec							
Virginia Commonwealth University	VA						g elem/g sec		

Program guide: ug elem = undergraduate elementary; ug sec = undergraduate secondary; g elem = graduate elementary; g sec = graduate secondary; ug sped = undergraduate special education; g sped = graduate special education

Institution	State	Satisfy the standard and the standard's strong design indicator:					Satisfy the standard by earning all possible points. Programs indicated satisfy both the standard and all the standard's indicators:		
		Standard 1: Selection Criteria	Standard 2: Early Reading	Standard 5: Elementary Math	Standard 6: Elementary Content	Standard 17: Outcomes	Standard 10: Classroom Management	Standard 12: Assessment and Data	Standard 14: Student Teaching
Walla Walla University	WA	ug elem							
Washington and Jefferson College	PA	ug elem/ug sec							
Washington University in St. Louis	MO	ug elem/ug sec							
Western Governors University	UT						g elem/ug sec		
Whitworth University	WA	ug elem/ug sec							
William Carey University	MI						ug elem/ug sec		
William Paterson University of New Jersey	NJ								ug elem/ ug sec/g elem/g sec
Wilson College	PA	ug elem/ug sec							
Winthrop University	SC					all			

Program guide: ug elem = undergraduate elementary; ug sec = undergraduate secondary; g elem = graduate elementary; g sec = graduate secondary; ug sped = undergraduate special education; g sped = graduate special education

IV. Findings on Secondary Alternative Certification Programs

A first stage in NCTQ's evaluation of alternative certification programs

In this section of *Teacher Prep Review 2014*, we report our results from a pilot study of new standards for assessing the quality of alternative certification programs. In our first iteration, the scope is limited. We evaluate only the most "alternative" of the programs: those programs not managed by institutions of higher education that also offer traditional certification.[34] Our sample includes only secondary preparation programs, not programs that prepare elementary or special education teachers, both of which in our view require too much specialized professional training in advance of teaching to serve as practical options for alternate route entry into the profession. In spite of the parameters we have imposed on ourselves for this pilot study, the standards applied here should prove useful for examining any alternative certification program, whether associated with a higher education institution or not. In later iterations, we will expand the scope of our evaluation to all types of alternative certification programs.

What is alternative certification?

Roughly 30 years after the first "alternate route" into teaching was established in New Jersey, all states at least claim to offer prospective teachers some form of alternate routes into the classroom. These routes are "alternative" to traditional preparation in the sense that they generally have the teacher candidate serve in an "internship" as the teacher of record *before* obtaining initial certification.[35]

The term "teacher of record" may seem bureaucratic, but it has flesh-and-blood implications. It means that the candidate can be the only adult in a roomful of students, just as certified teachers in neighboring classrooms are on their own. Unless the support provided by both the supervisor assigned by the alternative certification provider and an assigned mentor rises to the level of co-teaching (which is very rare), the candidate is left largely to his or her own devices except for periodic observations and coaching. Needless to say, given the difficulty of the first year of teaching, this is a daunting challenge for teacher candidates, and the potential for students to lose days, weeks, or even months of ground academically is a real risk.

At the inception of alternative certification, there was clear consensus about how it should differ from traditional preparation: Alternative certification would be a responsible way to get smart, content-proficient individuals — especially individuals with content knowledge in areas such as secondary math, science, and foreign languages — into the classroom with necessary training and coaching, but without requiring that they earn another degree or its equivalent. For example, a chemical engineer could make a career change and become a chemistry teacher, or an accountant could become a math teacher. We note the important distinguishing features of ideal alternate routes:

- *They attract very capable individuals,* which implies relatively high admission standards.

- *Their candidates already "know their stuff,"* which implies that they can demonstrate their content knowledge prior to entry.

- *Candidates get sufficient on-the-job training and coaching,* which implies that experienced teachers mentor candidates intensively and program supervisors closely monitor their teaching.

Sample for NCTQ pilot study of alt cert

Our sample includes providers that produced significant numbers of candidates of all program types (elementary, secondary, special education and so on) over the period 2009-2012, as well as providers in as many states as possible. A total of 23 states and the District of Columbia are represented in the sample.[36] A disproportionate share of the programs in the sample (45 percent) is located in Texas because about 40 percent of the state's teachers are produced by alternate routes, with for-profit providers dominating the market.[37] Texas is the only state permitting for-profit providers.

The sample does not include "teacher residency programs." Because teacher candidates in residencies are trained in classrooms but are not teachers of record, the providers offering residencies are not categorized as "alternative certification" providers.[38]

NCTQ's standards for assessing alternative certification

In crafting our alternative certification standards for secondary programs, we considered the essential features of alternative certification (capable and content-knowledgeable candidates who are then trained in the classroom) mentioned earlier. With appropriate modifications for supervised practice, we have also made the standards as parallel as possible to the key standards applicable to all traditional graduate secondary preparation programs, the traditional programs to which secondary alternative certification programs are most analogous. We have also included a standard on "evidence of effectiveness," which is analogous to a standard for traditional secondary teacher preparation programs, but cannot be a key standard because the data on which it is evaluated are so scant that it is available for virtually no traditional secondary programs evaluated in the *NCTQ Teacher Prep Review*.

The full text of the alternative certification standards is found on our website.

Individual rating sheets for each of the programs included in this sample are found here. Each rating sheet contains not only the program's overall grade, but also its score on each of the three standards, with an additional comment that provides information on the salient programmatic features that determined the scores. A graphic depicting the program's basic structure is also included, with some program features described (often those advertised by the provider), including ones on features not included in this evaluation, such as professional coursework.

Alt cert programs and grades

State	INSTITUTION	Grade
AR	Arkansas Department of Education: Arkansas Professional Pathway to Educator Licensure (APPEL)	D
AR	Teach For America	C
CA	Los Angeles Unified School District: District Intern Program	B
CA	Rex and Margaret Fortune School of Education	C
CA	San Joaquin County Office of Education: IMPACT Intern Program	B
CO	Teach For America	C
CO	Teacher Institute at La Academia	F
CT	State of Connecticut Office of Higher Education: Alternative Route to Teacher Certification (ARC)	C
CT	Teach For America	C
DC	DC Teaching Fellows	B
DC	Teach For America	B
FL	Gulf Coast State College: Educator Preparation Institute (EPI)	D
FL	Hillsborough Community College: Educator Preparation Institute (EPI)	D
FL	Pasco County Schools: Alternative Certification Program	D
FL	Valencia College: Educator Preparation Institute (EPI)	D
GA	Clayton County Public Schools: Teacher Academy for Preparation and Pedagogy (TAPP)	D+
GA	DeKalb County School District: Teacher Academy for Preparation and Pedagogy (TAPP)	D+
ID	American Board for Certification of Teacher Excellence (ABCTE)	D
LA	Louisiana Resource Center for Educators (LRCE): Certification Solutions Program	F+
MA	Catherine Leahy-Brine Educational Consultants, Inc.	D
MA	Collaborative for Educational Services	D
MA	Springfield Public Schools: District-based Licensure Program	D
MA	Teach For America	A
MD	Baltimore City Teaching Residency (BCTR)	B
MD	Prince George's County Public Schools: Resident Teacher Program (RTP)	B-
MD	Teach for America (Baltimore)	B
MD	Teach for America (Prince George's County Public Schools)	B
MO	American Board for Certification of Teacher Excellence (ABCTE)	D
MS	American Board for Certification of Teacher Excellence (ABCTE)	C
MS	Mississippi Community College Foundation: Mississippi Alternative Path to Quality Teachers Program (MAPQT)	D
MS	Teach For America	C
NC	Regional Alternative Licensing Centers (RALC): Region 1 – Charlotte/Cabarrus	F
NC	Regional Alternative Licensing Centers (RALC): Region 2 – Fayetteville	F
NC	Regional Alternative Licensing Centers (RALC): Region 3 – Nash	F
NC	Regional Alternative Licensing Centers (RALC): Region 4 – Catawba	F
NH	New Hampshire Department of Education: Alternative 5 (Site-Based Certification Plan)	C
NJ	State of New Jersey Department of Education: Provisional Teacher Program (PTP)	D+
PA	American Board for Certification of Teacher Excellence (ABCTE)	D
SC	American Board for Certification of Teacher Excellence (ABCTE)	D
SC	South Carolina State Department of Education: Program of Alternative Certification for Educators (PACE)	D
TN	Tennessee Department of Education: Teach Tennessee	D-
TX	A Career in Teaching: Alternative Certification Program (Corpus Christi)	F
TX	A Career in Teaching: Alternative Certification Program (McAllen)	F
TX	A+ Texas Teachers Alternative Certification	F
TX	ACT Central TX	F
TX	ACT Dallas	F
TX	ACT Houston	F
TX	ACT Rio Grande Valley (RGV)	F
TX	ACT San Antonio	F
TX	Alternative South Texas Educator Program (A-STEP)	F
TX	Alternative South Texas Educator Program (A-STEP) – Laredo	F
TX	Dallas Independent School District: Alternative Certification Program	F
TX	Education Career Alternatives Program (ECAP)	F
TX	Educators of Excellence: Alternative Certification Program	F
TX	Houston Independent School District: Effective Teacher Fellowship (ETF)	D
TX	iteachTEXAS	F
TX	McLennan Community College: Alternative Teacher Certification Program	F
TX	Pasadena Independent School District: Alternative Teacher Certification Program (ATCP)	F
TX	Quality ACT (Alternative Certification for Teachers)	F
TX	Region 1 Education Service Center: Project PaCE (Preparing and Certifying Educators)	D
TX	Region 2 Education Service Center: Educator Preparation Program	D
TX	Region 3 Education Service Center: Educator Preparation Program (EPP)	D
TX	Region 4 Education Service Center: Alternative Teacher Certification Program (ATCP)	F
TX	Region 5 Education Service Center: Teacher Certification Program (TCP)	D
TX	Region 6 Education Service Center: Teacher Preparation and Certification Program (TPCP)	F
TX	Region 7 Education Service Center: Teacher Preparation and Certification Program (TPCP)	D
TX	Region 10 Education Service Center: Teacher Preparation and Certification (TPC)	F
TX	Region 11 Education Service Center: Teacher Preparation Program (TPP)	F
TX	Region 12 Education Service Center: Teacher Preparation and Certification Program (TPCP)	F
TX	Region 13 Education Service Center: Educator Certification Program (ECP)	C-
TX	Region 18 Education Service Center: Teacher Certification Program (TCP)	F
TX	Region 19 Education Service Center: Teacher Preparation and Certification Program (TPCP)	D
TX	Region 20 Education Service Center: Teacher Orientation and Preparation Program (TOPP)	F
TX	South Texas Transition to Teaching Alternative Certification Program	F
TX	TeacherBuilder.com	F
TX	Texas Alternative Certification Program	F
TX	Texas Alternative Certification Program at Brownsville	F
TX	The Texas Institute for Teacher Education*	C
TX	Web-Centric Alternative Certification Program	F
TX	Training via E-Learning: An Alternative Certification Hybrid (TEACH)	D
TX	YES Prep Public Schools: Teaching Excellence Program	B-
UT	Utah State Office of Education (USOE): Alternative Routes to Licensure (ARL)	F
VA	EducateVA: Virginia Community Colleges' Teacher Prep Program	C
VT	Vermont Agency of Education: Alternative Licensure Program (Peer Review)	F
WI	Norda, Inc: Project Teaching	C+

* Based on program approved for fall 2015.

Finding #1: **Although the preparation of candidates at the secondary level by traditional programs is weak, a much larger share of alternative certification secondary programs earns failing grades.**

Fig. 30   Grades of alt cert secondary programs (N=85)
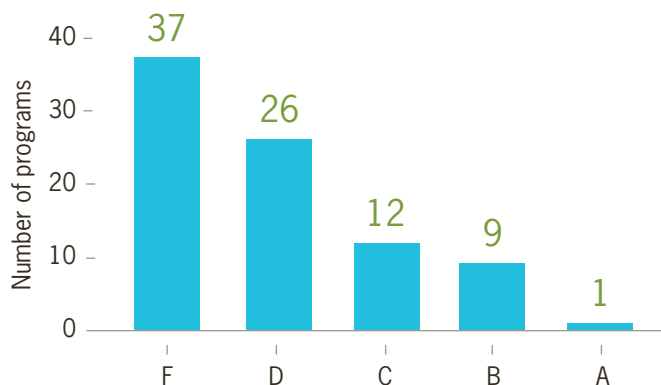
The distribution of grades of alternative certification programs is skewed, with only 10 programs (12 percent) earning an "A" or "B" and 37 (44 percent) earning an overall grade of "F."

What combination of features is typical in a program that earns a grade of "F"?

- No required minimum GPA, or a required minimum GPA of 2.5, which translates to a B-/C+ average. No standardized test required, or if required, the test only addresses basic skills. Possibly an interview, but no audition.

- No content test required even if the candidate hasn't earned a typical major in the subject (generally 30 credit hours), but has 21 to 24 credit hours of coursework in the subject area. To qualify to teach multiple subjects in science or social studies, the candidate has to be qualified in just one subject (e.g., the transcript lists a lot of chemistry coursework but no other science courses, yet the provider certifies the candidate is qualified to teach any science).

