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Developing State Policy to Ensure a “Highly Qualified” Teacher in Every Classroom

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Summary

If recent efforts to raise student achievement are to succeed, all school children must have access to highly skilled teachers. Research increasingly demonstrates that teachers are critical influences on student learning. In addition to discussion of how to produce an adequate supply of teachers with the requisite skills, research reveals much about the qualities of effective teachers. Good teachers know their subjects deeply and understand how to teach them. They understand how standards, curriculum, and assessments interact and how to use these in their classrooms. They know how to diagnose student learning and adapt instructional approaches to meet student needs. And, they know how to adapt to ever-changing classroom situations.

The reauthorization of the Elementary and Secondary Education Act (ESEA) as No Child Left Behind added a number of important new components to the federal law and to requirements for teacher qualifications. Among these is the requirement that all teachers of core academic subjects (including elementary grades) be “highly qualified” by the 2005–2006 school year. The law lists as core subjects English, reading/language arts, mathematics, science, foreign language, civics and government, economics, the arts, history, and geography.

The new federal statute places boundaries around the definition of a highly qualified teacher—possession of a bachelor’s degree, demonstrated subject matter competence, and full state licensure. However, there is considerable room for states to determine what “highly qualified” means and what steps will be required for teachers to meet the definition. The law encourages states to employ both traditional teacher preparation programs and alternative routes to meet the goal of a highly qualified teacher in every classroom.

No Child Left Behind gives states a fair amount of leeway to shape teacher preparation requirements and qualifications. At the same time, it offers an opportunity for states to take advantage of what is known about preparing effective teachers and assuring that a license to teach is meaningful.

This Issue Brief offers advice to governors as they seek to shape their states' policies to meet the letter and spirit of the federal law. The brief suggests five policy strategies designed to promote high quality teacher preparation programs and licensing standards:

- Establish standards of good teaching;
- Require a blend of subject matter and pedagogical preparation;
- Require a period of induction under the supervision of a mentor teacher;
- Develop a system of performance-based licensing; and
- Promote incentives to recruit and retain teachers.

What is Driving the Need for Highly Qualified Teachers?

Standards-based education, the backbone of contemporary education reform, aims to ensure that all students achieve at high academic levels. Well-prepared, highly skilled classroom teachers are critical for ensuring that students of diverse backgrounds and learning needs meet the rigorous standards states have established for student learning.

Research has shown what common sense would suggest: Children with high quality teachers are able to make continuous academic progress. Those with less effective teachers struggle, often not successfully, to keep up.

Teacher effectiveness trumps nearly every other variable, from class size to class composition, as the determinant of student achievement. In a Texas study, nearly half the variation in test scores between white and African-American students was attributable to differences in teacher quality.¹ Researchers in a Tennessee study found that teachers have a profound and cumulative effect on student achievement. After three years of ineffective teachers, students scored at levels that were less than half of those of their peers who had benefited from more effective teachers.²

All students need and deserve teachers of high quality. That need is perhaps most starkly displayed in the nation's low-performing schools. These schools—many of them urban and many of them eligible for federal Title I funds for economically disadvantaged students—typically have high concentrations of students who live in poverty and/or come from households in which English is not the primary language. Yet teachers who are the least well prepared for these educational challenges often are placed in these schools.³

A study in California showed that students in that state's lowest performing schools are up to five times more likely to be taught by under-prepared teachers than are students in high performing schools.⁴ A similar pattern is evident in New York where urban schools, typically the lowest performing, have the highest number of under-prepared teachers.⁵

Moreover, each year, thousands of teachers are assigned to classes for which they have little or no academic preparation. A recent study, for example, revealed that more than half the teachers assigned to physical science classes did not major or minor in any physical science; half the history teachers have no major or minor in history; one-third of mathematics teachers did not major or minor in math; and one-quarter of English teachers have neither a major nor a minor in English or any related subject. This problem is even more severe in high poverty schools where it is not unusual to find more than half the classes taught by teachers who have but a cursory background in the subjects to which they are assigned.⁶

We do a serious disservice to students when we assign them to teachers who are not adequately prepared for their jobs. We all but ensure that academic success will be out of these students' reach. The "highly qualified teachers" component of No Child Left Behind provides states a chance to remedy these deficiencies in the education system.

