THE NUMBERS GAME II: BRINGING HIGH-Quality TEACHERS TO ALL SCHOOLS

by Carla Claycomb

NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION
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Other NASBE reports on the teaching profession and related topics include:

Moving Past the Politics: How Alternative Certification Can Promote Comprehensive Teacher Development Reforms. The ideological debate over how to prepare a new generation of teachers has reached a fever pitch. This politically charged argument, however, clouds the complexities of the situation and hinders the ability of state policymakers to make judgments about alternative certification programs and policies. The predominant arguments both for and against alternative certification confuse the process of teacher preparation with the product of teacher preparation. This Issue Brief takes the viewpoint that quality alternative certification programs offer a way to develop a broader pool of prospective teachers while also helping states address concerns about teacher development, professionalism, and retention. (30 pp., $10.00)

The Full Circle: Building a Coherent Teacher Preparation System examines the issue of improving teacher preparation by more fully coordinating programs and policies across K-12 and higher education. Topics include coordinating K-12 and higher education to support high-quality teacher preparation; building linkages within higher education to support teacher preparation; building a coordinated system of new teacher support; and ensuring program results with an effective accountability system. (52 pp., $12.00)

Principals of Change: What Education Leaders Need to Guide Schools to Excellence examines the changing role of the principalship and provides recommendations on the reforms needed to ensure that every school has a well-qualified principal. Topics covered include the growing shortage of qualified principals; recruiting high-quality candidates; developing a standards-based vision for the principalship; dramatically improving principal preparation and professional development programs; ensuring that the best principals go to the schools that need them the most; and retaining good principals once they are on the job. (40 pp., $12.00)

Ensuring a High-Quality Teaching Work Force: Special Issue of the State Education Standard. Articles include Barnett Berry on alternatives in teacher preparation; Jon Snyder on New Haven, California's teaching quality system; teacher induction programs; retaining and recruiting the best teachers for urban schools; and many more. (48 pp., $10.00)
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In 1998, NASBE convened its Study Group on Teacher Supply and Demand in response to widespread concerns regarding teacher shortages. Among the Group’s findings was that this national “teacher shortage” was not the result of the actual number of teachers prepared and licensed to work in schools. Rather, the shortage was the result of uneven distribution of teachers across subjects and geographic areas and high rates of attrition among new teachers. In other words, while states were preparing sufficient numbers of teachers to fill the demand, these teachers were not willing or able to teach what and where they were most needed. To exacerbate the problem, estimates were that one-third to one-half of all new teachers left teaching within five years, meaning that efforts to attract new candidates to teaching were like trying to fill a proverbial bucket that was riddled with holes. The result of the 1998 Study Group’s deliberations was NASBE’s influential report, The Numbers Game: Ensuring Quality and Quantity in the Teacher Workforce. This report contained five overarching recommendations:

- **Standards:** To improve the quality and quantity of teachers available to schools, state boards of education need to simultaneously develop a standards-based system of teacher preparation, evaluation, and development while continuing to recruit more promising teacher candidates to the field and finding effective ways to encourage them to stay. Doing this may require state boards to consider new ways of allocating resources and professional authority to encourage change.

- **Teacher Recruitment:** States need to formulate policies and programs acknowledging that the problems in teacher recruitment and supply will not be solved through blanket strategies, but through targeted programs that strategically recruit teachers with particular skills and characteristics.

- **Teacher Retention:** States need to build policies that recognize retention of high-quality teachers as one of the greatest problems of supply and demand, and therefore they should improve the support, services, and growth opportunities available to teachers in order to encourage good teachers to remain in the field.

- **Teacher Education and Professional Development:** States should create policies that extend teacher education beyond traditional university teacher preparation programs and facilitate a variety of high-quality ways in which teachers and teacher candidates can develop the knowledge and skills required to bring students to high standards. States should also consider various methods of teacher education that may attract candidates to, rather than deter them from, careers in teaching.

- **Teacher Licensure and Certification:** States need to create policies that hold
individuals to high standards of knowledge and performance, more than rigid course and degree requirements, in order to receive a license to practice as a teacher or a certificate of advanced practice. These standards should be applied for every teaching credential issued by the state in order to preserve the long-term integrity of licensure, regardless of short-term needs for individuals to fill vacant classrooms.

NASBE’s arguments concerning the “real” problems of teacher supply and demand and the related Study Group recommendations generated discussion and activity in many states that shifted the policy focus from increasing the number of licensed teachers to developing targeted recruitment, development, and retention strategies to improve the teacher workforce.

Since 1998, the situation on the ground has shifted drastically. Estimates of the number of new teachers needed over the next decade are considerably lower than they were in 1998. NASBE’s contention that the teacher supply problem is one of retention and distribution, rather than sheer numbers, has grown in popularity among policymakers and researchers alike and now forms the basis of policy decisions in many states. Economic factors, including the need for many school districts to lay off personnel due to budget shortfalls, have also affected the teacher-employment picture. Most importantly, however, the federal government passed new legislation with the 2001 reauthorization of the Elementary and Secondary Education Act (the No Child Left Behind Act, or NCLB) that profoundly impacts the way states need to look at their teaching pool. NCLB does this in at least three ways:

- It defines for states what a “highly qualified” teacher is and requires that all teachers be highly qualified by the 2005-06 school year. This means that states need to ensure that a sufficient pool of “highly qualified” teachers exists from which schools and districts can hire, and that the teachers in the pool are willing and able to teach in the schools that need them.

- It sets goals for student achievement that require all students in all schools to be proficient according to state standards and assessments by 2013-14. This means that every single student needs to be taught by teachers who have the knowledge and skills they need to bring students to high standards. As this report explains, actually developing teachers who are able to bring students to high standards may require policies and programs that are very different than those that aim to meet the federal requirements for teachers who are “highly qualified.”

- It begins to link teacher quality and school quality issues by setting a clear agenda that focuses on improving student achievement, and it sets requirements for the ways in which states must intervene to improve failing schools and the teachers that work in them. In other words, the legislation requires states to link teacher quality, instructional improvement, and student achievement in order to achieve compliance.

Federal law makes crystal clear the expectation that all students learn. Building a system that can meet that expectation requires states to place school improvement and teacher development at the top of their agenda, because effective schools and the effective teachers who work in them are critical to improving student achievement.

Now, in 2003, states are met with a flurry of new requirements that are taxing both state budgets and education department personnel. With a strong national consensus that every school should have what it needs to bring every student to high standards, and with legislation to give life to that notion, states cannot afford to ignore teacher development issues. Nor can they afford to deal with teacher development separately from issues of student achievement and school improvement. Indeed, school improvement depends on strategic approaches to teacher development.

This report expands on the Study Group’s work done in 1998 by envisioning teacher supply problems within the context of teacher development and school improvement. It argues that without focusing on developing a comprehensive system of teacher development and linking school improvement to improvements in teacher quality and retention, the bucket will always have holes.
Good teaching is critically important. Indeed, studies that examine the impact of teaching on student achievement have found that teacher expertise accounts for more variation in student reading and math achievement than socioeconomic status. In the No Child Left Behind Act, the federal government acknowledges the critical importance of teachers by including requirements that every teacher in any school receiving Title I funds be “highly qualified” by the beginning of the 2005-06 school year (see box opposite). This legislation gives life to the notion that, just as we expect all of today’s students to achieve high standards, we must expect no less from our teachers.

But so far the nation has fallen short in its attempts to produce and retain a sufficient number of high-quality teachers for all students. For example, of the 39 states that collect statewide data on school staffing needs, nearly all said they had shortages in specific geographic areas, such as rural communities. Across the nation, 56 percent of high school students were taught by unqualified teachers in the physical sciences, 27 percent were taught mathematics by an unqualified teacher, and 21 percent were taught English by teachers who lacked even a minor in the field.

Problems with the quality and sufficiency of the teacher workforce raise fundamental equity issues as well: poor and minority students in rural and urban schools are more likely to be taught by poorly qualified teachers. For example, one study in Tennessee found that African American students are about two times more likely to be taught by ineffective teachers than are white students. In Texas, the average teacher’s score on the state licensure exam increases as the percentage of white students in the school increases, and even when comparing the experience of poor white students with the experience of poor African American students, white students were still more likely to be taught by fully qualified teachers. A longitudinal study of teachers in New York state found that the quality of teachers in urban schools is “much worse...in comparison to other regions.”

Current state reforms and new federal legislation to hold all students to high standards will fail without...
skilled, well-trained teachers for every student in every class—no exceptions. And, although hiring and placing teachers is a district and school responsibility, ensuring a sufficient supply of high-quality teachers is fundamentally an issue of state policy that requires a coherent system of teacher recruitment, development, support, and system data-driven improvement.

Many policymakers resist building policies to improve the teaching force because they believe that raising standards when some schools already find it hard to attract the teachers they need is self-defeating. Historical evidence demonstrates, however, that raising standards among teachers can actually attract more candidates to the field rather than fewer. Furthermore, assumptions about a shortage of teachers need to be reconsidered in light of overwhelming evidence that suggests that: (a) the real problems of teacher supply center around teacher distribution and retention, not shortage; and (b) the real solutions to teacher distribution and retention extend beyond teacher recruitment to include elements across the teacher development and school improvement cycle.

**The Complex Notion of a Teacher Shortage**

In the late 1990s, experts suggested that districts may need to hire as many as 2 million teachers by 2007. Considering that there are currently fewer than 3 million teaching positions nationwide, the turnover these estimates imply is staggering. The truth is more complex, however. The nation will certainly need more teachers in the next decade. Student enrollments, likely to reach about 53.5 million by 2011-12, combined with an expected increase in teacher retirements and reductions in class size, will contribute to the need. Nonetheless, ensuring a sufficient supply of high-quality teachers is fundamentally an issue of state policy that requires a coherent system of teacher recruitment, development, support, and system data-driven improvement.

**No Child Left Behind and Highly Qualified Teachers**

The No Child Left Behind Act of 2001 set new standards for teachers. By the end of the 2005-06 school year 100 percent of teachers in every state are to be “highly qualified.” At the start of the 2002-03 school year, all newly hired elementary and secondary teachers who are hired with Title I funds must have a bachelor’s degree and must be fully licensed (no emergency or temporary credentials) according to state requirements.

In order to be fully licensed, new elementary teachers must demonstrate their competency on a state assessment that evaluates both subject knowledge and teaching skills in reading, writing, mathematics, and other areas of the basic elementary school curriculum. New secondary teachers must demonstrate their competency by passing a subject test in each of the academic subjects they teach. Alternatively, teachers may complete an academic major, graduate degree, coursework equivalent to an undergraduate academic major, or advanced certification or credentials.

All teachers who are not new to the profession must have a bachelor’s degree, must have passed either the relevant requirements listed above or must demonstrate their competence by passing a state test or a statewide standard of competency other than a test.
teacher supply and demand is not strictly a numbers game; for the most part, states are preparing sufficient and, in many cases, overly abundant numbers of teachers. In fact, each year more than 200,000 teachers are prepared to fill approximately 150,000 open teaching positions. Furthermore, in filling the 150,000 positions each year, more than half of newly hired teachers are not new graduates from traditional teacher preparation programs. The reserve pool of trained, experienced teachers, for example, provides up to one-sixth of all new hires.

Then why do many schools and districts face persistent and recurring shortages of qualified and high-quality teachers? The answer is complex and multifaceted, and varies according to state and local conditions. In general, however, there are at least three reasons why millions of students are not taught by a qualified and high-quality teacher for every year of their K-12 education.

- Teachers are not earning licenses in the fields where they are most needed. Often, teacher candidates prepare in fields that already have a balance in supply and demand. State and university programs rarely counsel candidates into the fields where they are most needed.

- Teachers are not willing or able to teach in the geographic areas where they are most needed. Wealthy districts rarely experience shortages; low-income ones often do, and of the 39 states that collect statewide data on school staffing needs, nearly all said they had shortages in specific geographic areas, such as rural communities.