- No or limited fieldwork (a week or less) prior to beginning to teach. No clinical practice.

- After beginning to teach, anywhere from 1-4 formal observations by a program supervisor. May have mentor support, but at best the mentor has had mentor training and has no track record as an effective instructor.

In contrast, what combination of features might earn a program a grade of "A"?

- A required minimum GPA of 3.0 or a documented average GPA of 3.3 or above. Alternatively, a score on an adequate standardized test that places the applicant in the top half of the college-going population. A required audition.

- To teach a single subject, passing a content test or having a major of at least 30 semester credit hours (SCHs). To teach multiple subjects in the sciences or social studies, having 15-SCH minors in at least two subjects.

- Prior to beginning to teach, undertaking clinical practice that involves full class instruction and several formal observations, with a cooperating teacher who is both a capable adult mentor and an effective instructor.

- After beginning to teach, a period of co-teaching with a mentor or frequent observations provided by a program supervisor with ongoing mentor support.

Considering that our alternative certification standards most closely parallel our key standards for traditional graduate secondary preparation programs (with appropriate modifications for supervised practice), the distribution of grades for those traditional programs in *Teacher Prep Review 2014* are provided below for comparison:[39]

Fig. 31 Comparison of grades of secondary programs: Alt cert vs traditional graduate

Comparing the distribution of grades of the alternative certification programs in our sample with the grades of their closest counterparts in traditional preparation (graduate secondary programs) reveals substantial differences. Many more alternative certification programs fail; fewer have average or above average grades.

How do Teach For America and ABCTE fare?

Because **TFA** and **ABCTE** are two of the most well-known alternative certification programs — in fact the only ones we find mentioned frequently by name in state regulations — their performance as analyzed in this review may be of particular interest.

Teach For America
Since TFA policies and practices are nearly uniform across the country, it may be surprising that the eight TFA regions included in the sample did not earn the same grades. As mentioned above, the Massachusetts region earned an "A," the only such grade in the sample, having met the **Selection Criteria** and **High School Content Standards** and nearly meeting the **Supervised Practice Standard**. However, four TFA regions earn "Bs" (**Arkansas**, **District of Columbia**, **Prince George's County Public Schools** (MD), and **Baltimore** (MD)) and three earn "Cs" (**Colorado**, **Connecticut**, **Mississippi**). These last three regions share the same high scores on the **Selection Criteria** and **Supervised Practice Standards**, but differ on scores on the **High School Content Standard**. The difference stems from the fact that the different TFA regions do not adjust their testing and/or transcript review requirements to meet a single national standard, only requiring what is mandated by the states in which they reside. The lower-performing TFA regions allow candidates to teach in one or two areas of multiple-subject certification (general science and/or general social science) for which no state requirements or guidelines satisfy NCTQ's standard.

Given TFA's enviable record on delivering effective teachers into the classroom (see Appendix C), our scores on their content preparation may seem off base. However, much as we appreciate the contributions TFA teachers make to America's education institutions (including the contributions of the four TFA alums on NCTQ's staff), we note that TFA teachers' performance is being judged on a relative basis in K-12 schooling in which weaknesses abound.

ABCTE.

The sample includes five ABCTE programs in **Idaho**, **Mississippi**, **Missouri**, **Pennsylvania** and **South Carolina**. Grades for these programs are also affected by state context, for the same reasons as those noted above to explain the variation in scores for TFA regions. The ABCTE programs in Idaho, Missouri, Pennsylvania and South Carolina earn grades of "D," whereas the Mississippi provider earns a grade of "C"; the fact that it offers no multiple-subject certification means that the content proficiency of its interns is assured by testing requirements.

Finding #2: **Because the vast majority of the Texas programs evaluated earn failing grades, the sample's grade distribution improves enormously when grades of Texas programs are not factored into the results.**

As mentioned earlier, because about 40 percent of the state's teachers are produced by alternate routes, a disproportionate share of the programs in this sample (45 percent) is located in Texas. Nonetheless, the mere fact that a large share of the sample is based in Texas does not explain differences in grades. What accounts for this difference in grades comparing programs outside of Texas and those within? The answer to this question lies in the graphic below, showing the distribution of scores for the 40 Texas programs. Virtually all Texas programs get failing grades.

Fig. 32   Grades of Texas alt cert programs (N=40)
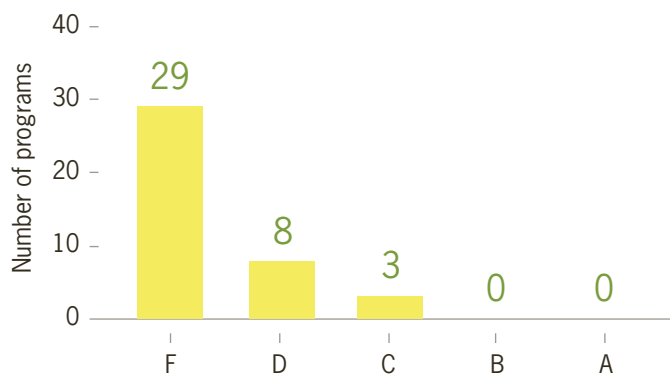
The distribution of grades of Texas alternative programs in the sample mirrors that of the sample as a whole as shown in Fig. 30.

When the grades of alternative certification programs located outside of Texas are compared to those of graduate secondary programs, the distributions of grades are much more similar.

Fig. 33   Comparison of grades of secondary programs: Alt cert programs *outside* of Texas vs traditional graduate
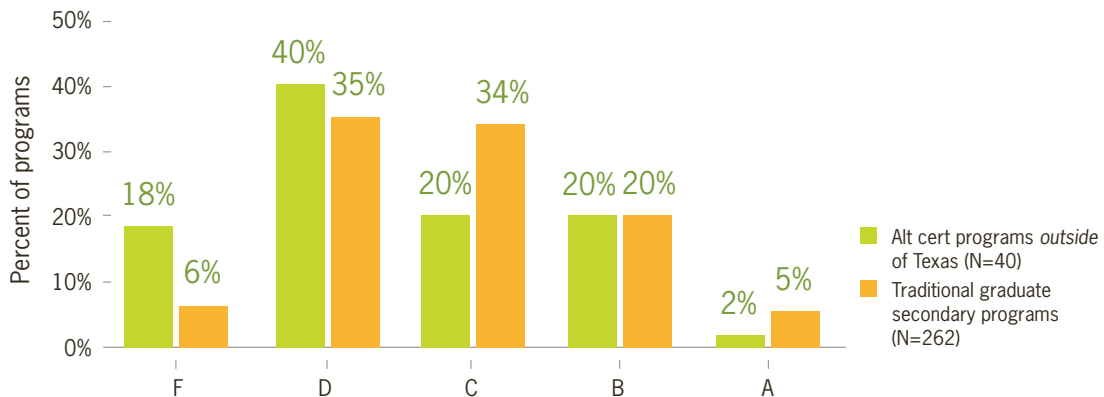
Looking only at grades of alternative certification programs outside of Texas,the distribution is fairly close to that of traditional graduate secondary programs.

What accounts for the low grades in Texas? Clearly state regulations play a large role; an examination below of the distribution of scores on each standard, with attention drawn to the relevant state regulations in Texas, will make this clear.

Finding #3: Over half of the alternative certification programs have inadequate admissions standards.

Fig. 34   Scores of alt cert programs on the Selection Criteria Standard (N=85)
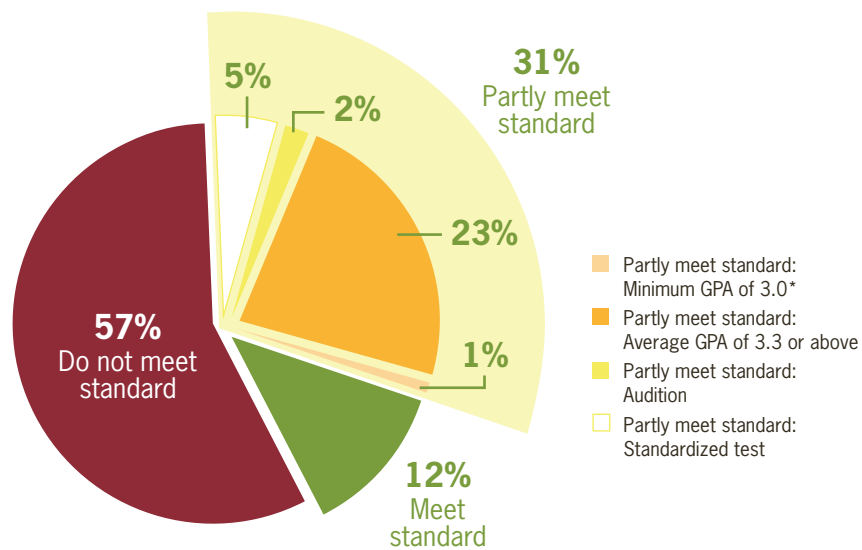
*   One provider requires a 3.0 min GPA and has an average GPA of 3.3 or above.

Well over half (57 percent) of the sample has no selection criteria that even partly satisfy NCTQ's standard. To meet the standard it is necessary to require a minimum GPA of 3.0 or obtain a 3.3 (or above) average GPA for a cohort and require an audition, something only 12 percent of all programs require.

Grade inflation has been documented in recent years, with average college GPAs increasing. Accordingly, an applicant applying mid-career to an alternative certification program may have earned grades at a time when grading standards were slightly higher. Still requiring only a GPA of 2.5 is substantially below the current national average GPA of 3.0-3.3.[40] In fact, these data do not just reveal programs having set too low a standard; some have no standard at all.

Fig. 35   What are alt cert programs' requirements for minimum GPAs? (N=85)

3%
3.0

22%
None*

75%
<3.0
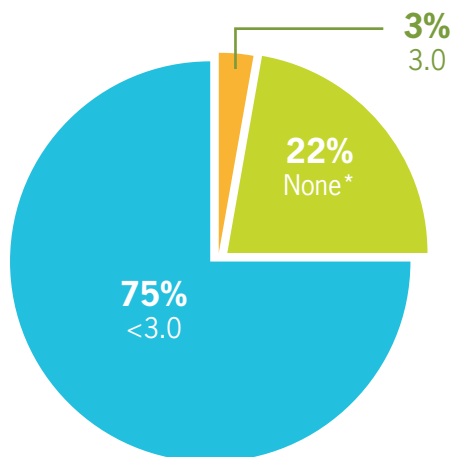
* Includes programs that have a variety of requirements, of which a minimum GPA is only one possible requirement.

Only 3 percent of programs in the sample require a minimum GPA of at least 3.0.

There are some limited signs of change. Texas regulators are considering a proposed increase of the minimum GPA for admission from 2.5 to 2.75 and Arkansas' state alternative certification program will increase its current GPA requirement of at least 2.7 to 2.9 in 2015.[41]

Almost half of alternative certification programs (45 percent) require applicants to take admissions tests, but most only require a low-level test of basic skills in reading, writing, and math that is designed for teachers (the PRAXIS I or its equivalent). The type of standardized test that would be an acceptable alternative to a requirement of a 3.0 GPA (the ACT, SAT, GRE or an equivalent) is required by only 3 percent of the programs in the sample.

Fig. 36   What are alt cert programs' requirements for admissions tests? (N=85)
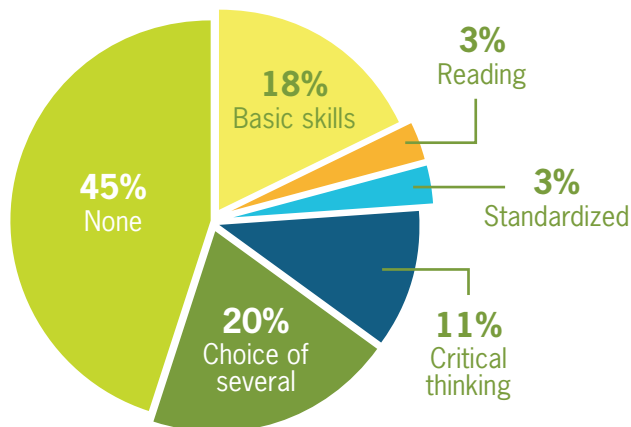
Slightly more than half (55 percent) of alternative certification programs require some kind of admissions test, but few (3 percent) require an appropriate standardized test of general academic aptitude. One in five programs provide so many choices to candidates that their requirement is hard to categorize.

Although interviews are commonly required for admission, auditions are not.

Fig. 37   What proportion of alt cert programs require auditions for admission? (N=85)
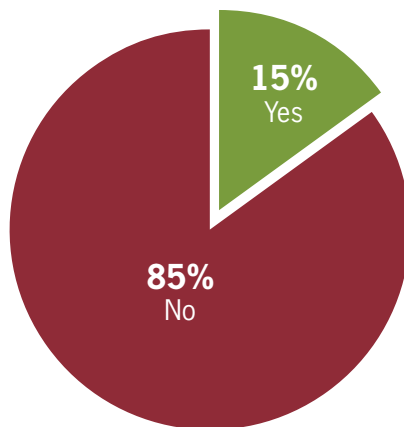
Just over one in seven (15 percent) alternative certification programs require an audition as part of the admissions process.

How to Become A Teacher in Texas

Five Easy Steps that begin with a phone call!