What Does Highly Qualified Teaching Look Like?

What makes for a well-prepared teacher? How do we know effective teaching when we see it? It turns out there is no simple answer to this question. In fact, knowledgeable people are likely to disagree on the response. However, research suggests that effective teachers share a number of common attributes and skills.

Good teachers know the subject(s) they teach. They understand the content deeply enough that they are able to think through a sequence of learning for their students and anticipate where and how student misunderstandings are likely to arise.⁷

Effective teachers know how to teach their subjects. They have a repertoire of instructional skills and a well-developed ability to communicate effectively with their students about the content of the lessons.⁸

Good teachers understand how standards, curriculum, and assessments link together to create a coherent educational system. They understand the inter-relationships among academic standards for student learning, curriculum to impart those standards, and various ways to assess whether students are learning what they must in order to meet the standards.

Effective teachers are able to diagnose individual students' learning needs, and adapt instructional approaches accordingly. They tailor instructional strategies and methods to give all students, regardless of learning style, a chance to absorb the required instructional material. And they are able to use a variety of means and measures—standardized tests, classroom-developed paper and pencil exams, performance-based demonstrations—to assess the extent to which students have mastered the curriculum.⁹

Finally, **good teachers have the ability to adapt quickly to ever-changing classroom situations.** The classroom is never a static environment. Being able to rise to the challenge of unanticipated circumstances and events, and to make decisions at a moment's notice, are hallmarks of effective teaching.

According to a recent poll commissioned by the Educational Testing Service (ETS), the American public equates quality education with quality teaching. The public believes teachers need subject matter knowledge and more. The bipartisan survey, conducted jointly by Democratic pollster Peter Hart and Republican pollster Robert Teeter, found that the public defines quality teaching as, "a teacher in every classroom who has a gift for designing learning experiences that engage young people and successfully communicates information and skills."¹⁰

Clarifying the Debate: Traditional versus Alternative Certification

There has long been a debate in education that typically is posed as traditional teacher preparation *versus* alternative preparation. Traditional teacher preparation, the current pathway for most teachers-to-be, requires four or five years of fulltime study in an institution of higher education. In the course of this preparation, teachers complete a bachelor's degree—sometimes in education, sometimes in an academic subject, depending on institutional and state requirements—and also complete coursework designed to prepare them for the classroom. Such courses, called pedagogy, can run the gamut from child and adolescent development to classroom management to methods for teaching discipline-specific subjects.

Alternative preparation programs typically are designed for potential teachers who already possess a bachelor's degree and complete teacher preparation while they teach. Many of these programs are targeted to particular groups of people—new college graduates, mid-life career changers, or minorities, for example—or to instructors in special needs areas, such as mathematics, science, special education, or hard-to-staff schools.

There is no single model for alternative preparation. Programs differ in terms of their goals, selection processes, admission requirements, and pre-service requirements.¹¹

It is important for purposes of this discussion to distinguish alternative preparation and licensure (which requires that some set of standards be met) from emergency licensure (which requires virtually no teacher preparation at all).¹²

Proponents of traditional teacher education argue that alternative programs give pedagogy short shrift by relying on subject matter knowledge to carry the day in the classroom. Proponents of alternative programs say that traditional preparation restricts the pipeline of potential teachers and sacrifices academic rigor for “soft” education courses.

This debate is often expressed as the choice between a regulated system (traditional teacher preparation) and a less regulated, or even de-regulated, system (alternative preparation).¹³ While differences of opinion are likely to continue, there is little question that the combination of increasing enrollments, the pending retirement bulge as Baby Boomers move out of teaching, and the new federal law is creating a pressing need to encourage more—and more qualified—people to choose a teaching career. In order to fill that need, many states will be obliged to create and support multiple pathways to teaching.