- Teachers leave the profession at high rates during their first five years on the job. Thirty-nine percent of all new teachers leave the field within five years. In urban, rural, and high-poverty schools this percentage is often higher. Clearly, recruiting more and more new teachers into classrooms does not solve a key reason for the teacher shortage: attrition. Not only does this mean that public resources are often squandered on teacher candidates who contribute very little time to schools, but it means that schools and districts are forced to expend enormous energies developing new teachers who are likely to leave after only a few years. This is a particular concern because high-quality educational change rests in large part on the quality of teachers in our schools, and teacher effectiveness grows over time.

As some communities contend with teacher shortages, they resort to hiring individuals who are unprepared and under-qualified to teach. As a consequence, even with an abundance of licensed teachers, over a quarter of all teachers enter the teaching force without proper qualifications in their major field of teaching. Furthermore, even when teachers who meet the expected criteria are hired, licensure requirements and preparation programs do little to guarantee teachers of any quality, professional development often contributes little to teachers' actual professional growth, staffing patterns provide little upward mobility to motivated individuals, and most teachers do not reflect the diversity of the students they are expected to serve.

Elements of NCLB are intended to stop the practice of hiring poorly qualified teachers to work in some of the nation's neediest schools and to encourage schools, districts, and states to focus on bringing to schools the resources they need to bring students to high standards. But in order to ensure that states and districts are able to comply with federal law, states need to make available a pool of high-quality teachers prepared to teach where they are needed. Although states were expending varying degrees of effort on recruiting and retaining high-quality teachers for all schools prior to NCLB, the legislation lays out a very short timeline for full compliance. Teacher supply, demand, and distribution now must be at or near the top of every state's education agenda.
BUILDING A STATE AGENDA TO PROVIDE EVERY STUDENT WITH QUALIFIED AND HIGH-QUALITY TEACHERS

To ensure that every student is taught by high-quality, fully qualified teachers, states need to simultaneously address the reasons teachers choose to teach in some schools over others and the reasons teachers choose to leave the profession early in their careers. Doing otherwise “merely creates a policy process that accelerates the training and recruitment of teachers—and their eventual departure from the profession.” Accomplishing this dual goal will require states to strategically evaluate and address key elements of both their teacher development and school improvement systems.

Building policies that address why teachers leave and why they distribute themselves as they do is very different from building policies to attract more individuals to teaching and to entice them to take positions they may not otherwise consider. Building policies that address the root causes of teacher attrition and inequitable distribution, however, is a longer-term and more stable way to cure a problem rather than ameliorate its symptoms.

The Teacher Development System

Over the last several years, a model of teacher development has emerged that defines key elements that impact both the quality and quantity of teachers. The reasons teachers do not teach where they are needed and the reasons four out of ten new teachers leave the field within the first five years are often related to gaps and inconsistencies in one or more of these elements of the teacher development cycle. Consequently, solving the teacher “shortage” requires states to think critically and strategically about the entire teacher development system in their state. This system has the following elements:

- **Teacher Standards** that reflect knowledge and skills in content and pedagogy that teachers need to bring all students to expected levels of achievement;
- **Teacher Pipeline** that seeks talented and diverse candidates who are likely to become teachers in the academic subjects and geographic areas that need them most;
- **Teacher Preparation** that is based in teacher standards and is specific to particular disciplines;

THE STATE ROLE IN TEACHER DEVELOPMENT, SUPPLY, AND DEMAND

Historically, the job of placing teachers in classrooms has been largely the responsibility of local districts. However, the state also has important roles in enabling local districts to do their job:

- States, through rigorous preparation and licensure requirements, need to ensure a pool of high-quality teachers from which districts can choose with confidence;
- States, by accrediting preparation programs that emphasize the particular needs of local districts, need to compel programs to prepare teachers to accept positions and succeed in subjects and geographic areas where they are needed;
- States, through comprehensive research and evaluation programs, need to engage in data-driven decision-making and use this data to inform program implementation;
- States need to ensure that preparation programs that are re-approved have a track record of preparing effective teachers; and
- States need to premise the entire system of teacher supply and development upon rigorous standards and assessments that have been developed via open discussion with teachers, parents, researchers, policymakers, and the general public.
• **Beginning Teacher Licensure** requirements that reflect the teacher standards and require multiple lines of evidence that teachers are able to meet high standards of knowledge and practice;

• **Teacher Placement** systems that ensure that schools with the greatest need for teachers have the resources and information they need to attract qualified and high-quality candidates;

• **Teacher Induction** programs to support new teachers, help them improve their practice, and increase retention;

• **Full Teacher Licensure** requirements that differentiate career and novice teachers and require teachers to continue to grow professionally across their careers;

• **Ongoing Professional Development** that is related to standards for student achievement, job embedded, and instructionally relevant; and

• **Differentiated Staffing** models that encourage high-quality, experienced teachers to serve as mentors and instructional leaders without leaving the classroom.

Chapter 2 of this report looks at each of these elements in more detail.

**Linking Teacher Policy with the School Improvement System**

One of the most critical oversights of states has been to build policies to address the teacher shortages separate from policies for school improvement. Evidence is clear that teachers often leave the profession because of poor work conditions, and these poor work conditions correlate with poor student achievement. In other words, schools that attract and retain teachers are likely to be those that also are effective instructionally. Improving schools is one of the best ways to stabilize the teacher workforce.

Federal legislation has rightly placed student achievement as the keystone of education reform. In schools where students do not achieve, the federal government has laid out a comprehensive system of interventions and supports to help schools improve. But evidence makes clear that when schools improve, they develop teacher capacity and create environments conducive to both teaching and learning. Acknowledging the inextricable link between school quality, teacher quality, and teacher retention is a critical step to resolving the reasons for the “teacher shortage.”

Evidence concerning effective schools points to at least four critical elements of good schools:

• **Leadership.** Effective schools have good leadership, and schools with effective leadership tend to foster high-quality teaching and learning and have low turnover among teachers.

• **Positive Environment that is Conducive to Learning.** Low-performing schools and schools with high turnover often have academic programs that are neither challenging nor engaging for students. Teachers need high-quality curriculum and instructional supports to engage students in learning. A focus on teaching and learning is also important in building a collaborative environment that fosters academic achievement. This focus applies to all students, and teachers feel supported in helping all students achieve.

• **Frequent and Appropriate Use of Data.** Schools that attract and retain teachers have found ways to use data to help teachers improve instruction, help leaders improve the school environment, and help students improve their achievement.

• **Sufficient Resources to Support High-Quality Instruction and Classroom Management.** In schools that attract and retain effective teachers, teachers have the resources they need to teach and to motivate students to attend school and learn. They also have the resources needed to collect, analyze, and use information about student progress.

Chapter 3 of this report examines these and other issues that link school improvement efforts with policies and programs aimed at bringing high-quality teachers to every student.
CHAPTER 2

BUILDING A TEACHER DEVELOPMENT SYSTEM TO ATTRACT AND RETAIN TEACHERS FOR ALL STUDENTS

Finding solutions to issues of teacher quality and quantity is a complex and multifaceted challenge. States cannot afford to solve the problem by bringing more and more individuals into the field unless they have ensured that the teacher development system is prepared to support their professional growth and ensure their ability to do the job once they enter the field.

Ensuring an effective, highly qualified teacher in every classroom is a critical step in meeting the expectation that all students attain proficiency over the next twelve years. Chapter 1 made clear that we are a long way from reaching this goal.

Attaining the goal requires states to do much more than attract more individuals into teaching. It also requires states to ensure that their recruitment systems attract high-quality candidates who are likely to actually enter teaching after completing their preparation and who are willing and able to teach where they are needed; to prepare teacher candidates with the knowledge and skills they need to bring students to high standards; to support and evaluate new teachers to ensure they can apply their knowledge effectively and develop their skills; to require all teachers to develop professionally throughout their career; and to provide opportunities for career development.

...
advancement for accomplished teachers who choose to remain in the classroom rather than move into administration.

Without paying strategic attention to the supports and opportunities available to teachers throughout the teacher development cycle, states and districts will always have “holes in their buckets.”

Most importantly, states need to develop a coherent network of policies that is based on a foundation of high standards for teachers.

The following sections describe the ways in which each element of the teacher development cycle impacts the supply of high-quality teachers and points to promising practices undertaken by states and districts to overcome some of the most damaging shortcomings.

**TEACHER DEVELOPMENT ITEM 1: SETTING RIGOROUS TEACHER STANDARDS**

States have traditionally made policies concerning teacher development and supply according to immediate, rather than long-term, needs. The result is an ad hoc array of programs and policies that have conflicting purposes and may be based on opposing conceptions of the purpose of teacher work, the content of teacher knowledge, and the nature of teacher skills. For example:

- Class-size reduction plans make it hard to put a well-qualified teacher in rapidly increasing numbers of classrooms;

- Teacher certification requirements that emphasize paper-and-pencil tests make it hard to ensure that teachers have the necessary instructional skills to be effective; and

- Teacher preparation program requirements that define topics of study and minimum hours of instruction make it impossible to ensure the quality of instruction at the preparing institutions or the candidates’ ability to apply knowledge in effective instruction.

Without clear, challenging teacher standards and ways to measure effectiveness according to those standards, states may find it impossible to align programs and policies in ways that provide a pool of teachers with the skills and knowledge districts need. Currently, 23 states have implemented teacher standards that are tied to their K-12 academic content standards, but considerably fewer actually have aligned systems of preparation, evaluation, and development to their standards.

Standards for teachers represent a state’s commitment to parents and communities that their children’s teachers are of high quality. Standards are also the only way that teachers themselves can make good on the promise of competence that they, and the states that license them, need to make to the public. Properly devised, standards describe the knowledge, skills, and dispositions that each teacher should possess in order to help students reach the state’s expectations for student achievement.

Furthermore, defining and measuring standards is the only way in which states can ensure that the pool of teachers they certify, and from which districts may select, is of high quality. States need to have in place a set of standards for teacher preparation, support, and development upon which a coordinated policy and programmatic system can be built. The good news is that we know several elements shared by effective teachers that can form the basis of a standards-based system (see box opposite).

It is very important for each state to go through its own process of developing teacher standards that corresponds with each state’s student standards and that defines the norms and expectations of the particular citizens of each state. When developed comprehensively, these teacher standards include:

- expectations for colleges of education in terms of coursework, classroom experience requirements, and performance and knowledge requirements among their graduates;

- expectations for graduates of teacher training programs in terms of both knowledge and performance;

- expectations for all teachers in terms of professional development, skills, and knowledge development across their careers; and

- expectations for professional development providers defined in terms of student and teacher outcomes.

Devising comprehensive standards has implications for the spectrum of state education policies because standards move the focus of policy from inputs and processes to results. The actual processes individuals
employ to achieve the standards become less important from a policy perspective, and across the system individuals are evaluated according to the results they achieve. In terms of teaching, this means that the entire teacher development cycle needs to be infused with opportunities to: 1) evaluate teacher knowledge and skills in relation to standards; 2) support teachers as they hone their practice; and 3) help teachers relate their own practices to improvements in student achievement.

Fortunately, not every state needs to “reinvent the wheel” when they devise teacher standards; there is considerable agreement already about necessary knowledge, skills, and dispositions for teachers that have been developed by states and by national projects such as the National Board for Professional Teaching Standards (NBPTS), the National Council for the Accreditation of Teacher Education (NCATE), and the Interstate New Teacher Assessment and Support Consortium (INTASC). All of these initiatives share a view of teaching as a complex undertaking, “grounded in decisions that are contingent on students’ needs and instructional goals, and reciprocal, that is, continually shaped and reshaped, by students’ responses to learning events.” Whether or not state policymakers decide to adopt components of existing teacher standards or develop new standards, policymakers need to be aware of the rationale for and content of the important work that has been accomplished by these existing projects (see Appendices).