☑ **Step 1: Appointment to determine your eligibility**

☑ **Step 2: TExES Content Exam for your certification area**

☑ **Step 3: Preparation Program Institute & Field-based Experience**

☑ **Step 4: Choose your route to teach! Internship OR Clinical Teaching Practicum**

☑ **Step 5: Receive your STANDARD TEACHER CERTIFICATE!**

Begin your teaching career NOW!

From ACT Houston website.

What about Texas?

Texas regulations for all teacher preparation programs, traditional and alternative, require a minimum GPA of only 2.5. Moreover, while an interview or other screening device is required, no audition is required (and the interview can range from a commercially designed one such as the "Haberman Star Teacher Pre-Screener" to an "open-ended" phone conversation). A provider may choose to require an appropriate test as a demonstration of basic skills in reading, written communication and mathematics,[42] but there are so many possible alternatives (including an undergraduate degree from any accredited college or university in the United States) that few programs do so. Only one Texas program meets this standard,[43] and nine other programs partly meet the standard, four for having average GPAs of at least 3.3,[44] four for requiring an appropriate standardized test with nearly sufficient cut scores,[45] and one for requiring an audition.[46]

Texas programs' advertisements in many cases seem to focus on the speed at which anyone can become a teacher (see graphic to left), rather than on the fact that teaching is a challenging profession that requires academic and other talents. For example, **ACT Houston** advertises on its website, "No matter what your major or the type of Bachelor's Degree that you hold... ACT Houston offers content and grade level certification for you to enter the classroom quickly — without any additional university coursework." Likewise, the **Texas Institute for Teacher Education** says "Earn full teacher certification within 12 weeks."

The only Texas provider we could identify that emphasizes the importance of recruiting talented applicants over recruiting as many (paying) applicants as possible is the **YES Prep Public Schools: Teaching Excellence Program**, which has established a "Talent Strategy Team" to attract, acquire and hire new interns at more selective IHEs such as Texas A&M, the University of Texas at Austin, and Rice University (within Texas), and Stanford, Harvard, Columbia, Michigan, Lewis & Clark, Vanderbilt, and the University of Virginia (outside of Texas).

Finding #4: Most programs evaluated (85 percent) fail to ensure that their teachers are proficient in every subject programs claim to qualify them to teach.

Fig. 38   Scores of alt cert programs on the **Subject Area Expertise Standard** (N=85)

- 61% Do not meet standard
- 24% Partly meet standard
- 2% Meet standard: Adequately tests all subjects offered
- 14% Meet standard: Adequate review of transcript with inadequate test
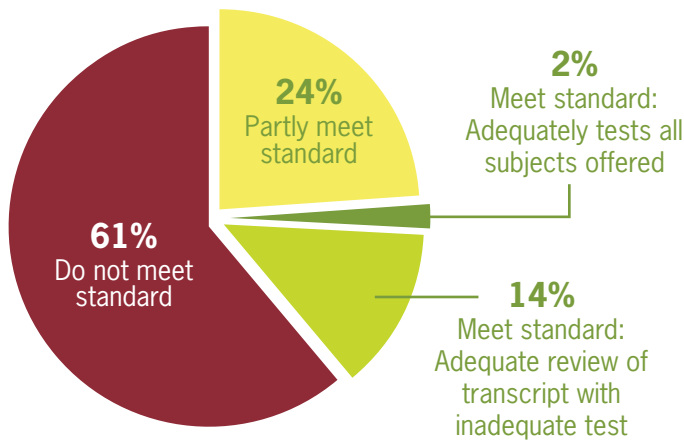
Alternative certification programs are not requiring that candidates demonstrate content proficiency before entering the classroom, or they use inadequate tests for that demonstration. They also do not supplement testing with transcript reviews. Only 16 percent of programs ensure that candidates "know their stuff."

NCTQ's standards on content proficiency in both traditional and alternative certification shine a light into the darker, often ignored corners of certification, wherein lie multiple-subject certifications in general science and general science ("social studies"). Teachers who can be assigned to teach high school classes in biology, chemistry, physics, history and government should actually have taken a test that demonstrates their competence or have on their transcript more than a few credits in the subject.

But even for subject areas like English or mathematics where expectations can be much more clear cut, the results are not good: In 30 programs in the sample (35 percent), requirements are inadequate across the board due to the fact that testing is optional and/or coursework preparation standards are inadequate.

The rationale for these lax requirements is unclear. For example, **Tennessee** has an exemplary secondary certification structure and accompanying testing requirements, and no candidate graduating from a traditional teacher preparation program is exempt from testing. Yet applicants to a Tennessee alternative certification program — who should have to meet more stringent standards for demonstration of content since they have not necessarily graduated from

Of 40 Texas programs in the sample, **McLennan Community College's** program is most explicit about the skills mentor teachers should possess: Conferencing skills, ability to provide quality instruction to adults, good interpersonal skills, demonstrated diplomacy skills, demonstrated tolerance of others, demonstrated good role model for novices.

a regulated teacher preparation program whose coursework is presumably approved — may forego testing if they have only 24 SCHs of relevant content coursework on their transcript.

ABCTE programs in Idaho, Missouri, Pennsylvania and South Carolina recommend that candidates select their own mentors, a remarkable suggestion given that the candidates have had no experiences that would equip them to assess the relevant capabilities of any colleague.

What about Texas?

Texas regulations allow for two possible approaches to assuring content preparation before candidates enter the classroom: (1) a requirement that candidates take a pre-admission content licensing test (PACT) that is substantively the same as the licensing test normally taken at the end of preparation programs of any type, or (2) a transcript review to ensure that candidates have taken at least 24 SCHs in the subject they wish to teach.

Both of these approaches are inadequate, but for different reasons. The first is inadequate to the task of ensuring that candidates seeking any one of four types of multiple-subject certifications for grades 8-12 (Physical Science, Physics/Mathematics, Science, Social Studies) are adequately tested in every subject they will be certified to teach. The second is inadequate because 24 SCHs is too few credits for content proficiency even in single-subject certifications such as mathematics, and certainly too low for multiple-subject certifications. Only if a Texas provider goes above and beyond state regulations in terms of transcript reviews, as one soon will do,[47] can the provider partly or fully meet the standard.

With the exception of programs in **California** and **Tennessee**, all of the programs in the sample are located in states whose content testing is either inadequate across the board, or inadequate for multiple-subject certifications.[48] Even when testing is partly or fully adequate, as it is in **Tennessee**, it may not be required before the candidate enters the classroom as the teacher of record. Looking at programs outside Texas, in the absence of adequate testing, only in **Wisconsin** was a program's transcript review process adequate for a multiple-subject certification — in this case, general science.

Granted, the problem of inadequate testing is one that states need to fix (and we certainly propose as much in our *State Teacher Policy Yearbook*), but there is nothing that stops providers from exceeding state requirements to better serve the interests of the teachers they produce and the students of those teachers.

Finding #5: By every measure, training and coaching offered to alternatively trained candidates is inadequate.

Fig. 39   Scores of alt cert programs on the Supervised Practice Standard (N=85)

19%
Do not meet standard

13%
Nearly meet standard

14%
Partly meet standard

54%
Meet small part of standard
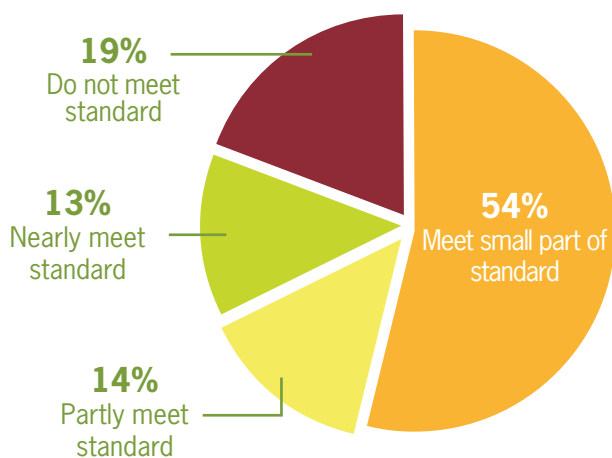
Just over half the sample (54 percent) "meets a small part of the standard;" no program fully meets the supervised practice standard.

Although there were nearly limitless versions of support offered to alternative certification teachers by these programs, all fell short mostly because of inadequate opportunities to practice full class instruction in clinical practice and/or the absence of intense training and coaching in the first weeks of the internship. The standard we applied was constructed to accommodate the limited time available to train and coach alternatively prepared candidates.

For more information on how we have categorized programs' support of practice in three different models — clinical practice, internship and hybrid — see Appendix C.

Nature of fieldwork

In keeping with our **Student Teaching Standard** for traditional teacher preparation, our standard here does not consider the features of fieldwork. Few details are provided on the exact nature of the fieldwork most programs offer. However, were descriptions provided and fieldwork to appear to be sufficiently structured to be of value, we would mention it in this report. In contrast, those details that are available make it appear that in some programs, fieldwork might better be described as "field trips." For example, two Texas programs advertise that attending a football game can count towards the required 30 hours of "interactive field experience."[49]

Pasadena Independent School District's program is the only Texas program of 40 in the sample to require that teachers apply to be mentors and provide references, as opposed to relying on principals to select mentors.

Length of clinical practice

Our standard looks for at least eight weeks of clinical practice. In six programs that strongly emphasized practice before entering the classroom, the length ranged from five weeks to a full semester. For those programs that paired clinical practice with internships, the length of time spent in the classroom ranged from a few days to seven weeks.

Length of co-teaching

Our standard looks for at least six weeks, with a gradual reduction in intensity after the first month of school. Only two programs offer a period of anything approaching co-teaching, in one case for two weeks, in another for four weeks, described as "intensive mentoring at the beginning of the program."[50]

Number of formal observations

Our standard looks for at least five formal observations in the eight-week period of clinical practice or in the first 12 weeks of an internship. The graphic below shows, for the programs for which an explicit number is advertised, the combined minimum number of formal observations provided by the program supervisor over the course of the combination of any clinical practice and the entire first year of the internship.[51]

Fig. 40 Total number of formal observations of alt cert candidates in their first year (N=72*)
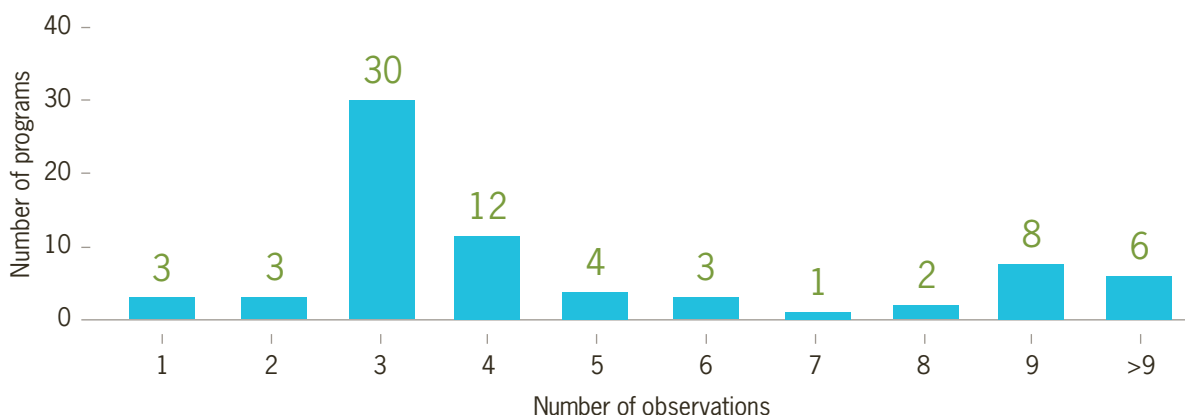
* Does not include programs for which the number of formal observations is discretionary or not specified.

In well over half (58 percent) of the programs for which this number could be determined, candidates receive only three or four observations. In a significant number (8 percent), candidates receive only one or two.

Considering the nature of training and coaching in a holistic manner, the graphic below illustrates the portion of each model that earned scores of "inadequate," "partly adequate" and "adequate."

Fig. 41   Supervised Practice:Training and coaching
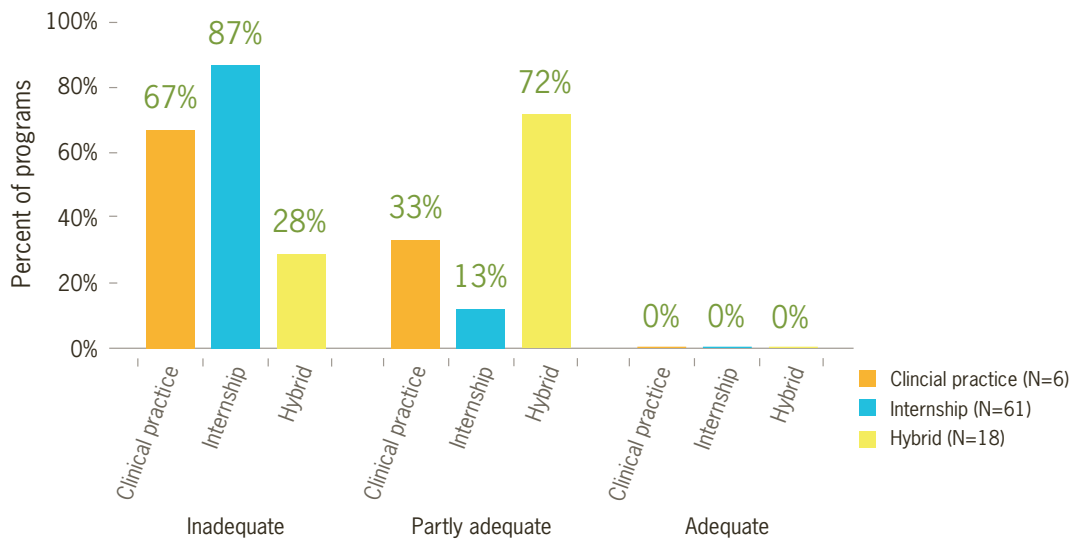
Not a single provider had "adequate" training and coaching — meaning they did not fully satisfy any part of the first indicator of the Supervised Practice Standard — whether they relied on clinical practice, an internship or a combination of the two in a hybrid.