Whatever the preparation route, traditional or alternative, states must ensure that *all* programs are of high quality and produce effective beginning teachers. Toward that end, all teacher preparation programs ought to be based on the same elements of good practice and graduates of all programs should be required to meet the same standards of knowledge and practice for licensure. In short, methods of delivery might vary; standards should not.

Evolving State Definitions of Highly Qualified Teachers

Once again, the new federal law defines a “highly qualified” teacher as one who has earned a Bachelor's degree, has demonstrated subject matter competence, and holds full state certification. According to the Education Commission of the States (ECS), states are still grappling with their definitions of highly qualified teachers and with how to reconcile federal and state requirements. Some, however, have taken steps that set them on track to conform to the new federal law.

Colorado defines a highly qualified teacher as one who holds a current, valid Colorado Provisional, Professional, or Alternative Teacher License with an endorsement in the content area(s) taught. In order to be licensed, a Colorado teacher must hold a bachelor's or higher degree, have completed a state-approved traditional or alternative teacher preparation program, and have passed the state board of education-approved content test in the content area(s) being taught. To be considered highly qualified to teach in an additional content area, the teacher must provide the employing school district with documentation showing completion of 24 semester hours or its equivalent in the content area to be taught or with evidence of having passed the appropriate content test.

Connecticut is addressing the federal requirement through its long-standing portfolio assessment process that all beginning teachers must complete successfully to move from a beginning license to a provisional license during their first two years on the job. The state is using its Common Core of Teaching—which

since 1999 has defined the professional knowledge and skills teachers need to have—as the general standard for highly qualified teachers. Prior to licensure, all teachers are required to complete a subject area major, demonstrate competence in basic skills, and pass the Educational Testing Service’s (ETS) Praxis II exam, which assesses subject matter and pedagogical competence.

Illinois is requiring that all new teachers hold a bachelor’s degree, pass a basic skills test, and earn a certificate with a special endorsement. In addition, teachers of Early Childhood Education (ECE) must pass the state ECE test, elementary teachers the state elementary test, and secondary teachers a subject matter test of the subject(s) they intend to teach. Beginning in October 2003, new teachers must also complete a test of a common core of knowledge that will assess them on the Illinois Professional Teaching Standards.

North Carolina is requiring that all new teachers complete an approved teacher education program and meet respective Praxis II testing requirements or be enrolled in an approved alternative route program to receive a full state license. Elementary teachers not new to the profession who hold a full state license may be designated highly qualified by meeting the state’s “high, objective, uniform state standard of evaluation” (HOUSSE) as allowed by NCLB. Middle and secondary teachers not new to the profession can meet the requirements based on completion of the appropriate Praxis II exam; an undergraduate academic major in the subject taught; National Board Certification in the subject taught; or through the HOUSSE. Proposed changes to the Praxis requirements, which were still under consideration in early 2004, could alter the state’s definition.

If **California’s** experience is any example, the federal government appears to be serious about holding states to a fairly rigorous definition of “highly qualified.” California attempted to have its definition of highly qualified teachers include those holding emergency licenses and was rebuked by the U.S. Department of Education. The California State Board of Education subsequently adopted a new definition that seems to address the earlier concerns and considers those on emergency permits, among others, as not highly qualified. The plan includes options for how new and veteran elementary, middle, and secondary teachers can demonstrate subject competence, including an undergraduate major in the subject; a graduate degree in the subject; a passing score on a subject matter exam validated by the California Commission on Teacher Credentialing; coursework equivalent to an undergraduate major; or advanced certification or credentialing, such as certification from the National Board for Professional Teaching Standards.

Building a State Policy System to Ensure Highly Qualified Teachers

To meet the letter and spirit of the federal requirements, state policy needs to provide the architecture around which teacher preparation programs are constructed and teacher licensing standards are established. Governors should consider the five research-based elements described below as the core of state policy designed to ensure a highly qualified teacher in every classroom.