When basing policy decisions on a coordinated system of teacher standards, state policymakers need to keep at least three things in mind:

- Teacher standards need to be aligned with standards for students, because every student standard implies a particular notion of teaching and learning. For example, if students are being asked to think thematically and link subject areas across concepts, then teacher standards need to expect teachers to connect subject areas in thematic teaching.

- Setting high standards for students and for teachers obligates the state to provide the structures and supports that students and teachers need to meet the standards. Doing so requires states to
think differently about the ways in which resources are allocated, since individual districts will require different kinds of support in order to meet standards, as will individual teachers.

- Programs and policies designed to support a standards-based system need to balance the need for implementing what we know works with what is promising, new, and innovative. State funds need to be allocated strategically, as an incentive to keep effective programs operating while at the same time encouraging the design, implementation, and evaluation of promising new programs.

Rigorous standards form the foundation upon which the rest of the teacher development cycle can be built, and they establish one set of criteria upon which its effectiveness can be evaluated. However, standards alone can do nothing to ensure that teachers have what they need to achieve the expectations that are set for them. Nor can they ensure that teachers have what they need to bring students to high levels of achievement. In other words, standards are necessary, but not sufficient; they cannot, by themselves, guarantee teaching and learning of any quality. Making standards a reality by recruiting, developing, and retaining high-quality teachers for every classroom is the central purpose of every other element of the teacher development cycle.

**Teacher Development Item 2:**
**Targeting Recruitment into the Teaching Pipeline**

In large part, most states do not need to recruit more candidates into teacher preparation programs. The number of individuals preparing to be teachers is consistently larger than the number of openings in schools each year. What states do need, however, are targeted programs that attract candidates who are willing and able to meet the needs of the schools in which they will be asked to teach.

Currently, few recruitment policies are actually designed to attract diverse, high-quality teachers who are willing to teach where they are needed. Consequently, even with a growing number of recruitment programs in operation across the country, the most dire needs faced by districts continue to be for: 1) teachers who are racially, culturally, and ethnically diverse; 2) teachers who are qualified to teach specific subjects in which teachers are in short supply; and 3) teachers who are willing to teach in high-poverty schools and schools serving students of color, primarily in urban and rural areas.

“"The race and background of teachers tell [students] something about power and authority in contemporary America. These messages influence children’s attitudes toward school, their academic accomplishments, and the views of their own and others’ intrinsic worth. The views they form in school about justice and fairness also influence their future citizenship."**

**Encouraging Individuals of Color and Other Diverse Candidates to Enter Teaching**

Across the nation, almost 40 percent of public school students are individuals of color, about 5 percent are limited-English proficient, more than 15 percent live in homes with incomes below the poverty line, and about 13 percent are diagnosed with a disability. To be successful, schools must have teachers who can respond to the needs of culturally, ethnically, socially, and racially diverse students. But 68 percent of administrators say they face a shortage of diverse teachers, and the typical graduate of a teacher preparation program is white, female, 21 years old, speaking only English, from a small town, and wanting to teach in the same. In recent decades, diversity among the nation’s teaching force has actually decreased, particularly when compared to the growing diversity among public school students. Overall, the need for teachers of color is so dire that in North Carolina, for example, one report concluded that “if current trends continue, the average minority child could conceivably have no minority teachers during the K-12 years.”

Critics of efforts to attract individuals of color to teaching point out that students can and do learn every day from teachers who do not resemble them. Indeed, there is no evidence that students absolutely need teachers who resemble them racially, ethnically, socioeconomically, or culturally in order to succeed.
Several indicators suggest, however, that teachers of color do make unique and important contributions to the education of all students:

- Teachers of color and ethnically diverse teachers are often the most successful teachers in the neediest schools;

- Diverse members of local communities are often the most likely and willing candidates to instruct students with limited English proficiency and other special needs;

- Teachers of color are often able to forge more meaningful ties with local communities of color and demonstrate greater understanding of the particular circumstances of students of color than are white teachers;

- Teachers of color can provide valuable role models not only to students of color but also to white students; and

- Teachers of color and ethnically diverse teachers may be more likely to encourage students of color to enter teaching.

The good news is that several successful programs to attract individuals of color to careers in teaching provide helpful lessons about the necessary components of an effective program. Successful programs insist that diverse candidates, regardless of their route of entry into teaching, be held to the same standards as all other teacher candidates; provide courses in local communities instead of exclusively on university campuses; provide financial support to their students; offer classes in the evening and on weekends; provide extensive academic and social support; and often recruit teacher candidates from existing pools of school paraprofessionals. Graduate teacher preparation programs, particularly those that offer some of the program characteristics listed above, also attract above average percentages of individuals of color.

Some states and local communities have responded to the need for diverse teachers with innovative programs that succeed at attracting nontraditional candidates to the teaching field.

- South Carolina’s Teacher Cadet Project involves teachers, administrators, and university faculty in mentoring talented secondary school students who demonstrate interest in teaching. Programs such as South Carolina’s are particularly promising because participants of early recruitment programs are more than one-third minority.

- The federal government’s Troops to Teachers program was created in 1994 to help separated military personnel find training and jobs in public education. Troops to Teachers has offices in 25 states. This program has been particularly effective at attracting men to teaching (90 percent of program participants), individuals of color (29 percent), individuals to teach math (29 percent), and individuals who are willing to work in urban, rural, and small-town schools (25 percent urban; 48 percent rural or small-town).

### Encouraging Teacher Candidates to Prepare in Shortage Subject Areas

Teachers are poorly distributed across subjects and specialties, causing acute shortages in some fields of teaching and surpluses in others. As a result, nine out of ten administrators report facing teacher shortages in specific subjects. Not surprisingly, shortage areas are largely those fields in which higher paying career options are available (such as the sciences) or in which teaching placements are disproportionately in low-income schools and/or schools serving students of color (such as special education and bilingual education).

State policymakers are often quick to point out that teacher training programs are doing exceptionally well at producing teachers that districts don’t need. For example, despite a balanced supply of elementary teachers in every region of the country, almost half of all bachelor’s degrees in education, about 48,000 in all, are conferred in elementary education. On the other hand, in one recent year the nation produced only 84 bachelor’s degrees in bilingual education, when this field has considerable shortages in every region of the country.

Although it may be tempting for policymakers to blame colleges and universities for preparing individuals for teaching fields where there are already large surpluses, it is the responsibility of the state, more than colleges, universities, or school districts, to ensure that there are enough teachers available to schools and districts to meet their needs. States that continuously accredit programs and license teachers in surplus fields when districts are desperate for specialists in shortage fields are failing to provide districts with the staff they need to bring students to high standards.
Research on initiatives that have successfully attracted teacher candidates into high-need fields has found that such programs share several critical elements. These include an uncompromising position that all teacher candidates, even those preparing in high-need subjects, need to meet high standards in order to be licensed to practice; financial incentives for currently practicing or newly recruited teachers to become qualified in a high-need subject area; partnerships with local businesses and the military to attract early retirees and career-changers to high-need teaching fields; efforts to attract currently practicing paraprofessionals, particularly in bilingual and special education, to teacher training programs; and effective recruitment and public awareness campaigns that emphasize the rewards of a career in teaching.

Current projects undertaken by several states, districts, and private entities demonstrate that states can increase the number of teacher candidates specializing in shortage areas by thinking creatively about who to recruit into the teaching pipeline and how to educate them.

- About one in five school districts offers free training for staff to prepare to teach in a shortage field. In districts where more than 40 percent of students receive free or reduced lunches, one in four districts provide free training.

- Legislation in North Carolina established alternate certification programs in the 1980s that, by the end of the decade, were preparing 15 percent of all mathematics teachers in the state. Evaluations indicated that teachers in North Carolina from alternate programs were as competent and as successful on teacher examinations as teachers from traditional preparation programs.

Developing Programs to Address Geographic Shortages

Once prepared to teach, individuals apply for and accept teaching positions in highly inequitable patterns. This causes severe local and regional shortages of qualified teachers, particularly in urban and rural high-poverty districts. For example, six out of ten urban school leaders cited “recruiting teachers” as a critically important need.

Districts do not have equal ability to attract teachers for reasons that are largely related to working conditions. Wealthy districts often report receiving hundreds of qualified applicants for a single teacher opening, but many districts and schools with the most dire need cannot offer the pay, resources, or employment conditions to attract teachers of any quality. In general, high-poverty schools serving students of color have higher student:teacher ratios, lower pay, fewer classroom resources, more discipline problems, lower levels of student achievement, less educated teachers, and lower levels of administrator support than other schools. The result of these inequitable working conditions is that most teachers choose not to teach in schools that need them most, and on almost every measure, high-poverty schools end up with less educated, less experienced teachers who are often teaching under difficult circumstances and are more likely to be teaching without proper qualifications. The current ad hoc system of distributing high-quality teachers disproportionally to wealthy schools places high-risk, high-poverty students at even greater risk of academic failure by giving them fewer instructional resources and fewer qualified teachers. Particularly in states with high-stakes accountability programs for students, unequal distribution of teaching resources may have profound legal and moral implications.
Providing all students with good teachers may require states to provide incentives to help districts with greater need compete for high-quality school staff. Chapter 3 discusses ways in which states need to invest in school improvement in order to have any long-term, significant impact on teacher quality in some of the nation’s poorest and most isolated schools. However, some states and districts have also established successful programs to recruit and train teachers from local communities:

- Responding to the fact that over 90 percent of teachers on the Navajo reservation are not Navajo, Arizona State University (ASU) formed a partnership with Dine College (a tribally controlled two-year institution of higher education located on the Navajo reservation) to operate the Dine Teacher Education Program, a B.A. program in Elementary Education with a specialization in Navajo language, culture, history, and philosophy. This program, which was launched in 1996, is staffed by both ASU and Dine College faculty on the Dine campus in Tsaile, Arizona.

- In Los Angeles, California, a consortium of colleges, local teacher unions, policy organizations, and the L. A. Unified School District operates a program to train Latino paraprofessionals to be teachers. This program offers strong academic and social support for participants, including a cohort system of peer support, faculty mentors at each teaching assistant’s home school, and adjunct class sessions for program participants who need academic assistance. In operation since 1992, the Latino Teacher Project has an extremely low dropout rate and has produced significant numbers of high-quality teachers for Los Angeles schools. In 2001, the project placed 33 credentialed bilingual and Latino teachers in local districts, and in the same year, 200 Latino teaching assistants were enrolled in the program, compared to only 50 in 1992. The program has been recognized by the U.S. Department of Education as a model for other districts and universities.42

- The Mississippi Critical Teacher Shortage Act eases teacher shortages in the Mississippi Delta and other areas with critical teacher shortages by providing tuition, books, and other educational fees for teachers who commit to teaching in regions with critical teacher shortages. In addition, any teacher who is already working in a critical shortage area, or who is willing to relocate, can pursue a master’s degree at state expense. The state also offers $1,000 in relocation expenses to the critical need area. The program attracts a high proportion of students of color, and many program participants choose to remain in Delta schools even after their commitment of service has been fulfilled.

**Teacher Development Item 3:**
**Developing High-Quality, Flexible Preservice Education**

Being a good teacher is not intuitive. “On the contrary, effective teaching requires knowledge and practice. Teacher preparation ... that ensures subject-matter and pedagogical knowledge, hones verbal skills, and provides extensive clinical experience plays an important role in producing high-quality teachers and, as a result, in bringing about student achievement gains.”43 It is little wonder that states such as Connecticut and North Carolina that have sponsored highly successful initiatives to improve teacher preparation and teacher knowledge have simultaneously shown dramatic improvement on standard measures of student achievement.44
However, preservice programs have received considerable criticism. The American Federation of Teachers, for example, says many programs are “beset by serious problems,” and the National Commission on Teaching and America’s Future notes that programs are often fragmented, uninspired, superficial, and haphazard. Preservice education for teachers has also been criticized for ignoring what teachers themselves say they need to know in order to do their jobs effectively: a national survey of public school teachers with five or fewer years of experience found that 62 percent of new teachers feel that their preparation program did a fair or poor job of preparing them to deal with the actual pressures of teaching. Relatedly, two-thirds of principals and superintendents reported that they are not satisfied with how well preparation programs prepare teachers to deal with student

RECOMMENDATIONS OF THE NASBE STUDY GROUP ON COORDINATION AND ACCOUNTABILITY IN TEACHER EDUCATION

COORDINATION

It is the role of the state to lead a K-16 institutional collaboration that ensures all teachers can bring students to high levels of learning. Policymakers enacting reforms intended to improve student achievement need to place teachers at the center of reform efforts and provide them with the knowledge and skills they need to help students achieve high standards.