The second indicator in the **Supervised Practice Standard** pertains to the characteristics of the cooperating/mentor teacher. The graphic below illustrates the share of programs whose required characteristics are evaluated as inadequate, partly adequate or adequate on the indicator.

Fig. 42   Supervised Practice: Mentor characteristics
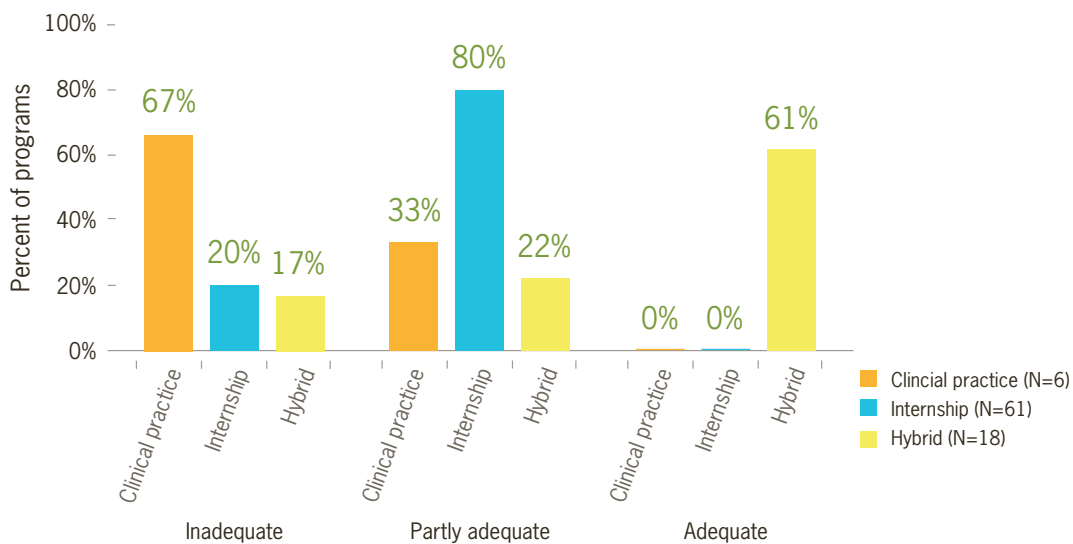
Only 13 percent of the overall sample of programs satisfy the indicator by requiring that mentors be both capable mentors and effective instructors, and all of the programs that do so are hybrid programs.

Only the **Teaching Fellows** and **TFA** programs, and **Houston Independent School District's Effective Teacher Fellowship (**together accounting for 11 programs in the sample) require that the teacher who works with teachers in clinical practice also be an effective instructor, as measured by student learning. This requirement is phrased as "a track record of raising achievement in challenging classrooms" by the **Teaching Fellows** and "quantifiable success as a classroom teacher" by **TFA**. The **Effective Teacher Fellowship's** mentors' evaluations (partly based on student performance data) must be at the top or next to the top level.

What about Texas?

It's instructive when placing the Texas results on the **Supervised Practice Standard** in context to know that under Texas regulations a program supervisor need not formally observe a teacher candidate until six weeks into the candidate's internship. (The supervisor needs to establish contact within two weeks, but the contact can be by email.)

Texas programs' relatively low scores on this standard can be attributed to the following:

- Only three programs out of 40 offer the opportunity for clinical practice prior to the beginning of an internship.[52]
- Only six programs provide more than nominal levels of mentor support.[53]
- Well over half (60 percent) of programs have supervisors conduct a minimum of three formal observations over the full internship — meeting, but certainly not exceeding, the required minimum number of observations required by the state.
- Only six programs provide structured mentor support that is relatively strong, although still far from the level contemplated by NCTQ's requirement of a significant period of co-teaching at the beginning of the internship.[54]
- Only one program's mentors are explicitly required to be effective instructors, as measured by student performance.[55]

Texas does require that interns be provided with mentors and that mentors have appropriate training. However, that is as far as the regulations go, leaving programs to decide if they will accept any teacher a principal selects, regardless of the teacher's years of experience or instructional performance. Even those providers that do set a bar for instructional performance do so at a level that can hardly inspire confidence in the candidate: for example, "at least one year of successful teaching."[56]
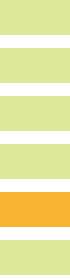
V. Recommendations

Traditional Teacher Prep

Although there have been some encouraging signs of progress, much work remains to be done to achieve the system of teacher preparation all teachers and students need and deserve. Even after expanding the scope of this year's edition by nearly 40 percent, the portrait of an "industry of mediocrity" in last year's first edition of the *Review* remains accurate.

The power to transform teacher preparation *lies primarily with the consumers of teacher preparation* — aspiring teachers and school districts — who should make more informed decisions by looking to the programs that add value and staying away from those that do not. But policymakers and teacher educators within the walls of higher education institutions must also play a role. Only sustained attention and effort by higher education professionals, state leaders and the public at large will move the needle.

Recommendations for aspiring teachers

Aspiring teachers (and their parents) can find more guidance in our appendix on how to use the *Review* as they shop for programs.

Fig. 43 Institutions whose programs are Top Ranked and whose tuitions are relatively low

Undergraduate Elementary

Institution	In-State Tuition	Out-of-State Tuition	Institution	In-State Tuition	Out-of-State Tuition
Texas A&M University	$8,506	$25,126	Fort Hays State (KS)	$4,358	$12,821
Northwestern State University of Louisiana	$6,207	$16,327	CUNY – Hunter College (NY)	$6,129	$12,639
Louisiana State University and Agricultural & Mechanical College	$7,873	$25,790	Texas A & M University – Corpus Christi	$7,172	$15,668
University of Houston (TX)	$8,401	$16,897	Ball State (IN)	$9,160	$24,124
Eastern Connecticut State	$9,376	$20,881	Delta State (MS)	$6,562	$6,562

Undergraduate Secondary

Institution	In-State Tuition	Out-of-State Tuition	Institution	In-State Tuition	Out-of-State Tuition
Western Governors (UT)	$6,070	$6,070	CUNY – Hunter College (NY)	$6,129	$12,639
Fort Hays State (KS)	$4,352	$12,821	Southeastern Louisiana University	$5,715	$17,734
Henderson State (AR)	$7,580	$13,700	University of North Carolina – Wilmington	$6,343	$18,480
Austin Peay State University (TN)	$6,876	$21,372	Murray State University (KY)	$7,044	$19,164
University of Houston (TX)	$8,401	$16,897	Tennessee Technological University	$7,073	$22,063

The in-state tuitions of the institutions listed above are less than the average in-state tuitions of the lowest performing institutions in the Review.

Recommendations for school districts

The most important step districts can take is to clearly communicate their expectations to teacher preparation institutions. For too long, districts have found it difficult to get institutions of higher education to grapple with the need to improve teacher preparation. Instead, districts have had to invest billions of dollars in professional development and remedial programs to mitigate the effects of poor training.

We urge districts to use NCTQ's findings in the following appropriate ways:

1. Accept student teachers only from institutions that are committed to preparing their candidates for the classroom not only because they select academically talented applicants, but also because they provide high quality training *before* student teaching.

2. Conduct recruitment visits at highly ranked institutions even if it means crossing state borders.

3. Use *Review* results as a screening device, narrowing down large pools of applicants for a single position.

4. Where there are no highly ranked programs, match specific needs with institutions that did well on the relevant standard. It would be wise for a district dissatisfied with how well its students are performing in math to search our website to identify the institutions which do the best job preparing math teachers, even if the program has otherwise poor performance.

Resources for districts on using the NCTQ evaluations can be found here.

Districts are also encouraged to examine, and to publicly report, the outcomes produced by the programs that supply the greatest numbers of their teachers to the district. Analysis should be based on the district's areas of need, ranging from performance measures (such as attendance rates, evaluation scores and retention rates) to student outcome measures.

Recommendations for deans of teacher preparation programs

Over the past year, we have heard from a number of teacher educators that we need to go farther in explaining what our standards mean and the steps we recommend they take to improve their programs. We've taken those comments to heart in this year's edition, and have posted clear and detailed Standards Guides for deans and teacher educators.

For deans interested in using the *Review* for planning improvements, the first step is to take a look at the program ranking sheets for the institution. Along with the scores earned by programs for each standard, these sheets have detailed comments about program strengths and areas in need of attention. Coupled with the Standards Guides, the ranking sheets provide a clear road map for change.

Deans may also want to draw on the examples of top scoring programs. In addition to the Standards Guides, we've posted a wealth of resources on our website drawn from teacher preparation, including

- highly rated course syllabi in early reading and elementary math;
- evaluations of reading and elementary math textbooks;
- student teaching materials and evaluation instruments used by programs;
- modules developed by the state of Tennessee on the use of assessment data; and
- examples of outcomes data being used for program improvement.

The Forum: NCTQ's Appeal Process

Our number one priority is accuracy. Nonetheless, we do make mistakes, given that we have made no fewer than 19,000 ratings decisions. Last year, in response to appeals by 49 institutions seeking score changes on approximately 294 standards, we made 68 corrections to standard scores.

From June 2014 through September 2014, institutions will be able once again to appeal through our Forum process. Here are the steps to take:

1. Review materials about the NCTQ standards on our website, particularly the Scoring Methodologies (these provide more detailed information than the Standards Guides). Often what appears to be an error in our analysis actually comes down to a misunderstanding of the standard and the indicators that describe how the standard can be met.

2. Be certain about the evidence that needs to be marshaled for NCTQ to consider a scoring change: In June, NCTQ will reach out to all institutions with more details about the Forum process, particularly the kinds of documents that are most relevant for our analysis.

3. Register for the Forum: To ensure proper tracking, it's important to notify NCTQ that an appeal is forthcoming. Institutions will be provided the address of their unique login page. Deadlines will be posted.

4. Submit the appeal to the Forum: Once an institution has registered for the Forum, it will receive a special link to a web portal where explanations and documents can be uploaded. To fulfill our pledge of full transparency, we will post all submissions on our website along with our responses.

Here is our protocol for processing appeals through the Forum:

Appeals will be considered on a first-come, first-served basis. The sooner an institution applies to the Forum, the sooner the appeal will be considered. (Some appeals take longer to evaluate, however, so first-served is not necessarily first-resolved.)

If we decide our analysis stands, institutions will be notified in writing.

If we accept an institution's appeal leading to a change in score at the standard level, we will provide an explanation to the dean of the program and we will also publish the explanation on our website. We will make any corrections to standard scores on the program ranking sheet.

After we have compiled all ranking changes, if the score corrections we have made improve a program's national ranking by 50 or more, we will notify not only the dean of the institution, but also the head of the college or university and any local media that the institution identifies.

Recommendations for state policy makers

Use the Review *and other data to drive system-wide improvement*

State policymakers looking to improve teacher preparation in their own state will find the following helpful:

1. State overview pages which show how programs in a state do on NCTQ standards compared with programs across the country.

2. Program ranking sheets, which detail how individual programs do in fundamental areas of teacher training.

3. *State Teacher Policy Yearbook*

4. NCTQ state teacher policy checklist, which can be tailored to your state. To find a checklist for your state, go here and select your state. Select the page for "[state] Policies" and click on "expand all" to see a checklist of all policy recommendations for your state.

5. NCTQ brief on how to design teacher prep accountability systems that make use of student achievement data.

States and districts often have a great deal of data, in addition to NCTQ's results, that they can add to the mix — teacher impact on achievement, principal evaluations, first-time licensure pass rates, retention rates and the like — which can be of tremendous help in setting the agenda for program improvement. States such as **Louisiana**, **North Carolina**, **Ohio** and **Tennessee** have led the way in developing report cards for teacher prep. But in many other states across the country, we hear from teacher educators that they cannot get access to the data that would be most helpful to them.
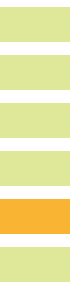
State policy leaders should consider convening working groups of deans and key officials to examine the evidence from the *Teacher Prep Review* and other available data to develop ambitious plans for program improvement. **Hawaii** officials recently made such an effort and found that it took an intensive commitment on the part of state, school and higher education officials for six months to get the baseline data. The textbox below describes this initiative.