Establish Standards of Good Teaching

As a complement to student academic standards, states should establish standards of good teaching. What do teachers need to know and be able to do? States can then require that an approved teacher preparation program be structured around these

Elements of a State Policy System to Ensure Highly Qualified Teachers

- Standards of good teaching
- A blend of subject matter and pedagogical preparation
- An induction period under the supervision of a mentor teacher
- A performance-based licensing system
- Incentives to recruit and retain teachers

effective teacher standards. A common set of standards of good practice that applies to all teacher preparation programs across a state sends a powerful message about what good teacher preparation entails and what good teaching looks like.

A number of states have established and implemented such standards, either by adapting those developed by the National Board for Professional Teaching Standards for experienced teachers or by using the beginning teacher standards developed by the Interstate New Teacher Assessment and Support Consortium (INTASC). As of 1998, 21 states had developed beginning teacher standards.¹⁴

Require a Blend of Subject Matter and Pedagogical Preparation

As previously described, research suggests, and a number of national reports recommend, that teachers need to be conversant both with the subjects they teach and with ways to communicate these subjects to students.¹⁵

Teachers need to know the subjects they teach. A recent study by the Educational Testing Service (ETS) showed that 8th-graders whose teachers majored or minored in mathematics scored 40 percent higher—relative to average grade-level scores—on the National Assessment of Educational Progress (NAEP) than did students whose teachers did not major or minor in mathematics.¹⁶

Student academic standards revolve around the core subjects—mathematics, history, science, and literature—and teachers must be well versed in the content covered by the standards in the subjects that they will be teaching. Teacher understanding of the subject matter needs to go well beyond that covered by student standards such that teachers are able to break down and convey knowledge and concepts in ways that help students learn.

There is also reasonable consensus in the research community that elementary teachers, who instruct in as many as a dozen subjects, need a broad liberal arts background in order to provide the foundation for teaching the core subject areas. Secondary teachers ought to be required to complete an academic major or the equivalent in the primary subject they plan to teach. If they intend to teach more than one subject, they ought to complete at least a minor or the equivalent in that area. Faculty in some schools of arts and sciences are working with education school faculty to more effectively design courses of study in the content areas that will help teachers acquire appropriately deep levels of content knowledge.

Knowing the subject matter, however, is not enough. Teachers also need to know how to teach their subjects to students. This requires a core of pedagogical knowledge on topics such as child and adolescent development, learning theory, strategies for teaching the discipline-based subjects for which the teacher will be responsible, and the principles of managing a classroom. For elementary teachers, preparation for teaching reading is also essential.¹⁷

Information about practice—the pedagogy of instruction—can be transmitted in a variety of ways. It can, for example, be accomplished through university-based classes taught by university faculty, through courses taught by experienced classroom teachers at a school or other setting, or through courses taught on-line. The point is not for state policy to specify the method of pedagogical preparation, but to ensure that all teacher preparation programs include a structured opportunity for teacher candidates to gain an understanding of the core of educational theory and the techniques that lie at the heart of successful classroom practice.

Require a Period of Induction under the Supervision of a Mentor Teacher

New teachers need a firm foundation of supervised classroom practice on which to build. Research shows that beginning teachers who have the continuous support of a skilled mentor are twice as likely to stay in teaching and are much more likely to be able to move quickly beyond classroom management concerns and focus on student learning.¹⁸

According to the U.S. Department of Education, as many as 20 percent of teachers leave the profession within the first year and nearly twice as many leave within three years. Some reports put the early career attrition rate of urban teachers at 50 percent.¹⁹ Teachers leave for a variety of reasons, but one of the primary of these is lack of support. Induction with mentoring helps to fill that support gap and retain teachers in the profession.

A study by the New Teacher Center at the University of California at Santa Cruz of a group of teachers who participated in California's required two-year induction program called BTSA (Beginning Teacher Support and Assessment) found that 88 percent of those in the study remained in the profession a full seven to eight years following their participation.²⁰ A study in Rochester, New York, revealed that 95 percent of teachers who had begun teaching in that district in 1985 and had participated in the district's new teacher induction program were still teaching in the district a decade later.²¹

Supervised induction provides the opportunity for novice teachers to link the theory of instruction with classroom practice. Because they have the support of an experienced colleague, induction offers new teachers a kind of safety net as they develop their repertoire of instructional skills and strategies, and prepares them much more quickly for truly independent professional practice.²²

Clinical practice under the supervision of a mentor should not be the end of induction. Induction ought to conclude with a comprehensive summative review, preferably conducted by the mentor. Studies of districts that have had peer review systems in place for a decade or more show that these kinds of reviews tend to be extremely thorough and are based on intensive review of teachers' professional practice.²³ This written review should be based on the state's standards for effective practice, and a positive review ought to be one of the conditions of licensure.