Higher education institutions, K-12 schools, and the policymakers who govern both systems need to recognize and articulate the role each plays in the success of the others and coordinate their missions, goals, policies, and practices to prepare teachers who can bring students to high levels of achievement.

Policymakers need to support university administrators as they build a campus-wide commitment to teacher preparation that includes strong collaboration between education and arts and sciences faculty and between K-12 and higher education.

ACCOUNTABILITY

State policymakers need to hold higher education institutions responsible for the outcomes of their teacher preparation programs through comprehensive evaluation criteria that include multiple measures and are tied to program approval.

States need to reconsider policies that require acceptance of transfer credits from one institution to another, encourage higher education institutions to develop shared standards of course content and rigor, and vest ultimate authority to accept or deny course transfers with the degree-granting institution.

States should develop and support new teacher induction programs, hold them accountable for the extent to which they help new teachers improve their practice, and require preparing institutions to participate in the transition from preparation to practice.

State policymakers need to be well informed of existing program standards developed by various national organizations and decide upon a standards system that most appropriately aligns with their particular expectations for K-12 students.

Policymakers at all levels of the education system need to hold themselves accountable for their role in planning, facilitating, and providing the resources to sustain a high-quality, coordinated system of teacher preparation.
discipline. Furthermore, only about 50 percent of teachers reported having a degree in a curricular content area (as opposed to a degree in education). Preservice also often fails to acknowledge the fact that in many cases there is no clear division between preservice and inservice teachers, with individuals working full-time as teachers while they seek their credential.

Despite such shortcomings and criticism, research has shown that high-quality teacher education matters. It matters not only because it has been shown to have a significant impact on student achievement, but also because teachers who are well-prepared to enter classrooms are more likely to remain in teaching and more likely to meet consistently high standards in their practice. Across academic fields, teachers who are fully prepared in their discipline as well as in child development, pedagogy, and curriculum are more highly rated and are more successful with students than are teachers without preparation. Not only does the amount of education teachers receive matter, but the content and structure of teachers’ educational experiences have been shown to make a difference in the way teachers perform in the classroom.

Another factor that must be considered in teacher preparation is flexibility for students. As the pipeline into teaching widens to include individuals with very different backgrounds, knowledge, and experiences, preparation programs need to be designed to meet the needs of very different kinds of candidates. For many candidates, the traditional model of teacher preparation may be appropriate. However, for the growing number of candidates who approach the field with an earned bachelor’s degree, related work experience, or both, states need to work with preparation providers to ensure that flexible alternate routes are available that meet the needs of all candidates without compromising quality.

The good news is that states that develop a comprehensive set of teacher standards have a solid foundation on which to design new models of teacher preparation. In a standards-based system of teacher preparation, what matters are program outcomes in terms of teacher knowledge and skills, rather than program structure. This focus on outcomes gives program developers and administrators the flexibility they need to build programs to suit candidates with different backgrounds and different schedules and may lead to the development of programs that look very different from traditional undergraduate teacher education models.

Building High-Quality Preparation Programs as Part of Undergraduate and Graduate Degree Programs

In most states, the majority of new teachers continue to receive their initial training in a traditional undergraduate, graduate, or five-year preparation program. Despite the problems noted above, there is a large and growing body of knowledge about what constitutes high-quality teacher preparation. In general, high-quality teacher preparation programs meet eleven criteria:

- They share a common vision of high-quality teaching that permeates all coursework and clinical experiences;
- They are guided by a well-defined set of standards and a pervasive vision of good teaching that is the foundation of all coursework and every clinical experience;
- They contain a rigorous core curriculum in the liberal arts and require education and arts and sciences faculty to combine the pedagogical and liberal arts elements of teacher education;
- They place students in clinical experiences of at least 30 weeks that are combined with closely related coursework;
- They use problem-based methods of learning, such as case studies, portfolios, and self-assessment;
- They build strong relationships with local schools that are reform-minded and have the support of both the university administration and the leaders of partner schools;
- They insist upon a rigorous entrance process;
- They guide new teachers into the field rather than “cut them loose” after graduation;
- They combine theory with practice;
- They make extensive use of performance assessments that require teacher candidates to apply knowledge to practice; and
- They continuously assess their outcomes through a variety of different measures.
NASBE’s 2000 Study Group on Coordination and Accountability in Teacher Education concluded in its report, The Full Circle, that “high-quality teacher preparation programs are those that link components of teacher candidate experience—across higher education and K-12 clinical experiences and across education and arts and sciences coursework—and that insist upon high standards in knowledge and practice among their graduates.”

But building these linkages requires coordinated actions across many agencies and institutions. Education faculty, faculty in colleges of arts and sciences, K-12 teachers and administrators, and policymakers that govern both K-12 and higher education all have important roles to play in ensuring that teacher preparation is of high quality.

This level of coordination is easier said than done, however, in large part because institutional and governance systems are not designed to support the kinds of collaboration that “best practice” in teacher preparation requires. For example, institutional systems are disconnected to such an extent that it is difficult for K-12 and higher education institutions to collaborate around teaching and learning. Furthermore, uncoordinated systems of governance allow policymakers at different levels to develop conflicting policies and competing priorities across different levels of education. Finally, standards are loose and uncoordinated and fail to join the work of practitioners to the work of policymakers with a system-wide vision of good teaching and learning.

There are several actions that state policymakers can take to ensure that preparation programs are coordinated and high quality:

- Use state program approval as leverage to require high-quality practical experience in K-12 schools for all individuals preparing to be teachers;
- Develop incentives for universities to reconsider tenure and incentive policies that fail to reward faculty for work in K-12 public schools;
- Provide incentives for developing institutions and practices that join K-12 and higher education institutions;
- Make state resources available to support collaboration among K-12 and higher education policymakers, administrators, and faculty;
- Lead a coordinated effort among state policymakers to ensure that programs and policies across K-12 and higher education are clearly articulated in relation to each other;
- Ensure that faculty and administration from higher education institutions participate centrally in any state discussion of K-12 standards; and
- Work with other governing bodies to ensure that K-12 student content and performance standards form the backbone of teacher preparation standards.

**Alternative Routes to Teaching**

Alternative routes for educating teachers provide opportunities for districts, colleges and universities, and other educational agencies to offer preparation for teachers who complete a preparation program that may differ in content, structure, recruitment strategy, or target population from traditional university undergraduate programs in teacher preparation. Driving this trend is the desire to achieve at least four important goals: 1) increasing the pool of teachers competent in high-demand educational specialties; 2) increasing the participation of under-represented racial/ethnic and cultural groups; 3) increasing staff levels of urban and high-
Poverty schools; and 4) decreasing the need for emergency credentialing to meet teacher shortages. Indeed the need to eradicate emergency credentialing has been made more urgent by NCLB requirements concerning highly qualified teachers.

Policymakers have often relied on alternate routes to certification to help ease teacher shortages. More recently, advocates have advanced alternate routes as a means of recruiting otherwise qualified candidates who are unwilling or unable to complete a traditional route into teaching. Supporters also make the argument that alternate routes move candidates into the classroom faster than traditional programs and help link K-12 and higher education by placing those preparing to be teachers in classrooms while they complete their preparation program. Finally, advocates of alternate routes point out that some research shows that teachers who enter classrooms from alternate routes remain in teaching for at least as long as or longer than traditionally prepared teachers.55

Currently, almost every state allows some form of alternate route, although alternate programs can vary widely according to regional needs and local resources. For example, some regions with pressing needs for bilingual and special education teachers have found educational paraprofessionals to be excellent candidates for alternate routes into teacher careers in those fields. In regions with large military or business economies, some alternate routes have catered to retired military officers or business executives who often bring technical skills and scientific knowledge to new careers in teaching.

Evaluating alternate routes according to the four goals above, several programs are highly successful. Alternative routes to teaching increase minority representation in teaching. In Texas, it is the primary means of attracting minority professionals into teaching. Not only do Texas interns from alternate preparation programs have higher pass rates on certification tests than do traditional education graduates, but minority interns have higher pass rates than minorities who were initially prepared through regular channels. Furthermore, the Los Angeles Unified School District’s Intern Program recruited minorities at a much higher rate than the California state university system. New Jersey also experienced similar success with their alternate routes to teaching. Teachers from alternate routes are also more likely to teach in urban schools than teachers from traditional preparation programs, and there is evidence that attrition rates both during program participation and after becoming a teacher are the same or lower among alternate-route graduates.56

By providing a rich continuum of models, alternative routes to teaching suggest a variety of strategies for developing content and pedagogical skills for novice teachers from a range of circumstances, backgrounds, and life experiences. Well-constructed programs are no longer considered by most to be “back-door” access to careers in teaching. As a matter of fact, entrance to some alternate routes have become more rigorous and competitive than many traditional university preparation programs. In some cases, they “have become so broadly recognized as successful innovations in education that they have encroached on traditional turf and suffered the type of setbacks reserved only for genuine threats to established bureaucracies. In other cases, as models proliferate, lines may blur between what was formerly a universally defined ‘traditional’ model and its distinct ‘alternatives.’”57

The evidence is clear: when judged by results, high-quality alternate routes to teaching need not be viewed as a compromise in teacher preparation standards. On the contrary, an effective standards-based system of teacher preparation welcomes innovations in “process” that demonstrate promise in achieving the results states expect.

Developing a standards-based system of teacher education frees states to think creatively about the processes that can lead to the results defined by standards. Just as with student standards, how teachers develop knowledge and competencies is much less important to standards-based policy than the fact that knowledge and competencies are developed. When they focus on results instead of processes, states have developed highly effective, innovative approaches to teacher preparation and development that sometimes look very different than traditional ways in which teachers learned their craft.

Building a standards-based system also requires state policymakers to link the systems together with an integrated vision for high quality.

Providing Extensive “Hands-On” Experience

When students of teacher preparation programs embark on their “student teaching” experience, the relationships between schools and the teacher preparation institution generally lack meaningful collaboration. Not only is student teaching often separate from campus-based teacher preparation experiences, but in some instances it is extremely
truncated, lasting no longer than eight weeks. In contrast, public schools and teacher preparation institutions have been developing promising ways to work collaboratively across the span of a teacher’s preparation program and to create a continuum of theoretical and “hands-on” experiences for individuals preparing to teach.

Six out of ten principals and superintendents believe that teacher preparation fails to make sure that teachers have sufficient teaching experience in actual classrooms, and half of new teachers and 72 percent of principals and administrators believe that requiring new teachers to spend more time in classrooms under the supervision of experienced teachers would be a very effective way to improve teacher quality.58

One promising development in this area is the professional development school (PDS), a K-12 school where teachers and administrators work alongside university faculty and teacher preparation students to influence the development of their profession, to increase the professional relevance of their work, and to undertake mutual deliberation on issues of student learning. School and university faculty share teaching responsibilities, collaborate on research concerning educational practice, and cooperatively supervise prospective teachers and administrators.59

Based on the model of teaching hospitals in the medical profession, professional development schools focus on providing professional development for both new and experienced teachers as well as developing research about teaching. Although such schools are recent innovations and therefore offer little research evidence concerning their effectiveness, preliminary results suggest that the PDS may be an effective way to simultaneously reform public schools and teacher preparation. Currently, the status of professional development schools can only be described as “very active.”