Using data to drive improvement in teacher prep: The case of Hawaii

As part of its plan for Race to the Top, Hawaii pledged to develop annual reports on teacher preparation program quality using data on graduate employment rates, retention and, most significantly, evaluation results. The goal: make program quality transparent to policymakers and consumers alike so that programs would have incentives to improve.

This proved to be a heavy lift. The state had little experience in tracking where graduates of its programs ended up. For their part, the deans of Hawaii's teacher preparation programs were frustrated that they had never been able to get this data before and were suspicious of how the data might be used to criticize their programs.

In the summer of 2012, the state began to convene monthly meetings of 10 deans and state officials to work through the challenges of getting clean sets of data and understanding the implications of what the data might mean for changes to how programs do business. Before presenting the actual data, officials decided to give the programs reports with simulated data. This helped move the conversation from potential finger-pointing to constructive and collective analysis.

By the spring of the subsequent year, the deans of the programs had seen preliminary versions of actual reports about their own graduates — and were eagerly seeking more information so that they could determine what adjustments, if any, they should make to their programs.

If this kind of *outcome* analysis were combined with the in-depth analysis of programs in the *Teacher Prep Review*, teacher preparation program leaders and state officials would have a clear set of next steps. For example, if the graduates of a program were not helping their students make headway in math, then the math preparation the programs provide is probably a key factor. The detailed guidance provided by the *Review* on the math content preparation elementary teachers need to be successful would serve as a road map for program improvement.

High leverage policy changes to consider

State policymakers have the tools at their disposal to drive change on their own. Drawing on our *State Teacher Policy Yearbook's* in-depth analysis, we have developed Teacher Prep Policy Checklists for each state that list specific high-leverage reforms they can make to increase the number of well-trained teachers delivered to their classrooms. The policies on these checklists are by and large low-cost or no-cost changes to states' existing structures of licensing and teacher prep accountability systems, though a few are more outside-the-box and potentially higher impact.

What follows is the full list of policy changes that we urge policy makers to consider. A version tailored to a state can be generated. Choose a state and go to "[state] Policies."

State Policy Checklist for Improved Teacher Prep

Selection Criteria

☐ **Require rigorous teacher prep program admission tests.** Teacher prep programs should screen candidates for academic proficiency before admission by requiring that they earn a score in the top half of the general college-bound population on a test that is designed for that population (like the ACT, SAT or GRE). The Praxis I and similar tests designed only for teacher candidates generally assess skills at the 8th-10th grade level and are inadequate as admission tests.

OR

☐ **Require an admission GPA of 3.0.** Consider using a higher GPA requirement for program admission in combination with a test of academic proficiency. A sliding scale of GPA and test scores would allow flexibility for candidates in demonstrating academic ability. When using such multiple measures, a sliding scale that still ensures minimum standards would allow students to earn program admission through a higher GPA and a lower test score, or vice-versa.

☐ **Consider requiring candidates to pass subject-matter tests as a condition of admission into teacher programs.** Such a requirement would permit candidates lacking sufficient expertise to remedy deficits prior to entering formal preparation.

Early Reading

☐ **Test elementary teacher candidates on the science of reading.** Ensure that elementary teacher candidates have sufficient and appropriate knowledge and skills of the science of reading instruction with a rigorous stand-alone test addressing phonemic awareness, phonics, fluency, vocabulary and comprehension. Programs whose candidates routinely require multiple attempts to pass such a test are highly likely to provide inadequate or inaccurate preparation in early reading. Consequently, states should consider using the first-time pass rates on these tests as a measure of program accountability.

Elementary Mathematics

☐ **Test teacher candidates on elementary math.** Ensure with a rigorous standalone (or separately scored) test that elementary teacher candidates know elementary math at a depth sufficient for instruction, not simply at a procedural level. Programs whose candidates routinely require multiple attempts to pass such a test are highly likely to provide inadequate or inaccurate preparation in elementary mathematics. Consequently, states should consider using the first-time pass rates on these tests as a measure of program accountability.

Elementary Content

☐ **Use licensing tests that are designed to provide scores for all core subjects.** Whenever subject matter proficiency tests are administered, require that all elementary teacher candidates pass a rigorous content test with separate sub-scores for each core academic subject.

☐ **Ensure that elementary teacher candidates have an adequate course of study in the content they will teach.** Align state standards for teacher preparation to reflect all of the academic areas an elementary teacher needs to know.

☐ **Require that elementary teacher candidates complete an academic content specialization in a "teachable subject."** A specialization in English, math, one of the social sciences (such as history or political science) or the sciences (such as biology or the earth sciences) both enhances content knowledge and ensures that prospective teachers have taken higher-level academic coursework.

Middle School Content

☐ **Require that middle school teacher candidates pass tests that ensure their subject matter proficiency in every core subject they will be certified to teach.** Whether certified to teach a single subject or multiple subjects, middle school teacher candidates should pass a test of each core subject included under their license.

☐ **Distinguish middle school preparation from elementary preparation.** Do not allow middle school teachers to teach on a generalist license that does not differentiate between the preparation of middle school teachers and that of elementary teachers.

High School Content

☐ **Require that high school teacher candidates pass tests that ensure their subject matter proficiency in every subject they will be certified to teach.** No secondary teacher candidate should be exempted from subject testing on the basis of completed coursework and all such candidates should be tested before they become the classroom teacher of record.

☐ **Ensure that secondary general science teachers have the content knowledge to teach every subject they are certified to teach.** States that offer umbrella general science licenses should require candidates to pass a test or tests that separately measure subject-matter proficiency in each science discipline included under the license. In the absence of such testing requirements, general science-certified teachers who majored in biology, for example, can teach physics having answered few or no relevant questions correctly on a composite science licensing test. Some states avoid this as an issue by offering only single-subject science licenses.

☐ **Ensure that secondary general social science teachers have the content knowledge to teach every subject they are certified to teach.** States that offer umbrella general social science licenses should require candidates to pass a test or tests that separately measure subject-matter proficiency in each discipline included under the license. In the absence of such testing requirements, general social science-certified teachers who majored in economics, for example, can teach history having answered few or no relevant questions correctly on a composite social science licensing test. Some states avoid this as an issue by offering only single-subject social science licenses.

Special Education

☐ **Eliminate a K-12 "high incidence" special education license that does not differentiate between the preparation of elementary teachers and secondary teachers.** While K-12 licenses may be appropriate for teachers of low-incidence special education students, such as those with severe cognitive disabilities, it is deeply problematic for teachers of high-incidence special education students, such as those with learning disabilities, who are expected to learn grade-level content. And because the overwhelming majority of special education students are in the high-incidence category, the result is a mismatch between students' academic needs and teachers' ability to meet those needs.

☐ **Use licensing tests for elementary special education candidates that are designed to provide scores for all subjects.** Whenever subject matter proficiency tests are administered, require that all elementary special education teacher candidates pass a rigorous content test with separate sub-scores for each subject.

☐ **Require that secondary special education teacher candidates pass tests that ensure their subject matter proficiency in every subject they will teach.** Secondary special education teacher candidates should possess adequate content knowledge in the subjects they will teach. Alternatively, consider a customized HOUSSE route for new secondary special education teachers and look to the flexibility offered by the Individuals with Disabilities Education Act (IDEA), which allows for a combination of testing and coursework to demonstrate requisite content knowledge in the classroom.

Student Teaching

☐ **Require that cooperating teachers in student teaching placements are effective instructors.** Ensure that teacher preparation programs place teacher candidates with cooperating teachers who have been screened for their ability to further student achievement and can model effective instructional techniques. Also, consider the mentoring abilities of the cooperating teachers when making placement decisions

Outcomes and Evidence of Effectiveness

☐ **Collect data that connects student achievement gains to teacher preparation programs.** Such data can include value added or growth analyses conducted specifically for this purpose or teacher evaluation ratings that incorporate objective measures of student learning to a significant extent. Collecting such data is a first step which should be followed by setting minimum performance standards and publishing the data and results publicly.

Other high-impact strategies

☐ **Hold teacher prep programs to rigorous standards in inspections.** Revamp current inspections of teacher preparation programs that are performed as a condition of program approval. Almost all states either conduct site visits of teacher prep programs themselves or outsource site visits to accreditors, but these visits have not proven to add value. States instead should deploy inspectors who are 1) professionally trained and managed by an independent agency, and 2) drawn primarily from the ranks of PK-12 principals. Inspectors should conduct visits with little notice and assess program features that are relevant to the needs of public schools in and assess program features that are relevant to the needs of public schools in the state. They would also make their findings available — and understandable — to the public.

☐ **Enforce current teacher prep program regulations.** Many teacher preparation program regulations relating to accountability and program approval now on the books are simply not being enforced. Beef up enforcement and use the program approval process to mete out consequences. Injecting some steel into the spine of enforcement of these and other standards could have a hugely salutary effect, and state program approval is a logical mechanism by which to do it.

☐ **Redirect production to special education and away from areas of overproduction (such as elementary education).** Current production of elementary teachers is well over twice the supply necessary and special education is an area of chronic shortages. Encourage institutions to train more special education teachers by imposing limits on the number of candidates they can recommend for certification in high supply areas, such as elementary education.

☐ **Cap the number of graduates for whom teacher prep programs can recommend certification.** Set a fixed limit on the number of licenses in each teaching area that will be issued each year and allocate that number among teacher preparation programs based on their quality. Right now, states allow institutions to produce as many teachers as they like. Instead, a state could decide each year how many licenses to make available, rewarding strong-performing programs (however judged) by allotting them a higher number of licenses and starving low-performing programs by allotting fewer licenses. Programs would not be prohibited from admitting as many candidates as they choose, but they would not be able to assure candidates that a license and job in the state will be waiting for them.

Alternative Certification

Recommendations for alternative certification providers

Alternative certification programs need to raise the bar for admission.

Developing academic talent in students requires academic talent in teachers. Although professional experience may sound like an attractive alternative, it is only a possible complement. Applicants should be evaluated on one of several measures of academic talent (GPA, scores on the ACT, SAT or GRE, or any other standardized test normed to the general population). Because academic talent is necessary but not sufficient for effective teaching, applicants should also have to undergo an audition. Auditions including real teaching episodes and structured interactions with students or peers are important; unlike traditional programs with teacher educators, alternative certification programs have little time in training to gauge whether a candidate has classroom presence, interpersonal skills and the "grit" that may be a critical element for success in challenging classrooms. Videoconferencing can be used for auditions if candidates cannot easily travel to audition sites.

Teachers being delivered by alternate routes should "know their stuff" in every subject they can be assigned to teach.

Enabling individuals who knew the content to get into the classroom quickly was one of the motivations for establishing alternative certification. Yet in some cases for single-subject certification, and in almost all cases for multiple-subject certification, content-related requirements are too low.

Unless a subject-specific licensing test is required before a candidate enters the classroom as the teacher of record, the candidate should have 30 SCHs of coursework — the minimum amount of coursework defined by most universities as constituting a major — in the subject she or he will be certified to teach.[57]

For multiple-subject certification, alternative certification programs cannot change the 45+ different Rube Goldberg arrangements of certification types, testing requirements and approved course assignments in most of the states and the District of Columbia, but they can take some simple steps: Candidates for multiple-subject certification need to demonstrate proficiency in at least two of the subjects they will teach, either by taking two subject-specific content tests, or by having two 15-SCH minors on their transcript.

And if alternative certification isn't the right approach to crack the nut of teacher shortages in science, it may be time to use another nutcracker: innovative distance learning arrangements in which students enroll in online classes with acclaimed expert teachers. Certainly this approach would be preferable to staffing schools with teachers who are out of their depth teaching physics and chemistry.

Alternative certification program should be based on the premise that it takes intense training and coaching to enable a teacher candidate to "hit the ground running."

The only remedy to the sink-or-swim approach that defines most of the alternative certification programs in this study is to provide some period of real teaching in a real classroom in advance of the beginning of the school year, and — if that period is not sufficiently long — to provide the teacher candidate with nearly constant support for the first several weeks of school. Such support can be phased down to more typical periodic mentoring after the whirlwind pace of establishing classroom routines and working out instructional glitches slows. The program supervisor who provides formal observations before the start of the school year and immediately after its start adds the linchpins to ensure that the candidate is moving steadily on the learning curve.

Because it is difficult for teacher candidates to rise above the level of effectiveness of their mentors, alternative certification programs need to secure better mentor teachers. It is hard enough for a cooperating teacher/mentor who is an effective instructor to coach a teacher candidate on instructional strategies, making it inconceivable that a non-effective mentor can do so, regardless of interpersonal skills working with other adults. Any teacher tapped to coach and otherwise support alternative certification teacher candidates must be, as **Teach For America** puts it, a "quantifiably successful" teacher.

VI. Selected Issues Raised by the *Review* and Conclusion

The *Teacher Prep Review* is a groundbreaking effort. On a massive scale never before undertaken for any field in higher education, we seek to identify components of teacher education that should be common to programs without regard to a program's location, size, affiliation or body of candidates, and to ascertain the degree to which each program provides these components.

Even a 1,000-page report would not be sufficient to explore all the potential implications of our findings, but here are a few important questions raised by the results that need to be addressed:

Why is elementary teacher preparation so weak compared to secondary teacher preparation?