Establish a Performance-Based Licensing System

Completion of a teacher preparation program of the traditional or alternative variety is simply that, completion of a program. It does not signify a high quality teacher.

A variety of organizations have recommended that prior to licensing, teachers be required to demonstrate what they know about the subjects they plan to teach and about teaching.²⁴ States can accomplish this by implementing a performance-based licensing examination. This exam ought to be required of all licensure candidates regardless of the type of teacher preparation program they complete.

A number of states are designing such exams. More than 30 states, for example, now require teacher candidates to pass ETS' Praxis II tests of subject matter knowledge and pedagogy prior to licensing. A few states—such as Connecticut and Indiana—are also using or developing classroom-based assessments of teaching ability and performance.

A performance-based exam can go a long way toward assuring that only well-qualified and competent teachers are licensed. In addition, an exam that spans all types of teacher preparation programs can serve to dampen, if not eliminate, the debate about the relative quality of traditional and alternative preparation programs.

Along with a licensure exam for beginning teachers, states should establish a system of periodic license renewal. Renewal need not be based on an exam. No Child Left Behind, for example, requires that states and school districts offer teachers continuous opportunities for high quality professional development. Completion of an approved professional development package could serve as the means of license renewal.

Promote Incentives to Recruit and Retain Teachers

This issue brief is primarily about defining “highly qualified” teachers and establishing state policies to bring this definition to life. However, these policies will profit us little if we cannot recruit adequate numbers of people into teaching and create and sustain the conditions that encourage teachers to remain in the profession.

Teacher pay is not enviable, and working conditions are not always welcoming. Thus, it will take a combination of state and district incentives to recruit and retain high quality teachers. Incentives might include scholarships and loan forgiveness programs for individuals interested in becoming teachers; low-interest housing loans so teachers can buy homes; and early contracts and signing bonuses, especially for teachers who agree to teach in hard-to-staff schools or to teach subjects in which shortages are most severe.²⁵

Other kinds of incentives will be required to keep teachers in the profession over the long haul. Among those to consider are well-qualified and supportive administrators; job differentiation that allows teachers to assume leadership roles without leaving teaching; and differentiated pay structures that recognize teacher performance, willingness to take on challenging positions, and leadership responsibilities.

Governors’ Critical Role

The new federal requirement for a highly qualified teacher in every classroom presents both a challenge and an opportunity for states. The need for highly skilled teachers is irrefutable. Teachers provide the crucial link between students and learning. State policies can communicate powerfully a state’s intentions. The opportunity, then, is to promote state policies that drive teacher preparation and licensure toward the intended goal. A solid set of policies designed to ensure that the term “highly qualified teachers” has meaning in practice as well as theory can go a long way toward fulfilling a state’s obligation to provide well-prepared teachers to all of its students.

The challenge for many states, particularly those states already experiencing teacher shortages, is to resist the temptation to meet the federal standard in the least rigorous way possible. We will not obtain better teachers by lowering standards or qualifications. Governors’ leadership is crucial here.

Governors can show that they are committed firmly to state policies that recognize the critical connection between skilled teaching professionals and improved student achievement. They can serve as conveners of major stakeholders—policymakers, educators, parents, and interested agencies and organizations—to shape a state consensus about high quality teaching and the state policies that can support its development. They can use their high profile office to communicate the importance of sound policies on well-designed teacher preparation and licensure and to lead efforts to design and enact such policies. And they can set in motion procedures that keep the pressure on to ensure that policies once enacted are implemented faithfully. By word and deed, then, governors can convey that state policy and practice must match the federal legislative intent that every classroom be staffed by a highly qualified teacher.

Endnotes

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