Another innovation in providing teacher candidates with extended experience in schools are district-based preparation programs. In larger cities such as Dallas, Houston, New York City, and Los Angeles, school administrators have found that recruiting teacher candidates locally, training teacher candidates with district staff and through partnerships with local colleges, and providing teacher candidates with extensive experience in district schools can produce well-qualified teachers who are more likely to teach in urban schools and less likely to leave the profession. In many district-based preparation programs, teacher candidates spend most of their course of study working in local public schools, often receiving a stipend for this work.

States should welcome innovations in teacher preparation programs, both in terms of content and structure. Evidence is clear that there are methods of preparing teachers that may be more effective than the traditional model of an undergraduate degree followed by a semester or less of student teaching. Recognizing that not every innovation is sure to succeed, however, innovations need to be accompanied by rigorous evaluations of new models.

Teacher Development Item 4: Ensuring High Standards through Beginning Licensure Criteria

Only about one-fourth of new teachers in one survey felt that being fully licensed in their state ensured that “a teacher has what it takes to be a good teacher.”60 Among school administrators, nine in ten say that teacher licensure guarantees either only a minimum of skills or very little in terms of skills. Teacher licensure requirements have commonly failed to reflect appropriate standards of knowledge and performance among teachers. This makes it difficult for states to ensure that teachers have met meaningful licensure requirements. States need to devise licensure criteria that are based on high-quality content and performance standards that can reasonably assure the public that individuals admitted to practice as teachers are indeed highly competent. These criteria need to hold individuals to high standards of knowledge and performance, more than rigid course and degree requirements, and should be applied for every teaching credential issued by the state in order to preserve the long-term integrity of licensure, regardless of short-term needs for individuals to fill vacant classrooms.

Teacher licensure represents a state’s legal responsibility to guarantee to the public that individuals admitted to practice have met minimum requirements. Those not qualified to be teachers are presumably screened out by the licensure process, and students are protected from shoddy practices. Traditionally, candidates for licensure have been measured according to at least three criteria: the possession of a degree from an approved college or university; the completion of an approved program of teacher preparation, including several weeks of student teaching; and, more recently, satisfactory scores on a written test of pedagogical, subject, and
The federal government now requires all teachers to hold a bachelor’s degree and pass state tests of subject matter. But most tests aren’t up to the task and states sometimes set passing scores on low-level licensure exams so that little more is required than advanced high school or beginning college subject knowledge. Even with such a low bar for gaining teacher licensure, about six percent of all teachers lack a full license to teach, a percentage that is higher in high-poverty schools and in specific fields such as special education.

Traditional criteria for teacher licensure have been criticized on several fronts:

- **Traditional licensure requirements that emphasize college courses, grades, and written test results do not take into account teachers’ skills in teaching.** Evidence is clear that knowing facts is very different from doing a good job, and so licensing teachers based on their knowledge cannot guarantee their quality of performance in the classroom.

- **Traditional licensure requires every teacher candidate to complete virtually the same preparation process, regardless of differences in pre-existing knowledge or related life experience that may give some teacher candidates teaching competencies prior to entering teacher preparation. Basing licensure on coursework rather than upon demonstrated competencies may impose unnecessary barriers to qualified candidates.**

- **In several states, teacher licensure tests consist of minimum competency measures rather than measures of advanced knowledge and skills; therefore, these tests cannot guarantee high quality among teachers.**

- **Traditional licensure has often allowed an individual to teach for life.** Current thinking asserts that even excellent teachers need to refine their skills regularly. Consequently, permanent licensure cannot ensure that experienced teachers continually build their knowledge and skills and place them in line with new thinking, new practice, and new expectations for students.

- **Traditional criteria for licensure have often been waived at times of teacher shortages, making the concept of ensuring minimum requirements for teaching highly relative and demeaning the purpose of state licensure.**

In other words, the routes to licensure that states have depended upon for decades are an anathema to a results-based system of high-quality standards. Indeed, we know that measuring an individual in
terms of college degrees and course requirements has not produced teachers of consistent quality, and this has been problematic for teachers, who want to be perceived as professionals; for states, who want their licensure process to have meaning; and for communities, who want to know that their teachers can consistently teach well. It is also becoming clear, in large part from the popularity of alternate routes to licensure, that many promising individuals see traditional licensure requirements as a deterrent to entering teaching.

State boards of education need to have a vision of high-quality teaching that clearly articulates what teachers need to know and be able to do. This vision becomes a yardstick by which all licensure requirements are measured and by which states can guide their regulatory function.

Envisioning licensure as one component of a standards-based system requires systemic measurements and safeguards that look very different from traditional measures of college credits and paper-and-pencil test results.

Indeed, states that have started to develop standards-based licensure have usually found that they needed to rethink the ways they evaluate teacher candidates. Besides transcript evaluation and written tests, states are beginning to require teacher candidates to demonstrate skills through portfolio assessments, mentorship programs, comprehensive observations, and self-evaluation. States that have implemented these methods of evaluation have found that they can more reasonably measure teacher effectiveness with students, perhaps the most important marker of a “good” teacher, when the teacher’s practice is continuously evaluated according to standards-based criteria, rather than the teacher’s knowledge, as was traditionally measured in written tests for licensure. Furthermore, states have found that implementing standards-based performance assessments for licensure creates an environment where standards are infused in teachers’ discussion of their work, where teachers learn to measure their practice in terms of standards, and where teachers develop the habit of measuring their own success in terms of the success of their students. States have also learned that, because licensure is a measure of competence, and what constitutes competence can change as knowledge about teaching and learning changes, licensure should never be permanent; rather, teachers should demonstrate their competence across their career.

There are several advantages to building a standards-based system of teacher licensure. First, it helps states meet their statutory requirement of demonstrating with certainty that every teacher licensed by the state is high-quality—that is, capable of performing at an established level of proficiency. Second, states that can guarantee high levels of knowledge and performance

The Interstate New Teacher Assessment and Support Consortium (INTASC) recommends that states who are moving toward performance-based licensure need to undertake the following actions:63

1. Adopt general principles for what teachers should know and be able to do and standards in each discipline for which a license is issued. These standards should be clear about the kinds of knowledge teachers must draw upon and the kinds of teaching decisions and activities they must be able to accomplish to support student learning.

2. Develop an assessment system that can evaluate teachers’ attainment of the standards.

3. Redesign licensing regulations so they rely on the acquisition of knowledge and skills and the successful completion of comprehensive, high-quality assessments. These assessments would take place partly during the teacher preparation sequence and an associated internship experience and partly in common examinations.

4. Ensure that all candidates are evaluated according to the same standards of knowledge and performance, eliminating differences in standards that have emerged due to the current array of differential licensing programs. The presumption of performance-based licensing is that while preparation programs may differ in how they organize courses and other learning experiences, all entrants must demonstrate that they have mastered the essential knowledge and skills necessary for responsible practice.
that are aligned with student standards may find they increase their public credibility at the same time that they improve teacher quality and student outcomes. Lastly, clear, rigorous teacher standards impact the content and rigor of teacher preparation programs and professional development activities. In other words, setting standards and making them stick makes the state more than purely a regulatory body; it places the state in a position of setting and maintaining a vision of excellent teaching and learning across the spectrum of schooling.

A growing number of states are using licensure as a way to ensure that teachers meet a set of professional standards that extend to classroom practice. For example, many states have adopted the standards of the Interstate Teacher Assessment and Support Consortium (INTASC) to help ensure a basic level of competence for all teachers entering classrooms (see box opposite). Some states have begun to implement components of standards-based teacher licensure:

- North Carolina diversified its licensure procedures by creating a three-tiered system of initial, continuing, and advanced licensure tied to performance assessments and articulated performance expectations across teachers’ careers.

- Oregon created new Teacher Standards and Practices license categories with professional development requirements attached to renewal that span the course of teachers’ careers.

Some states have responded to the need for qualified teachers in every classroom with inventive policies. For example, Missouri approved state salary reimbursements to districts only for their teachers who are qualified and licensed. States may consider requiring local districts to publicly report each class that is taught by a teacher who does not hold at least a minor in that field. States may also reconsider their current certification categories to ensure that they are not inordinately narrow and discounting well-qualified teachers in specific areas. Where union agreements have allowed, some districts have successfully experimented with hiring part-time teachers to cover classes where there is no full-time, fully qualified teacher available. States may consider supporting inventive school staffing models at the local level that fill vacant classrooms with well-qualified, but nontraditional, individuals.

New teachers are likely to be placed in some of the most challenging teaching situations. Often, new teachers find jobs where they are most available: in hard-to-staff urban, rural, and high-poverty schools that have little in the way of resources to support and develop new teachers. This reality has led one certification and preparation from a state-approved college or university and hold at least a college minor in the field they are to teach. As a result, only a few years ago 56 percent of high school students nationwide were taught by unqualified teachers in physical science, 27 percent were taught mathematics by an unqualified teacher, and 21 percent were taught English by teachers who lacked even a college minor in English. It should come as little surprise that teachers who lack even a minor in the field they are teaching are more than three times more prevalent in low-wealth schools than in those with high wealth.

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Some states have responded to the need for qualified teachers in every classroom with inventive policies. For example, Missouri approved state salary reimbursements to districts only for their teachers who are qualified and licensed. States may consider requiring local districts to publicly report each class that is taught by a teacher who does not hold at least a minor in that field. States may also reconsider their current certification categories to ensure that they are not inordinately narrow and discounting well-qualified teachers in specific areas. Where union agreements have allowed, some districts have successfully experimented with hiring part-time teachers to cover classes where there is no full-time, fully qualified teacher available. States may consider supporting inventive school staffing models at the local level that fill vacant classrooms with well-qualified, but nontraditional, individuals.

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researcher to refer to teaching as “the profession that eats its young.”

Placing new teachers in positions where they can receive the support they need to develop skills in teaching is critically important to stemming the tide of teachers leaving the field during their first five years in the classroom.

**Teacher Development Item 6: Linking Preparation Programs with the First Years of Teaching via New Teacher Induction Programs**

Even with extensive preservice teacher preparation, the beginning years of teaching present many challenges that reflect a “steep learning curve.” New teachers typically are given the most difficult assignments and often are left to flounder without the kind of help provided by internships or entry-level positions in other professions.

Not surprisingly, the attrition rate for beginning teachers is high. Isolated in their classrooms with very little feedback from experienced peers, parents, administrators, or other beginning teachers, as many as 30 percent of teachers leave the profession in the first five years, a figure that is even greater in urban districts. This is only to be expected, according to many teachers and teacher educators, who note that beginning teachers are commonly placed in disadvantaged schools, assigned the most difficult students, given the greatest number of class preparations (many outside their field), and are given inordinate additional extracurricular duties. Even more alarming, those who leave teaching are often those who demonstrate promise in the classroom, those who specialize in high-need subjects, and those who are willing to teach in urban and high-poverty schools.

Recognizing that these problems exist, many districts, states, and teacher preparation institutions are attempting to build sturdy linkages from preservice preparation to the early years of teaching. For example, a majority of states and several urban districts like Toledo, Cincinnati, Columbus, Rochester, and Seattle have developed induction programs to support new teachers that include mentorships, formative performance evaluation, or other teacher support mechanisms.

The National Association of State Directors of Teacher Education and Certification (NASDTEC) has identified seven essential components of a beginning teacher support system. These include:

- a focus on beginning teachers, with attention also given to school and systemic improvement;
- mentor teachers to work with beginning teachers throughout the year;
- a training component for mentor teachers or support teams;
- an inservice program based on needs determined by both the beginning and mentor teachers;
- additional funding from the state or district that is earmarked for supporting new teachers;
- a process to assess new teachers; and
- a process to evaluate the effectiveness of the support system and to determine needed changes.

NASBE believes it is important to add four components to this list.