Elementary programs continue to be far weaker than their secondary counterparts, with 1.7 times as many elementary programs as secondary programs found to be failing. The graphics below illustrate the differences in the distribution of raw scores of both elementary and secondary programs, with a larger proportion of elementary programs scoring 50 or less (on a 125-point scale) and a smaller proportion of elementary programs scoring 83 or more.

How big is the *Review*?

Number of institutions: **1,127**

Number of programs: **2,400**

Number of reading textbooks reviewed: **962**

Number of elementary mathematics textbooks reviewed: **19**

Number of student teacher evaluation instruments analyzed: **3,500**

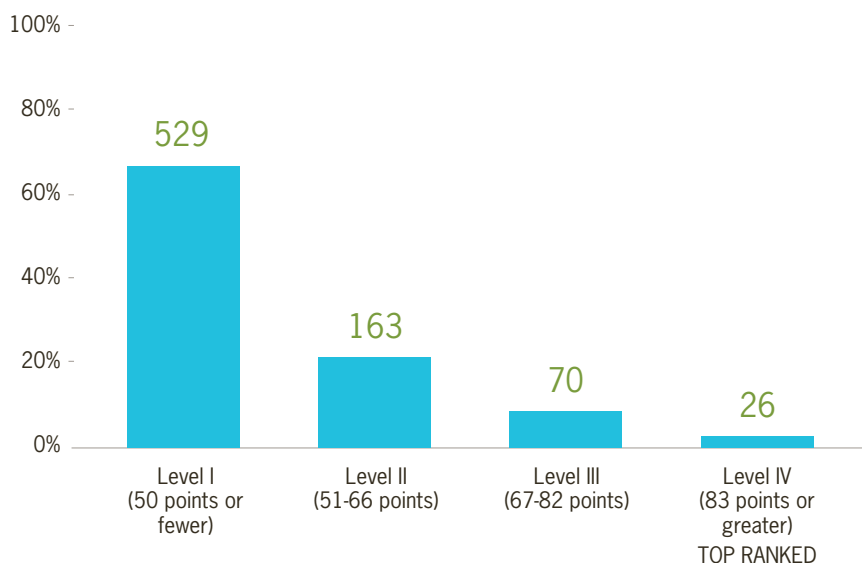Number of syllabi collected: **18,480**

Number of ratings: **19,000**

Number of staff, analysts and expert reviewers: **88**

Average time it takes to rate a program on a single standard: **80 minutes**

Average time it takes to rate an institution: **15-37 hours**

Fig. 44   Distribution of raw scores of elementary teacher preparation programs (N=788)

This graph displays the raw scores of the 788 ranked elementary programs in the Review. The highest score is 114 on a 125-point scale. The average score is 42. Sixty-seven percent of programs fall within Level I in terms of performance (≤50 on a 125-point scale).

Fig. 45   Distribution of raw scores of secondary teacher preparation programs (N=824)
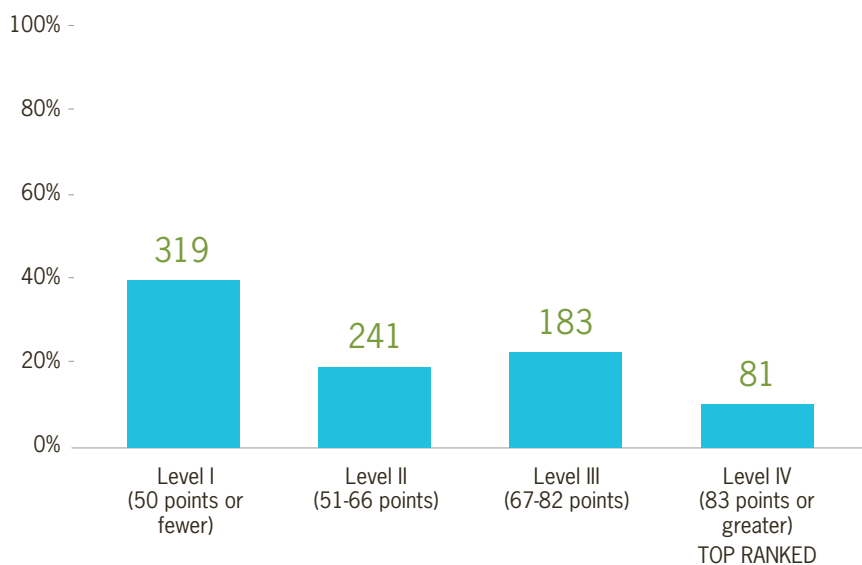
This graph displays the raw scores of the 824 ranked secondary programs in the Review. The highest score is 121 on a 125-point scale. Secondary program performance is better than its elementary counterpart, but the largest group of programs is still only at Level I in terms of performance (≤50 on a 125-point scale).

The poorer performance of elementary programs speaks to both the specialized training elementary teachers need and its continuing neglect.

As we discuss in the findings for Standard 2: Early Reading (see page 36), the teacher education field continues to disregard scientifically based methods of reading instruction, the most critical component of elementary teacher preparation: coursework in just 17 percent of elementary and special education programs equips candidates to use all
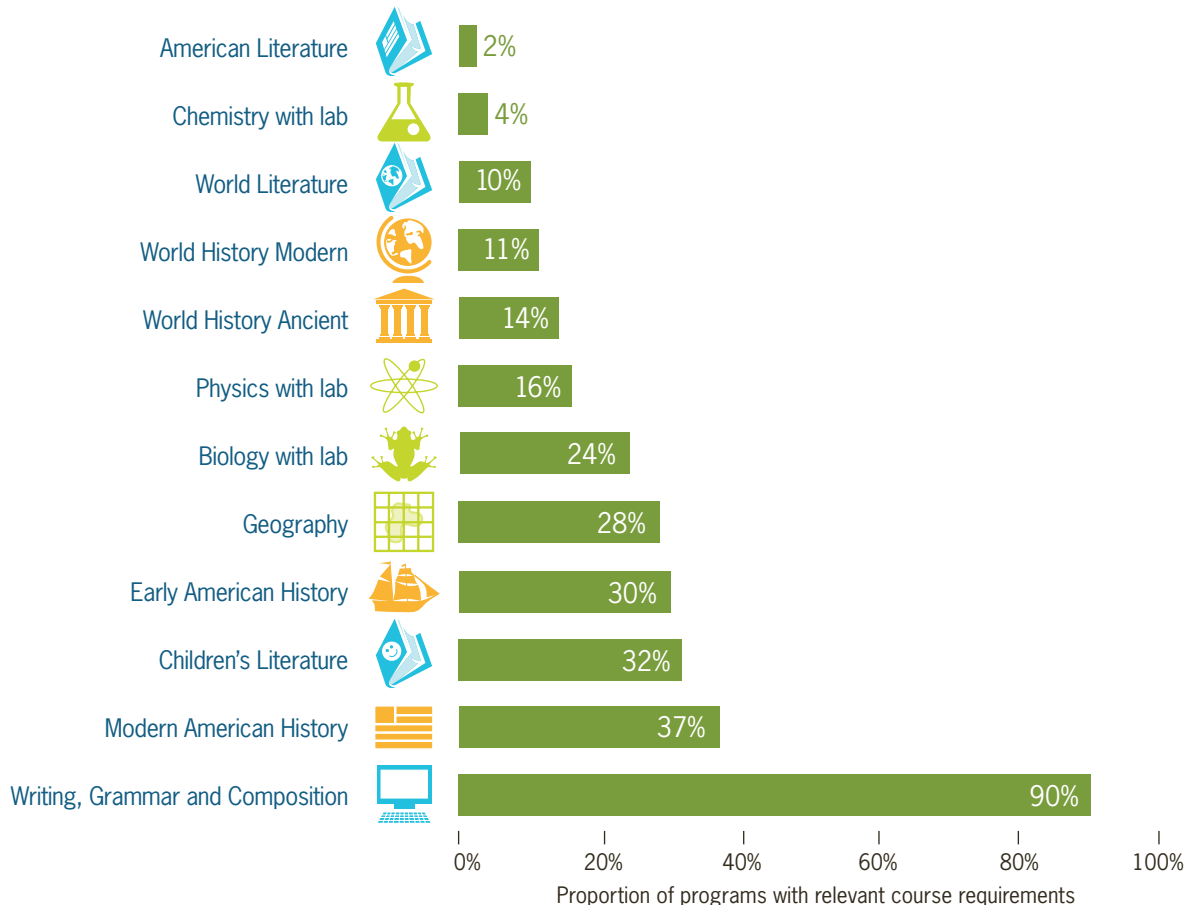
five fundamental components of reading instruction, helping to explain why such a large proportion of American school children (30 percent) never learn to read beyond a basic level.

The field also maintains a scattershot approach to STEM preparation of elementary teacher candidates. Looking across 907 undergraduate and graduate elementary programs, nearly half (47 percent) fail to ensure that teacher candidates are capable STEM instructors: these programs' requirements for candidates include little or no elementary math coursework and the programs also do not require that candidates take a single basic science course (with most giving candidates free rein to choose from a long list of narrowly focused or irrelevant electives).

In secondary preparation, only 10 percent and 20 percent, respectively, of the middle school and high school preparation programs we evaluated fail to ensure that candidates are prepared to teach every subject they could be certified to teach. In contrast, fully 72 percent of elementary preparation programs fail to require the coursework that would prepare teacher candidates for the core subjects of the elementary curriculum, creating what we have termed the "Capacity Gap."

Fig. 46   Is Teacher Preparation "College and Career Ready"?
(N=885 undergraduate elementary programs)

Subject	Proportion
American Literature	2%
Chemistry with lab	4%
World Literature	10%
World History Modern	11%
World History Ancient	14%
Physics with lab	16%
Biology with lab	24%
Geography	28%
Early American History	30%
Children's Literature	32%
Modern American History	37%
Writing, Grammar and Composition	90%

Proportion of programs with relevant course requirements

New college and career ready student learning standards require broad content knowledge of elementary teachers. Yet few programs require teacher candidates to demonstrate upon admission (through either testing or coursework) that they will be able to meet these higher demands, something we term a very real and disturbing "Capacity Gap."

It's no wonder that school district superintendents tell us that elementary teachers simply don't know the content they will be teaching.

Will teacher shortages be exacerbated by the changes in preparation advocated by NCTQ?

Teacher shortages certainly do exist in rural areas, urban areas, and for particular subjects such as special education, and secondary math and science. These shortages are chronic; they have existed for decades in spite of the fact that an enormous number of teacher preparation programs blanket the country and overall levels of enrollment in institutions are more than sufficient to fill all available teaching positions. If having well over 1,000 institutions generally overproducing teachers has not solved any shortage problem to date, we think that the problems and their solutions are simply divorced from the types of institutional changes we advocate to the extent that those changes may affect teacher production.

The solutions to chronic teacher shortages may come from greater use of distance learning, blended learning — or even boarding schools for the remote regions of states like Alaska. The solutions will not come from continuation of the status quo.

What is the relationship between NCTQ findings and states' "value-added" models?

A number of states, including Tennessee, Louisiana, North Carolina and Ohio, have produced reports about the effectiveness of an institution's teacher graduates, using so-called "value added modeling," or VAM. There seems to be a correlation between NCTQ findings and VAM models for some institutions, such as **Lipscomb University** (TN) and **Louisiana State University**, but what about findings that seem not to correspond?

Two factors that may contribute to this lack of correspondence

First, NCTQ looks at individual teacher preparation *programs* (e.g., undergraduate elementary programs certifying teachers in grades K-6), which are usually just *one* of several programs for elementary and middle school teachers offered by an institution. In contrast, every state report except for North Carolina's describes the effectiveness of all the graduates from an *institution* who teach in grades 4-8 (graduates from elementary and middle school programs, often including both undergraduate and graduate programs). The graphic below illustrates the approach taken by most states.

