

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.

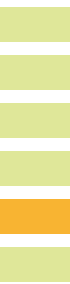
Recommendations for state policy makers

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.