- First, all induction programs should be based on clearly articulated, rigorous standards that are aligned with teacher and student standards. These standards should form the basis for comprehensive evaluation, not only of beginning teachers, but of the induction system itself.
- Second, all induction programs should include every beginning teacher in the state. In order to be taken seriously, standards need to be applied uniformly. Induction programs that apply rigorous standards to the work of beginning teachers need to be applied evenly across the state, or teacher quality becomes localized and standards become meaningless.
- Third, the selection criteria and the roles and functions of mentors, defined in terms of standards, should be clearly articulated, both to mentors and to beginning teachers, and mechanisms should be in place to ensure that mentors meet these standards. Currently, there is rarely consensus on the roles and functions of mentors, which makes the quality of teacher induction experiences vary and “standards” hard to apply since mentoring experiences are “unstandardized.”
- Finally, teacher induction programs should include performance assessments that hold beginning teachers accountable to knowledge and
performance standards and provide them with ongoing formative feedback to help improve their practice through their induction experience.

Thirty-eight states now require or encourage districts to implement new teacher mentoring or induction programs.70

- In the California New Teachers Project (CNTP), started in 1988, over 3000 first- and second-year teachers received assistance from experienced mentor teachers and were encouraged to attend innovative training sessions, seminars, peer discussion groups, and other professional development sessions. When support services were well designed and effectively delivered, induction programs reduced the attrition of new teachers by more than two-thirds and also achieved high retention rates among minority teachers and teachers serving in hard-to-staff urban and rural schools.71 CNTP was so successful that California decided to take their induction program statewide, initiating the Beginning Teacher Support and Assessment (BTSA) program in 1992. This program, co-administered by the California Department of Education and the California Commission on Teacher Credentialing, provides formative assessment and individualized support based on assessment information for beginning teachers across the state.

- In Kentucky’s Teacher Internship Program, new teachers receive support from a three-member team comprising a faculty member from the preparing institution, a school administrator, and an experienced teacher. This team observes the new teacher and provides guidance and support through the first year or two of teaching. The experienced teacher spends at least 70 hours each year working with the new teacher in the classroom and conducts professional development outside of the classroom as well.

Induction programs are becoming increasingly popular. Nationwide, about 65 percent of new teachers now participate in induction programs. This is important, because teachers with fewer than five years of experience who have not participated in an induction program are about twice as likely to leave teaching as those who do.72 By contrast, only 16 to 17 percent of teachers with more than 10 years of experience in the mid-1990s had such help when they entered the profession.73 New teacher induction programs should be in place in every state, be adequately funded with state resources, and

Evidence concerning induction programs is clear: when well conceived, adequately funded, rigorously maintained, and thoroughly evaluated, induction programs raise standards among new teachers, provide effective professional development for beginning and experienced teachers, and lower attrition rates.
include every beginning teacher. Evidence concerning induction programs is clear: when well conceived, adequately funded, rigorously maintained, and thoroughly evaluated, induction programs raise standards among new teachers, provide effective professional development for beginning and experienced teachers, and lower attrition rates. Induction programs make good state investments.

**Teacher Development Item 7:** Including Standards in Systems of Advanced Certification

Although “certification” has often been used as a synonym for “licensure,” states and professional groups are beginning to discriminate between the two in much the same way other fields have. In general, licensure refers to the state acting on its authority to ensure that a practitioner is likely to do no harm in a particular field. In other words, a licensed teacher is one that the state decides has the necessary knowledge and skills to practice as a teacher without jeopardizing students, communities, or schools. Certification, on the other hand, is largely a function of the profession itself acting to acknowledge those who demonstrate advanced capabilities.

The distinction between certification and licensure has become more evident with the creation of the National Board for Professional Teaching Standards (NBPTS).

Teacher credentialing has traditionally been a state responsibility with the terms certification and licensure used almost synonymously. The NBPTS is seen by many as a mechanism to sharpen the distinction between the two, with licensure limited to state recognition that an individual has met predetermined statutory qualifications for practice, and certification reserved to the Board as professional recognition that a person meets certain standards beyond those required to be licensed.74

NBPTS certification is not considered an alternative to licensure, but rather is a more specialized recognition of accomplishment and distinction within the field. Governed by a 63-member board of directors, the majority of whom are classroom teachers, the NBPTS has established high, rigorous standards for what accomplished teachers should know and be able to do. It has developed and is currently operating a national voluntary system to assess and certify experienced teachers who are exceptionally accomplished in their field and provides teachers with the opportunity to discuss elements of excellent teaching and to incorporate such practice into their classroom work.

Although the standards and assessments created by the NBPTS are based on the best available research in teaching and learning, the results of the national certification assessment have not yet been evaluated sufficiently to attest to the fact that the test is fair and valid. This does not mean that states should resist participating in this promising experiment in national professional certification of teachers. On the contrary, NASBE believes that the standards and evaluations of the NBPTS warrant support and continued research. However, states deciding to participate in these early years of national certification should understand that the assessments, and the standards on which they are predicated, may change as knowledge about excellent teaching and evaluation methods is refined. As with any other new initiatives to improve the supply of high-quality teachers, the results of NBPTS participation should be continuously evaluated.

Whether or not states decide to adopt the NBPTS certification system, every education policymaker should be informed about the ground-breaking work of NBPTS. There are several reasons why accomplished teachers should be offered the chance to receive advanced certification, whether via NBPTS or some other state-developed measure:

- Certification provides a system of promotion that recognizes and rewards excellent teaching;
- Certification requires states to forge agreements about what constitutes exceptional teaching practice; and
- Certification allows teachers the important professional opportunity to develop criteria for judging excellence in their own field.
Reciprocity across States

Of teachers who leave teaching, 35 percent do so because they move.75 In other words, retention rates of teachers are made worse because teachers who move across state lines find it difficult to transfer their license, and shortages are made worse because teachers who are willing to move from a “surplus” to a “shortage” state often find that doing so would mean a loss of seniority, decrease in wages, and sacrifice of their vested pension plan. Mobile teachers face these obstacles in large part because state policies and programs continue to be based on the premise that teacher labor markets are local, even though the current trend is toward nationalizing teacher recruitment through systems of national standards.

One of the greatest obstacles in teacher reciprocity is the extent to which states continue to evaluate and license teachers based upon “inputs” (content knowledge, college courses, and degrees) rather than “outcomes” (teachers’ actual ability to bring students to high standards). Envisioning reciprocity as a factor of “inputs,” where states try to ensure that all incoming teachers have certain minimum educational experiences and content knowledge, is an anathema to efforts in states to make sure practicing teachers are capable of performing well. In trying to measure performance as a precondition for licensure, some states have begun to recognize any teacher with National Board Certification as being qualified for a state license, believing that National Board Certification is an acknowledged measure of good practice. States need to begin to think creatively about ways to accept teachers across state boundaries for provisional licensure based upon the quality of their work, rather than based on the state in which they are licensed. Envisioning reciprocity decisions in this way requires states to implement performance-based evaluations, based on teacher standards, of out-of-state teachers in order to judge the quality of their work as a basis for full licensure.

Professional Development

Professional development, when done well, can significantly increase student learning and improve teaching practice. High-quality professional development is also an effective way to make sure teachers have the skills and knowledge they need to respond to new requirements for students and new knowledge in teaching and learning. But high-quality professional development does not come easily; on the contrary, effective professional development needs to be carefully crafted to include several or all of these critical elements:76

- It is rigorous, ongoing, school-based, and embedded in teacher work;
- It has as its primary goal improving student learning, and is evaluated according to this goal;
- It includes training, practice, feedback, opportunities for reflection and group inquiry, and coaching or other follow-up procedures;
- It is collaborative and provides opportunities for teachers to interact with peers;
- It encourages school-based and teacher initiatives;
- It is rooted in the knowledge bases for teaching, subject matter, and student needs;
- It is an important part of the normal school day;
- It recognizes teachers as professional adult learners and is often teacher designed and directed;
- It provides adequate time and follow-up support; and
- It is accessible and inclusive and helps teachers meet the needs of students who learn differently.

Research also shows that the quality and the duration of professional development are important determinants in the ability of the program to improve teaching practice and student achievement.77 But state policies usually do not address these two critical issues.

The reality is that most professional development programs do not incorporate these elements. Generally, professional development activities are not curriculum-based, there are few follow-up activities to help teachers use newly learned practices in their classrooms, teachers rarely lead professional development, and professional development activities are virtually never evaluated on how effectively they
Although there is much to be done, signs suggest that significant changes are occurring in how professional development is being conceived. The changes are:

- From individual development to individual and organizational development.
- From fragmented, piecemeal improvement efforts to those driven by a clear, coherent strategic plan for the district, school, and the departments that serve schools.
- From district-focused to school-focused approaches.
- From a focus on adult needs to a focus on student needs and learning outcomes.
- From training that one attends away from the job to multiple forms of job-embedded learning.
- From an orientation toward the transmission of knowledge and skills to teachers by “experts” to the study by teachers of the teaching and learning processes.
- From a focus on generic instructional skills to a combination of generic and content-specific skills.
- From staff developers who function as trainers to those who provide consultation, planning, and facilitation services, as well as training.
- From staff development provided by one or two departments to staff development as a critical function performed by all administrators and teacher leaders.
- From teachers as the primary recipients of staff development to continuous improvement in performance for everyone who affects student learning.
- From staff development as a “frill” to staff development as an essential and indispensable process without which schools cannot hope to prepare young people for citizenship and productive employment.

change teacher practice or improve student outcomes. Moreover, links between the content of professional development programs and teachers’ needs are weak, as are links between one professional development activity and the next, between professional development and supervision, and between teachers’ work assignments and the professional development courses they take. Finally, the content and method of delivery of most professional development rarely takes into account that some of the most effective professional development occurs in school-based discussions among colleagues of actual student work rather than via externally delivered programs. As a result, professional development rarely has the positive effect that it could on teacher practice or student achievement.

Professional development that focuses on teaching and learning matters greatly. One study that examined the relationship between teacher quality and student achievement found, for example, that math students whose teachers received professional development on incorporating higher-order thinking skills in their instruction were 40 percent of a grade level ahead of students whose teachers did not receive such professional development. In the same study, students whose teachers received professional development on working with diverse student populations were over one year ahead of students whose teachers did not receive such training. Conversely, science students whose teachers received professional development in classroom management were one-third of a grade level behind their peers.

In order to meet their commitment to provide every student with the tools he or she needs to meet high standards, states must begin to ensure the quality and quantity of professional development available to their teachers. Some states have demonstrated an interest in professional development by setting aside funds (or requiring districts to do so) to ensure that adequate resources are invested in developing teachers. But beyond providing resources for professional development, states should consider ways of ensuring the quality of professional development programs, such as creating program evaluation criteria. A few states have thought creatively about ways to encourage teacher participation in high-quality professional development.

- In response to the consistent research finding that sustained, ongoing professional development programs are more effective than one-time workshops, Arkansas passed legislation that requires districts to provide a minimum of 200 minutes of scheduled time each week for conferences and instructional planning. The state hopes that having weekly time set aside will help schools build
professional development from one week to the next that is sustained and related.

- Maine has developed regional coalitions of school improvement teams and school-university partnerships to stimulate school-based change and encourage appropriate professional development.

- California has created subject-matter collaboratives to provide professional development based upon the state’s curriculum frameworks.

- As an innovative professional development activity that involves teachers statewide, Vermont encourages teachers to work with others in developing and scoring student portfolio assessments.

- In recent years, Kentucky has had the most widespread professional development opportunities of any state. In 1994, more than 70 percent of teachers in that state reported that they had pursued professional development opportunities regarding the uses of technology, teaching methods, student assessment, and cooperative learning. Kentucky teachers also were more likely than most others to say that the professional development changed their practice.

- Washington limited the educational credits that teachers can use toward career advancement to courses that are directly related to a teacher’s current or expected area of instruction.