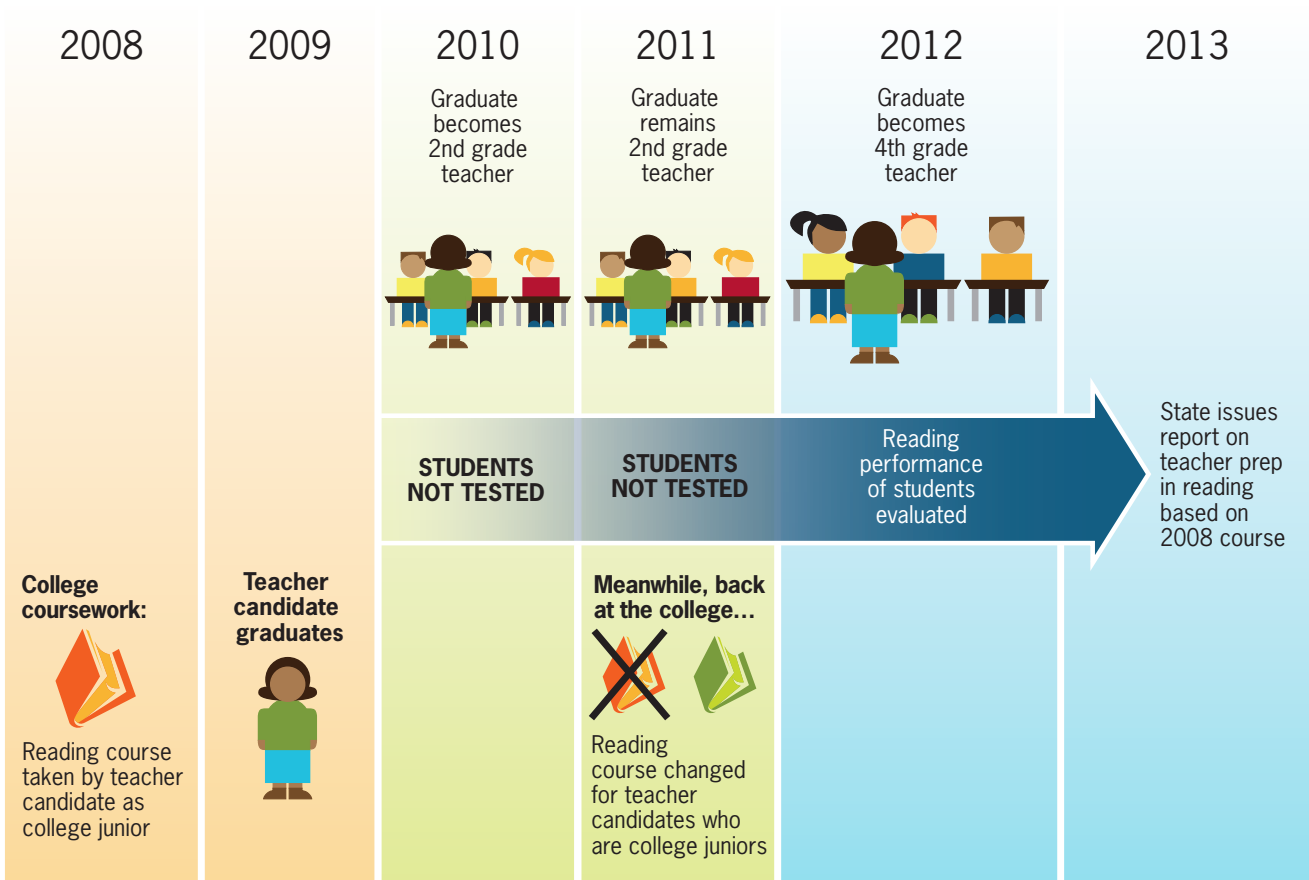Fig. 47 States combine the outcomes of multiple programs to produce a single score.
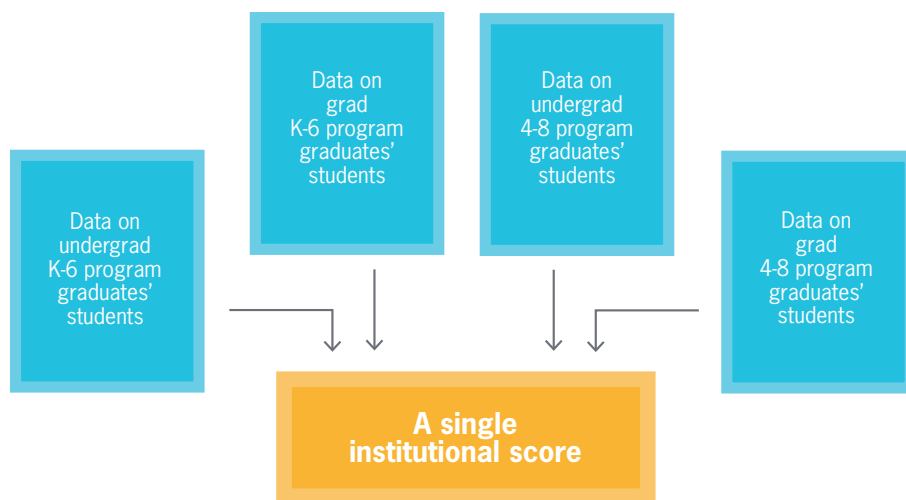
In contrast to state VAMs, NCTQ evaluates each program individually, as programs' fundamental approaches to preparation even on the same campus can vary dramatically.

Second, NCTQ evaluates the *most current program* for which we have been able to obtain information. States, however, are evaluating the program that may have been delivered as many as five years earlier. There can be a considerable time lag between when a candidate receives training in a program and when the effect of this training on the quality of instruction is measured. The graphic below illustrates the potential impact of this time lag with a simplified example of reading preparation.

Fig. 48   State VAM results may be outdated

2008	2009	2010	2011	2012	2013
		Graduate becomes 2nd grade teacher	Graduate remains 2nd grade teacher	Graduate becomes 4th grade teacher	
		STUDENTS NOT TESTED	STUDENTS NOT TESTED	Reading performance of students evaluated	State issues report on teacher prep in reading based on 2008 course
College coursework: Reading course taken by teacher candidate as college junior	**Teacher candidate graduates**		**Meanwhile, back at the college…** Reading course changed for teacher candidates who are college juniors		

NCTQ's evaluation of the preparation provided by a college's 2011 reading course may differ from a state's VAM report based on the performance of graduates who took the college's 2008 reading course.

Acknowledging these differences does not negate the need for NCTQ to conduct more research linking program practices and teacher effectiveness, providing at least more guidance on how to properly weight scores on each standard when computing programs' overall rankings. To that end, we are making our dataset available for a North Carolina study designed to shed light on the relationship between scores on our standards and teacher effectiveness. Because North Carolina teacher effectiveness data are tagged for specific preparation programs (unlike data used in any other state), and because the study will adjust the collection of data to account for the potential time lags noted above, this study may provide meaningful insights into the relationship between NCTQ evaluations and outcomes data.

For a more extensive discussion of the state data models that generate reports on the effectiveness of institutions' teacher graduates, see our report, *Teacher preparation program student performance data models: Six core design principles*.

Why do graduate programs perform particularly poorly?

We find a large disparity in program rankings for undergraduate and graduate programs, especially at the elementary level. In fact, except for the area of student teaching, graduate programs are consistently weaker than undergraduate programs, particularly in elementary math.[59] Graduate preparation is clearly inferior, not because of the quality of instruction, but because it is generally only one to two years in length instead of two to three years like undergraduate programs.

Fig. 49   Average scores of undergraduate and graduate elementary programs on key standards

Standard	Average score: undergrad elementary programs	Average score: grad elementary programs
Selection Criteria	2.2	1.2
Early Reading	1.8	1.3
Elementary Math	1.3	0.1
Elementary Content	1.0	0.9
Student Teaching	0.9	1.0
Combined: **Total unweighted average**	**1.6/4**	**0.9/4**

Scores are presented on a 0-4 scale, with 0 being the lowest score and 4 the highest.

Why is there a dearth of highly ranked traditional preparation programs in California?

California's unique approach to certification — primarily through year-long postbaccalaureate ("postbac") programs — has had a deleterious impact on training the state's elementary teachers. With about one-half of the one-year postbac program devoted to student teaching, it is virtually impossible to provide enough time for elementary teachers to get the preparation they need in reading instruction, specialized elementary math coursework and other topics likely to be offered only in a school of education.

California's 1970 law prohibiting undergraduate education majors encouraged something of a "race to the bottom" in elementary teacher preparation in the state, with institutions feeling that they would lose market share if they did not offer the postbac degrees allowed by the law. Fortunately, California has now passed legislation enabling more programs to expand from one year to two.[60]

Although postbac programs may be viable for secondary preparation, the results of California's experiment should give pause to those who believe that abolishing the undergraduate education degree is the key to reforming teacher preparation.[61]

A future for alternative certification?

We have not analyzed all facets of alternative certification programs and concede that some of the talented individuals they are designed to attract will succeed in the classroom against all odds. Nonetheless, given the inadequacies of most alternative programs and the fact that those inadequacies match or exceed those of traditional programs, the picture of how *typical* alternative candidates fare in the classroom can hardly be better than that of their traditional program counterparts. In fact, when we broaden the scope of our evaluation to include elementary alternative certification programs, the results can only be worse than for secondary programs: No elementary candidates can arrive at the provider's doorstep well-versed in the reading and elementary math knowledge they surely need, and there is no fast track for equipping them with that knowledge before day one in the classroom.

Most of the secondary alternative certification programs we examined have low admissions requirements and often insufficient content preparation requirements that betray the founding principles of the movement that motivated their creation. On the basis of these findings from our evaluation of programs for secondary teachers, we conclude that alternative certification is an experiment that has for the most part not lived up to its potential.[62]

In our view, the only reason not to pull the plug on the experiment of alternative certification is that traditional teacher preparation continues to have persistent flaws. Were traditional preparation to add the value that it should, teachers produced by alternate routes would never be competitive for jobs anywhere. As long as traditional teacher preparation continues to be so generally substandard, we recognize the need for, indeed the value of, limited, well-regulated alternative certification programs whose outcomes are monitored and made public. Alternative certification should never be given a free pass — and this report does not do so.

Conclusion

The education field is bloated, with no fewer than 1,450 colleges and universities (compared to only 189 in China, with four times our population) churning out twice as many elementary teachers as are needed. With professional accreditation shunned by half of institutions, the field operates with remarkably little self-governance. Although regulations and paperwork abound, they do not seem to be effective: In 2013, 50 institutions were threatened with probation by states if they did not make program improvements, a threat that is virtually meaningless both because of its scale and because it rarely comes to fruition. The field's own failings have made it seemingly answerable to everyone (we count ourselves among the guilty), but ultimately accountable to no one.

The irony behind all the fuss and fury over NCTQ's *Review* is that anyone who set about to apply a set of *objective* standards to assess the quality of teacher preparation, no matter from which perspective, might have turned up equally appalling results due to the incoherence of the field. It wouldn't matter if the "Not-NCTQ" assessment involved long, sustained visits to college campuses, surveys of graduates, or any one of a number of other sources of data we don't use. For example, if the Not-NCTQ group decided to assess programs on their adherence to a "whole language" approach to reading instruction, it would probably issue ratings as poor as ours, because there is no adherence to *any* approach to reading in teacher education: Most teacher candidates are taught that they need to develop their own unique approach to reading.

In fact, there is no area of teacher preparation in which a standard applied consistently will yield positive ratings unless it is so general as to be meaningless. In an area of preparation in which we estimate there are no fewer than seven common combinations of coursework,[63] any elementary math standard would have to be agnostic to almost every

feature of coursework endorsed by professional associations of math educators to produce rosy results when actually applied. Likewise, analysts using a standard for evaluating the feedback on classroom management that programs provide to student teachers could only produce positive results if it managed to divine the specifics of feedback provided by the blank sheets of paper or generic statements (e.g., "manages classroom well") that a considerable number of programs use for some or all parts of their observation instruments.

Much of what NCTQ has learned about teacher preparation is captured by the approach taken to early reading instruction by the teacher education field. While reviewing 2,671 courses intended to provide elementary teachers with the foundational knowledge needed to teach reading, we purchased and had experts review nearly 1,000 required textbooks. The median number of courses in which any single textbook is used is two; the mode is one course. The most any of the books is used is in 8 percent of the courses, a far cry from the typical use of core seminal texts in the introductory coursework for other disciplines and professions. Worse still, the most used book, *Literacy in the 21st Century: A Balanced Approach* (Gail Tompkins) is classified as an "inadequate" representation of the scientific findings behind reading, for "failing to capture the genuine implications of systematic, explicit instruction as well as promoting unfounded decoding practices."[64] The most frequently used textbook addressing all the material teacher candidates need to know with scientific accuracy is *Creating Literacy Instruction for All Students* by Thomas Gunning, and this book is used in only 4 percent of the courses.

There can be no justification for this lack of basic professional consensus and disregard for research, regardless of the opinion one holds of the *Teacher Prep Review*.

There is one possible exception to the chaos in teacher preparation, although some might view it as the cause of the chaos, not the exception to it. Much of teacher education shares a common vision for teacher preparation: to form the professional identities of teachers. The beauty of the teacher education field's focus on professional identity formation is that it carries no risk of failure: Because there are no standards by which it can be judged, all manner of preparation can be tolerated. Since the goal is to have teacher candidates embark upon a lifelong journey of learning, as distinct from knowing, widely varying content is hardly relevant, as actual knowledge is perceived by teacher educators as too fluid to be mastered and may even harden into bias. Instead, the aim is for each candidate to develop his or her own unique philosophy of teaching.

Teacher educators' conception of their mission is not known and certainly not shared by the general public (or even education policy makers). In contrast, NCTQ's vision, one we believe is closer to that of the general public, policy makers and certainly that of PK-12 leaders, is that teacher education should train teacher candidates to enter a classroom on day one with some degree of competence in specific skills. That is not to say that teachers should be in any way robotic in their instruction. None would dispute that teacher candidates will need to embark on a lifelong journey of learning and be reflective practitioners. What we do dispute is that the field's current "anything goes" approach to teacher preparation is the best foundation for a great profession. Instead, we argue that teacher candidates must solidly grasp content in the course of training and then learn how to convey that content to their students. To help achieve this goal they must be guided by instructors and practitioners with empathy, skill and wisdom borne of valid research and irreplaceable experience. Well-designed, coherent preparation is what new teachers need and deserve for their own sake and for the sake of the children entrusted to them.

Endnotes

1   Layton, Lyndsey (2014, April 25). Obama Administration Wants Better-Trained Teachers. *Washington Post.*

2   Cepeda, Esther (2013, December 15). Order in the Classroom. *Milwaukee Journal Sentinel.*

3   Mendez, Maria G. (2014, January 16). Update Teacher Prep Models and Outdated Classrooms. *Miami Sun Sentinel.*

4   PBS Newshour, "Are Teachers Being Adequately Trained for the Classroom? Study Says No," (June 18, 2013). Transcript retrieved May 8, 2014 at http://www.pbs.org/newshour/bb/education-jan-june13-teacher_06-18/

5   National Council for Accreditation of Teacher Education, *Transforming Teacher Education Through Clinical Practice: A National Strategy to Prepare Effective Teachers* (2010). Nancy Zimpher, the Chancellor of SUNY, co-chaired the panel that drafted this report.

6   Remarks to Bridging Teachers And Teaching, 2013 Cleveland Conference, December 5, 2013.

7   Ingersoll, R.M. (2007). A comparative study of teacher preparation and qualifications in six nations. *The Consortium for Policy Research in Education*, Philadelphia, PA. (China, South Korea); Wang, A.H., Coleman, A.B., Coley, R.J., Phelps, R.P., (2003). Preparing teachers around the world. *Policy Information Report*, Princeton, NJ: Educational Testing Service. (United States, United Kingdom); Teacher Education Ministerial Advisory Group. (2014). *Issues paper*. Australia; The El Group. (2014). Teacher education programs in Canada. Retrieved from http://www.schoolsincanada.com/TeacherEducationPrograms.cfm. *World of Education*. (2013). Teacher College Directory. Retrieved from http://www.educationworld.net/tc_finland.html (Finland).

8   New York City Department of Education, *Teacher Preparation Program Reports* (August 2013), accessed May 5, 2014 at: http://schools.nyc.gov/NR/rdonlyres/D9840D7D-7A36-4C66-817C-C48CFE5C017C/0/NYCDOETeacherPreparationProgram Presentation_August_2013.pdf

9   National Council for the Accreditation of Teacher Education.

10   Teacher Education Accreditation Council.

11   Council for the Accreditation of Teacher Preparation.

12   Stephen Sawchuk, "Standards Pose Teacher-Prep Challenges," *Education Week*, April 21, 2014 (accessed May 27, 2014 at http://www.edweek.org/ew/articles/2014/04/23/29cc-preparation.h33.html?tkn=WOWFPnxaxQNGooz52ej9rh5%2FQVZFW JlcOUKl&print=1)

13   Jamal Abdul-Alim, "Experts: New Teachers Can't Hide Behind Steep Learning Curve," *Diverse: Issues in Higher Education* (March 3, 2014)

14   This translates into a 34 percent increase in the number of *programs* that we can rank, comparing the first edition to the second: 1,200 in the first edition and 1,612 in this second edition.

15   When reporting findings on individual standards, the sample size for the evaluation may be larger than the total number of elementary and secondary programs noted here because findings for individual standards include scores for special education programs. We do not include the count of special education programs in reported counts of rankable programs, however, because special education program rankings are not reported to *U.S. News & World Report*.

16   Private institutions are not required to comply with open records requests, so we have gathered documents by other means (see our Methodology, Appendix B).

17   Further validation of our conclusion that private programs differ little in quality from public ones comes from comparisons of evaluations of private and public programs drawn from our 2010 study of Illinois teacher preparation. This study provides comparable evaluations of: 1) 12 public and 32 private undergraduate elementary programs, and 2) scores on the early reading standards of 27 public and 58 private undergraduate and graduate elementary and special education programs. Although the Illinois study as a whole encompasses far more standards than the *Review* — only the Early Reading Standard is the same in all respects in both — any significant differences in preparation offered by public institutions as opposed to private would have at least been hinted at in the study.

      In fact, both types of Illinois programs had average grades (somewhere between D+ and C-), with private programs' ratings just marginally higher. In contrast, both types of program had scores on the Early Reading Standard that averaged somewhere around C-, with public programs' ratings just marginally higher.

18   In fall 2013, we held four webinars attended by representatives from 83 institutions. The exchange was very productive and we now plan to hold webinars for teacher preparation program leaders regularly. More intensive communication following the publication of the second edition should help ensure that teacher educators know more about our ratings processes and how to appeal our findings.

19   We may refer to these institutions as "resubmitters".

20   Three standards are not included in this table for the following reasons: The **Lesson Planning Standard** results in *Teacher Prep Review 2013* will be the only results released on this standard; the **Equity Standard** is not included because reports were not included in the first edition in the *Review* and are included in this second edition only; the **Evidence of Effectiveness Standard** is not included because it is based on reports provided by states and does not rely on data submitted by institutions.

21   To meet the standard, graduate programs must also require an audition or the GRE.

22   Coursework in music history and art history is considered, but only for "strong design" designation.

23   These courses are available to elementary teacher candidates at **Pennsylvania State University – Harrisburg**.

24   In the first edition of the *Review*, we set aside data from 113 programs; these programs were included in the evaluation for this edition.

25   Indicators were broken out into their component parts. For example, an indicator used in the standard before its revision was awarded credit for the combination of establishing a positive learning environment, defined as dealing appropriately with time and materials and fostering engagement; in the revised standard, scoring for time, materials, and engagement is evaluated for each element individually.

26   Our analysis of statistical significance has a p-value of $p < 0.05$.

27   Cochran-Smith, M. and Fries, K., 2005. "Researching Teacher Education in Changing Times: Politics and Paradigms." Cochran-Smith, M. and Zeichner, K., eds. *Studying Teacher Education: The Report of the AERA Panel on Research and Teacher Education*. Washington, D.C.: American Educational Research Association.

28   Ronfeldt, M. (2012). Where should student teachers learn to teach? Effects of field placement school characteristics on teacher retention and effectiveness. *Educational Evaluation and Policy Analysis, 34*(1), 3-26.

29   Twelve states currently require that cooperating teachers be capable mentors and/or effective instructors: Arkansas, Connecticut, Florida, Kentucky, Louisiana, Maryland, New Jersey, North Dakota, Tennessee, Texas, Washington and Wisconsin; an additional three states will soon require one or both: Illinois, New Hampshire, Rhode Island.

30   We contemplated auditing school districts to triangulate the data on this issue and gain a better sense of whether school district staff were actually aware of the characteristics of cooperating teachers required by programs seeking student teaching placements. We rejected the plan as too difficult based on the difficulties encountered in surveying principals in our national study of student teaching.

31   Our analysis of statistical significance has a p-value of $p < 0.05$.

32   This is a conservative figure because of the approaches we took to evaluating this standard: Had we been able to analyze all the syllabi we needed to rate the programs, we believe our results would look not only different but better, with only 26 percent of programs not meeting the standard (down from 44 percent), 34 percent partly meeting the standard (up from 26 percent), and 41 percent meeting the standard (up from 30 percent).

33   Although standard scores are assigned by program, the evaluation for this standard is conducted across all programs at the institution that NCTQ has selected for evaluation.

34   This decision was not based on production; institutions of higher education produce about half of the teachers entering the classroom by alternate routes.

35 However, variations among both alternate and traditional routes blur distinctions. Some alternative certification programs offer student teaching (an apprenticeship in the classroom of another teacher who continues to serve as the teacher of record) rather than or in addition to internships, whereas some traditional teacher preparation programs offer both student teaching and internships.

36 Arkansas, California, Colorado, Connecticut, District of Columbia, Florida, Georgia, Idaho, Louisiana, Massachusetts, Maryland, Mississippi, Missouri, New Hampshire, New Jersey, North Carolina, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Virginia, Vermont and Wisconsin.

37 Smith, M. & Pandolfo, N. (2011, November 26). For-Profit Certification for Teachers Is Booming. *The New York Times*. Retrieved from http://www.nytimes.com/2011/11/27/us/for-profit-certification-for-teachers-in-texas-is-booming.html?pagewanted=all&_r=0

38 Given the way that production is reported, it is impossible to isolate secondary program production information.

39 We draw no conclusions from these paired figures. However, we note that while differences in enrollment and production figures in traditional preparation can often be explained by the fact that some share of those enrolled in teacher preparation are seeking a degree more than a career in teaching, the same does not hold true in alternative certification. To the extent that differences point to real attrition, they may signal the acceptance into the program of applicants whom higher admission requirements, including auditions, might have properly screened out.

40 We note that an overall grade on key standards is not provided for graduate secondary programs in the *Teacher Prep Review*; these grades have been calculated solely for this comparison.

41 2006-2007 figures from http://www.gradeinflation.com/ accessed May 23, 2014

42 Arkansas Department of Education: **Arkansas Professional Pathway to Educator Licensure (APPEL)**

43 The THEA, a test designed for the state's general college-going population with state-established minimum scores that are nearly high enough to allow selection of the top 50 percent of that population.

44 **Region 13 Education Service Center: Educator Certification Program (ECP)**, with an average GPA of 3.3 and an audition process.

45 **Houston Independent School District: Effective Teacher Fellowship (ETF)**, **Region 5 Education Service Center: Teacher Certification Program (TCP)**, **Region 1 Education Service Center: Project PaCE (Preparing and Certifying Educators)**, **Region 7 Education Service Center: Teacher Preparation and Certification Program (TPCP)**.

46 **Region 2 Education Service Center: Educator Preparation Program**, **Region 3 Education Service Center: Educator Preparation Program (EPP)**, **Region 19 Education Service Center: Teacher Preparation and Certification Program (TPCP)**, **Training via E-Learning: An Alternative Certification Hybrid (TEACH)**.

47 **YES Prep Public Schools: Teaching Excellence Program**.

48 The **Texas Institute for Teacher Education**.

49 The **New Jersey Department of Education: Provisional Teacher Program** requires subject-specific supplemental testing in general science certification, but not in general social science certification.

50 **A Career in Teaching: Alternative Certification Program (Corpus Christi)** advertises this possible fieldwork activity and its companion program (**A Career in Teaching: Alternative Certification Program (McAllen)**) is presumed to allow this as well. We note that the Texas Education Agency has issued reprimands for this practice.

51 **Quality ACT (Alternative Certification for Teachers)** and **State of New Jersey Department of Education: Provisional Teacher Program (PTP)**.

52 Unless contradicted by a response from the provider, we simply determined for evaluation purposes that the number is fewer than five in cases in which the explicit number of formal observations is not advertised, but we did not include those cases in the sample for this graphic.

53 **Dallas Independent School District: Alternative Certification Program**, **Houston Independent School District: Effective Teacher Fellowship (ETF)**, and **Region 13 Education Service Center: Educator Certification Program (ECP)**.

54 **ACT Rio Grande Valley**, **Training via E-Learning: An Alternative Certification Hybrid (T.E.A.C.H.)**, **Region 7 Education Service Center: Teacher Preparation and Certification Program**, **Region 12 Education Service Center: Teacher Preparation and Certification Program**, **Region 19 Education Service Center: Teacher Preparation and Certification Program** and **YES Prep Public Schools: Teaching Excellence Program**.

55 **ACT Rio Grande Valley (RGV)**, **Quality ACT (Alternative Certification for Teachers)**, **Region 7 Education Service Center: Teacher Preparation and Certification Program (TPCP)**, **Region 19 Education Service Center: Teacher Preparation and Certification Program (TPCP)**, **Training via E-Learning: An Alternative Certification Hybrid (TEACH)**, and **YES Prep Public Schools: Teaching Excellence Program**.

56 **Houston Independent School District: Effective Teacher Fellowship (ETF)**. Mentor teachers must be in the highest or next to highest level of a four-part evaluation scale that incorporates student performance data.

57 **Houston Independent School District's Effective Teacher Fellowship**, a recent and much-improved reincarnation of its previous alternative certification program, has enhanced the role of its program supervisors (i.e., "teacher development specialists") because of perceived inadequacies as instructional coaches of even the mentors it selects using relatively strong criteria.

58 A report that we will soon issue that reviews requirements for secondary content preparation in more than half of the states supports the threshold of 30-SCHs for majors.

59 Texas is the only state that allows alternative certification providers to be profit-making businesses.

60 We had sufficient data on 47 institutions to evaluate both early reading and elementary math preparation at the undergraduate and graduate levels. Teacher candidates received training that earned the same scores in both subjects and both types of program at only three institutions (6 percent), out of which four programs in two institutions did not meet either of the two standards. In only three institutions did programs earn the same scores in both the math and reading standards for their undergraduate programs; in 21 institutions, graduate programs earned the same scores on both standards, but in all cases, the scores "did not meet standard." In 22 of the 47 institutions, the difference in math scores is based on the fact that there is no elementary math content coursework at all required of graduate candidates.

61 California Senate Bill No. 5 (2013-2014).

62 James Koerner may have been the first prominent critic of teacher education to make the elimination of undergraduate education degrees a central reform strategy. See Koerner, J. (1963). *The miseducation of American teachers*. New York: Houghton Mifflin.

63 Not even addressed in this evaluation is the fact that there is some evidence that programs requiring that candidates take coursework while teaching full time generates a drag on the performance of their students.

64 Greenberg, J., and Walsh, K. (2010). Evaluating the Fundamentals of Teacher Training Programs in Texas, NCTQ.

65 Deborah Glaser, one of the expert reviewers in reading. Bios are found at http://www.nctq.org/teacherPrep/ourApproach/whoWeAre/expertAnalysts