Some states and districts have developed “career ladders” that provide avenues for professional growth for teachers that allow them to remain teaching in classrooms:

The Rochester Career in Teaching Program started in 1987, when a new teacher contract in the district paired unprecedented increases in teacher salaries with unprecedented responsibility for teachers to monitor and improve the quality of their peers in the district through peer review and lead teacher programs. New teachers receive mentoring and support from lead teachers, who also evaluate their performance and help them improve instruction. Lead teachers are chosen through a competitive application and interview process. They must have at least seven years of successful teaching experience and meet several other criteria, including:

- Proven ability to work with students with the greatest need;
- Demonstration of outstanding classroom teaching ability;
- Demonstration of effective written and oral communication;
- Evidence of leadership skills;
- Ability to tap into community support systems;
- Evidence of a commitment to improving student outcomes;
- Written letters of recommendation; and
- Evidence of effective parent involvement and communication.

**Teacher Development Item 9: Differential Staffing**

Teaching has been described as an “unstaged career,” meaning that a teacher’s job changes little over the course of an individual’s career. Those who do seek promotion and job advancement often have little choice but to pursue qualifications and positions in school administration.

The relatively flat career structure for most teachers is problematic for at least two reasons: it fails to encourage teachers to constantly improve their teaching skills, and it discourages individuals who seek opportunities for advancement from pursuing a career in teaching. For example, seven out of ten young college graduates who are not teachers say that teachers do not have good opportunities for advancement. In focus groups conducted by Public Agenda, young college graduates who did not enter teaching suggested again and again that teachers plateau too early in their careers and have no opportunity to advance. Equally alarming, 66 percent of principals and superintendents believe that “the lack of upward mobility for teachers is a key obstacle to making the profession attractive.”

Some states and districts have developed “career ladders” that provide avenues for professional growth for teachers that allow them to remain teaching in classrooms:
New teachers spend one year as a teaching intern assigned to a lead teacher. After successfully completing an internship, teachers become “resident teachers” for up to four years. While a resident, teachers are expected to maintain high standards and earn a master’s degree. After completing resident status, teachers move to “professional status,” which means they have tenure and are fully licensed by the state. The final and highest step on the career ladder is “lead teacher.”

The impact of the Career in Teaching Program has been impressive. Of new teachers who began working in the district in 1988, 95 percent were still teaching in the district ten years later. Of those who leave, a substantial percentage have been counseled out of the profession or not recommended for rehire—in other words, they left for reasons of quality.

Cincinnati has taken the step of completely scrapping its traditional salary structure in favor of a career ladder. Beginning at the start of the 2002-2003 school year, all teachers in the district with fewer than 22 years of experience will enter the new compensation plan. The plan consists of five categories of teachers, each with its own salary range, from “apprentice” to “accomplished.” Each category has specific teacher performance goals and standards attached to it. The system relies on frequent, in-depth evaluations of individual teacher performance to determine whether teachers advance, remain in the same category, or revert to a lower level. This plan is referred to as a “knowledge- and skills-based” system, because it rewards teachers for meeting goals and achieving standards of knowledge and skills rather than rewarding teachers according to their student test scores.

At the state level, teachers are increasingly compensated for achieving advanced certification, particularly those who earn national certification by the National Board for Professional Teaching Standards. For example, California provides a one-time $10,000 bonus to teachers who earn board certification; North Carolina offers a 12 percent pay raise to a teacher for the life of the NBPTS certificate; and Florida grants a 10 percent salary increase for the life of the certificate plus an additional 10 percent bonus to NBPTS-certified teachers who mentor newly hired teachers. It should be noted that the assessment procedure to gain NBPTS certification is both long and expensive; currently only about 40 percent of all teachers who complete the process actually go on to earn Board certification.
Chapter 2 described efforts to recruit, place, and develop teachers in ways that give them the knowledge and skills they need to be effective with all kinds of students. Other state policies reward teachers for agreeing to work in hard-to-staff schools, either with financial stipends or extra years toward retirement. These types of state interventions are critically important elements of any system to provide every student with consistently high-quality teachers.

The current package of state interventions to attract, prepare, and retain high-quality teachers is only half complete, however, because it addresses only a small portion of the reasons teachers choose not to teach in certain schools. What policymakers have ostensibly done is to build compensatory teacher recruitment programs that appeal to a combination of altruistic and monetary motivations for teachers to work in hard-to-staff schools. Compensatory approaches to teacher recruitment only appeal to a small percentage of the teacher workforce, though. For example, while most new teachers believe that individuals willing to teach in hard-to-staff should receive compensation for doing so, most would be unwilling to make the tradeoff themselves. Only 8 percent of teachers in rural and suburban schools say they would be “very
Money Matters. Many people think of money as a retention tool. This does not seem to be true. Evidence is clear that salary is not a primary reason why individuals leave teaching—quality of their work environment and their perceived ability to make a difference in the lives of students all impact new teachers’ decisions to stay or leave more than salary.

While salary isn’t a big determinant to retaining teachers, it may play a more significant role in recruiting candidates to teaching in the first place. What keeps teachers satisfied, however, has more to do with job satisfaction in terms of feelings of control and working conditions.

In one survey of young college graduates, individuals reported that teachers reach salary plateaus too early in their careers, and two-thirds of principals and superintendents said that the lack of upward mobility for teachers is a key obstacle to making the profession attractive. Beginning teachers do, on average, earn about $7,500 less than their peers who enter jobs in marketing and about $15,000 less than those who enter careers in computer science. But just like their teaching peers, graduates who did not pursue careers in teaching also agree that working conditions make the job unattractive. Eighty-nine percent of young professionals believe that public school teachers feel respected and appreciated. Three-quarters of young professionals believe that teachers are often scapegoats for all the problems facing education.

Twenty-seven states offer scholarships or forgivable loans to prospective teachers, to which a total of $81 million was targeted in 1999. Of these states, eleven have programs that specifically target academically talented students, and ten have programs that target minority candidates.

Salary. Although less than five percent of public school teachers who actually leave the field do so because of money, less than half of all teachers say they are satisfied with their salary. Even more troubling, less than 30 percent of teachers of color are satisfied, and the best-paid teachers working in high-poverty schools earned 35 percent less than teachers in low-poverty schools.

Some states have made strides in improving the salaries of teachers, particularly teachers with needed experience and high-quality skills. For example, North Carolina recently increased teachers’ salaries by an average of 33 percent, which includes a 12 percent increase in salary for teachers who obtain National Board certification. Much like the system in North Carolina, state-supplied salary increases should be targeted to encourage teachers not only to stay in the field but also to continue to grow professionally across the course of their career. States may consider targeting state salary incentives to strategically recruit teachers to high-need schools and subjects, encourage teachers to achieve advanced certification, and motivate teachers to participate in professional development experiences.
from their peers and more included as members of learning communities, they tend to be more committed to their jobs and more likely to stay in teaching.

Evidence that the causes of teacher attrition are often systemic and institutional is compelling. One survey of California teachers who had left teaching after six to ten years of teaching experience found that they rank-ordered their reasons for leaving as: accountability; increased paperwork; student attitudes; no parent support; unresponsive administration; low status of the profession; and salary considerations.96 This list closely parallels data from the Schools and Staffing Survey that demonstrate that teachers leaving within the first five years cite lack of administrator support, poor working conditions, and poor student attitudes as key reasons for their disaffection. Conversely, where favorable working conditions exist, such as collegial relationships among teachers and administrators, parent and community support, relatively low class sizes, and high levels of teacher responsibility for education decision-making, teachers report feeling better about their work, and they are less likely to leave.97 These kinds of evidence have led one education researcher to conclude, “Isn’t it possible that improving working conditions would be less expensive to school districts than the costs of losing—and replacing—unhappy teachers?”98 Another said, “The causes of disaffection with classroom teaching are systemic rather than personal…. Conditions that undermine the power and effectiveness of our public school system need to be identified and promptly rectified. This includes, above all, creating a work environment that will continue to draw the bright, committed new teachers we need—and will keep them enthusiastic, energetic, and productive throughout their careers.”99

<table>
<thead>
<tr>
<th>PERCENT OF PUBLIC SCHOOL TEACHERS WHO AGREE OR STRONGLY AGREE WITH STATEMENTS REGARDING THE WORKING CONDITIONS IN THE SCHOOL OR CLASS: 1999-2000</th>
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<tr>
<td><strong>Student misbehavior interferes with my teaching</strong></td>
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<td><strong>Stated that physical conflicts among students were a serious problem</strong></td>
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<tr>
<td>50 states and DC</td>
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<th><strong>Reported being threatened with injury in the past 12 months</strong></th>
<th><strong>Reported being physically attacked in the past 12 months</strong></th>
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<td>Urban fringe/largetown</td>
<td>3.3</td>
<td>7.9</td>
<td>3.5</td>
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<tr>
<td>Rural/small town</td>
<td>2.7</td>
<td>8.6</td>
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LINKING TEACHER RETENTION TO THE SCHOOL ENVIRONMENT

When it comes to providing teachers with the working environment they want, policymakers are in a very fortunate position. This is because the working conditions that produce teacher job satisfaction and improve teacher retention are frequently the same conditions that are strongly linked to improvements in student achievement. The philosophical, theoretical, and empirical evidence in support of this assertion is simply too overwhelming to be ignored any longer. Efforts at building effective schools and efforts at building stable, high-quality teaching forces are inextricably linked, and the effectiveness of both efforts can be enhanced when this link is explicitly acknowledged in policies and programs.

The good news for policymakers doesn’t stop there. There is a large and growing body of knowledge about effective, educationally sound policies and programs to attract and retain good teachers. This knowledge can inform a variety of state efforts to link teacher recruitment and retention strategies with efforts at school improvement and gives policymakers a rare opportunity to develop truly integrated systems of school and teacher improvement. Research on the reasons why teachers stay or leave the profession point to four elements of the school environment that are critical to attract, retain, and develop teachers of high quality.

- Effective Leadership. In schools that attract and retain high-quality teachers, the school leader is able to focus the whole school on effective instruction and use this focus as a means of establishing school priorities and acting upon them. Effective school leaders and everyone else in their school know the school is a place for learning and trust the school’s vision of how to bring that learning about.

- Positive Environment that is Conducive to Learning. In schools that attract and retain effective teachers, all staff and all students share the expectation that all students can and will learn. Learning takes place in a school environment that is safe and orderly, and students are expected to behave according to clearly established and widely understood rules of conduct that are fairly executed by teachers and school leaders.

- Frequent and Appropriate Use of Data. There is frequent monitoring and evaluation of student progress toward the learning objectives and other indicators of school success. Effective schools find ways to use data to help teachers improve instruction, help leaders improve the school environment, and help students improve their achievement.

- Sufficient Resources to Support High-Quality Instruction and Classroom Management. In schools that attract and retain effective teachers, teachers have the resources they need to teach and to motivate students to attend school and learn. There are clear instructional objectives across the school, and instruction occurs at a level that is appropriate for each student.

SCHOOLS THAT ATTRACT AND RETAIN HIGH-QUALITY TEACHERS HAVE EFFECTIVE LEADERSHIP

One of the most common elements shared by schools that consistently attract and retain effective teachers is good leadership. In one survey, for example, more than eight out of ten new teachers said they would rather work in a school with good administrator support than one that offered higher pay.
versely, of teachers who leave the profession because they are dissatisfied, 15 percent say they are dissatisfied because of inadequate support from their administration. Among dissatisfied teachers who seek a job in a different school, 29 percent report changing schools because of inadequate support from their administration.105

Clearly, attracting and retaining high-quality teachers to the schools that need them most requires states to pay attention to issues of school leadership. Effective schools research of the last twenty years, paired with survey information about what teachers expect from school leaders, has provided important information about the characteristics of school leaders that attract and retain effective teachers and improve student achievement. High-quality school leaders share at least four elements.106

- A vision of teaching and learning that is reflected in goals that are shared by everyone in the school. Effective school leaders develop a collective vision shared by students and teachers that focuses on high levels of student achievement and assumes that all students can learn. They also provide the rigorous academic curriculum and professional development that can help students and staff achieve school goals.

- The ability to foster models of shared leadership. School leaders that attract and retain high-quality teachers bring teachers and other staff into the process of school leadership. These leaders understand that sharing leadership is one of the most effective ways to ensure that students and teachers support school policies and programs. Furthermore, they understand that policies and programs that are adopted through shared leadership strategies stand a greater chance of surviving changes in school personnel.

- An assumption that school improvement is a continuous project. Effective school leaders foster among all students and staff a belief that their pursuit of rigorous learning is ongoing and that “the sky is the limit” in terms of student achievement and teacher effectiveness. They gather evidence and monitor progress in order to evaluate policies and programs and inform a constant cycle of institutional improvement.

- Successful investment in building relationships with families and community organizations. Good school leaders know that parent involvement is a key element of student achievement. They also understand that community organizations often can provide important resources to support student achievement. Good school leaders have the cultural competency they need to bring families and community organizations into partnership with teachers to improve teaching and learning.

NASBE’s policy report on school leadership, Principals of Change, addressed the kinds of knowledge, skills, and supports school leaders need in order to be effective. It also put forth the following recommendations to the education policymaking community about ways to foster high-quality leadership in all schools:

- **Set Standards and Measure Results.** To ensure excellence among all school leaders, states need to define a clear picture of effective leadership, contained in a set of standards, and require regular formative and summative assessment of school leaders according to the knowledge, skills, and dispositions defined in the standards.

- **Enforce High Standards for Program Accreditation.** If standards for school leaders are to be effective, policymakers must make hard decisions about accreditation that send clear signals to all preparation programs that poor quality will not be tolerated.

- **Recruit Leaders for Hard-to-Staff Schools and Districts.** States need to invest in targeted recruitment strategies that attract high-quality candidates to school leadership who are likely to work where they are most needed.

- **Provide Alternate Routes to Certification.** States should consider providing high-quality alternate routes to school leadership positions that may be independent of traditional university preparation programs.

- **Provide Induction Programs.** States should devise systems to support new school leaders that include a formal induction program.

- **Augment and Target Professional Development.** Policymakers should implement an articulated system of professional development that provides targeted training and assistance to school leaders throughout their careers.
• **Link Recruitment of School Leaders to Recruitment of Teachers.** Because school leaders are usually recruited from among teachers, there is a direct link between recruiting high-quality candidates into teaching and having a pool of high-quality candidates for leadership preparation programs. States need to include effective teacher recruitment strategies in any plan to improve the supply of high-quality school leaders.

• **Retain Current, Excellent School Leaders.** States should develop policies to improve the support, services, and growth opportunities available to school leaders in order to encourage excellent leaders to remain in the field. Implementing policies and programs that improve the quality of school leaders can make important contributions to addressing problems in teacher recruitment, distribution, and retention. Conversely, building policies to attract and retain teachers without linking them to policies to foster effective school leadership is similar to a doctor who hides a symptom to cure a disease.

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**A Rigorous Curriculum**

Effective schools that attract and retain high-quality teachers operate under the assumption that all students can learn—and then they put that assumption into practice by offering a high-quality, rigorous curriculum to every student. Despite the importance of a rigorous curriculum to fostering success among both students and teachers, low-level curricula are often found precisely in those schools that find it hardest to attract and retain staff. The Education Trust, for example, writes of being “stunned ... by how little is expected of students in high-poverty schools—how few assignments they got in a given school week or month. Stunned, second, by the low level of the few assignments that they do get. In high-poverty urban middle schools, for example, we see a lot of coloring assignments, rather than writing or mathematics assignments. Even at the high school level, we found coloring assignments. ‘Read To Kill a Mockingbird,’ says the 11th-grade English teacher, ‘and when you’re finished, color a poster about it.’”

Research on effective schools, including high-poverty, high-minority, urban and rural schools, demonstrates again and again the importance of the curriculum in fostering a constructive learning environment. Not only does curriculum need to be rigorous, but when students fall behind, studies suggest that the curriculum should become more rigorous, not less. Most schools do just the opposite for students who struggle—slow the curriculum and make learning more laborious. This strategy of offering some students a chronically low-level curriculum is linked to the development of behavioral and motivational problems among those students at risk of failure.
Disciplined and Motivated Students

Most teachers want to work with motivated students. By almost a nine to one margin, new teachers say they would choose to work in a school with well-behaved students and supportive parents rather than at one that paid more. Among college graduates who would be willing to consider a career in teaching, nine in ten believe that “in today’s schools teachers often have to worry about their personal safety.”

Teachers who feel that student motivation and discipline are a problem in their school are less likely to want to stay in teaching. Eighteen percent of dissatisfied teachers who leave the profession cite student discipline problems as their main reason for leaving. Another 18 percent cite poor student motivation. Among teachers who are dissatisfied with their school and apply to work in another school, 10 percent cite poor student motivation and 12 percent cite student discipline problems as reasons for their move. Clearly, student discipline and motivation are critical factors in attracting and retaining high-quality teachers.

Armed with the knowledge that poorly motivated students discourage teachers from working in certain schools, some individuals blame students for many of the problems in teacher recruitment and retention. The evidence is clear, though: when students attend schools that expect them to learn and provide the resources they need to do so, students are more motivated to learn and less likely to develop disciplinary problems. In other words, building high-quality learning environments is the key to fostering learning in several ways: high-quality learning environments reduce difficulties in recruiting and retaining teachers, foster high levels of learning among all students, and reduce student discipline problems.

Frequent and Appropriate Use of Data

A school’s ability to attract and retain good teachers is strongly linked with its capacity for continuous improvement. One of the key elements of such improvement is the use of data in decision-making, both in the classroom and at the school level. Indeed, school improvement efforts can plateau early unless strategies for school improvement are based on data that illuminate root causes of low performance and help schools prioritize their needs. Schools that excel at improving teaching and learning do it by gathering and analyzing data often and basing decisions about school, classroom, and student interventions on diagnostic information. Characteristics of quality data systems include: using the information for diagnostic purposes to identify achievement gaps early; using data to prioritize actions on the most critical factors impeding achievement; providing timely information to inform instruction; and focusing on explanations as well as outcome measures.

Indeed, data are at the center of any effective model of continuous improvement. Schools dedicated to using quality information in their decision-making process generally take at least five actions in regards to their data. These schools:

Analyze. Teachers and schools need to analyze data in ways that will provide information to inform key decisions about teaching and learning. For example, teachers who use data to ensure that their instruction of a particular topic was effective may want to evaluate student performance data in several ways: by individual students to inform decisions about continued instruction, by groups of students to discern if classroom practices and curriculum were more effective for some groups of students than others, and question-by-question to evaluate whether the chosen curriculum and instructional methods communicated some elements of the desired knowledge and skills more effectively than others.
Disaggregate. Because aggregated data can obscure the performance of individual students and subgroups of students, it cannot answer core questions about exactly which students are achieving and exactly what is being achieved. Disaggregating student performance data helps schools refine their focus for school improvement interventions, and disaggregated results may help educators decide what kind of evidence needs to be gathered in more formative and qualitative ways to disentangle the reasons for poor performance among students and certain groups of students.

Prioritize. Effective school improvement requires staff to use data to select a small number of primary improvement goals, based on data, and then to align school improvement planning, professional development, curriculum, and program selection accordingly. Targeting a small set of indicators that are most directly related to teaching, curriculum, and leadership helps focus staff on specific, doable tasks.

Apply. In addition to frequently gathering and analyzing several kinds of data, schools need to know how to analyze and apply information about performance and how to share appropriate information with their communities, families, and local and state policymakers. Change rarely happens overnight, and school improvement is no exception.

Collect again. Powerful data-driven improvement systems gather information with sufficient frequency to allow for continuous improvement and ongoing “early warning” of any problems associated with teaching and learning at the school. Thus, each cycle of data collection is the beginning of a new cycle of improvement efforts that move the quality of the school steadily upward over time.114

Sufficient Resources to Support High-Quality Instruction

Financing effective schools that attract and retain teachers is a very contentious issue.115 Despite decades of compensatory programs intended to equalize resources among schools that serve wealthy and poor students, educational spending is still strikingly unequal, as is the kind of teaching and learning experience that schools in different circumstances can provide to teachers and students. Wealthy school districts spend, on average, 56 percent more per student than poor school districts.116 In New York, the state’s wealthiest district spends $17,000 per pupil, while the poorest school district spends $6,000. For schools that find themselves at or near the bottom of an inequitable funding pattern, it is a considerable challenge to provide teachers with what they want—competitive salaries and benefits, small class sizes, time to meet together professionally, appropriate curriculum and instructional materials, state-of-the-art professional development, and top-notch school leaders.

Early efforts to improve chronically low-performing schools in the 1960s and ‘70s focused primarily on increasing spending for “compensatory programs” aimed at ameliorating the effects of culture or poverty on student achievement. Many such programs continue to exist, and their impact continues to be debated. NASBE’s 2002 Study Group on Low-Performing Schools concluded that there is substantial evidence that these programs have positively impacted student achievement,117 but no studies have ever examined the impact of compensatory programs on school staffing patterns.

Some critics point out that even if funds were to be earmarked for improving teaching conditions in hard-to-staff schools, many of these schools and districts
have very limited capacity to ensure that funds are directed toward effective interventions to improve teacher quality and stability or to improve student learning. The critics argue that schools and districts should have to “turn over a new leaf” before receiving extra funds. Others suggest that a portion of school improvement funds should go to reward schools that are already implementing effective programs rather than to support schools that chronically perform poorly.

It is certainly indisputable that mismanaged schools and districts are more likely than well-run schools to waste money. But managed properly, money is a powerful tool to address some of the greatest challenges at the root of inequitable staffing patterns. For example, there really is no replacement for money when low-performing schools try to provide teachers with:

- competitive salaries;
- well-trained, highly effective school leaders;
- extensive, high-quality professional development for teachers;
- high-quality laboratory equipment and technology systems to support teachers’ work;
- high-quality, up-to-date library books and textbooks;
- well-supplied clubs and extracurricular activities;
- classroom release time to plan together;
- safe, spacious buildings; and
- small class sizes.

Without question, all students in the nation should have as their birthright schools with high-quality teachers and leadership, high-quality laboratory equipment and technology systems, well-supplied student activities, safe buildings, adequate library resources, and appropriately sized classes. A judge in a recent state school finance equity suit put it this way:

The state... must roll up its sleeves, step in, and utilizing its constitutional authority and power over the [local education agencies], cause effective educational change when and where required…. It does not matter whether the lack of an equal opportunity to obtain a sound basic education is caused by teachers, principals, lack of instructional materials or other resources, or a lack of leadership and effort.... The state must step in ... and get the mess straight.118

NASBE’s 2002 Study Group on Low-Performing Schools concluded that providing sufficient resources to support teachers’ work at all schools may require districts and states to provide financial support in five ways.119

- Help hard-to-staff schools operate more efficiently with the fiscal resources they have. Many hard-to-staff schools need help tracking and evaluating existing expenditures to eradicate or reform programs that do not contribute to student learning. Evaluation is critically important even for programs that have a presumptive positive impact on student achievement. As described above, all programs need to be evaluated by a data-driven continuous improvement system that can measure program effectiveness and point out elements of programs that may need to be altered to achieve intended outcomes.

- Devise funding formulas that take account of the real needs of hard-to-staff schools. The National Research Council Committee on Education Finance, established by Congress to examine ways in which
school finance systems can be designed to ensure efficiency and effectiveness in reaching high standards, found that most state aid programs do not provide schools in “harsh educational environments” with the fiscal resources they need to achieve the same standard as an average school.120 The Committee encourages states to develop “educational cost indexes” to measure how much a school or district needs to spend, relative to the average district in the state, to meet a performance target. Such a cost index measures the resources needed to meet specific goals under the circumstances faced by different schools and districts and takes account of the fact that some may be able to meet the goal even if they are very financially inefficient, whereas other districts may find it hard to meet a goal even if they are exceptionally efficient.

Measuring school needs in terms of educational cost indexes points out the extent to which hard-to-staff schools need more money to achieve the same outcomes as an average school under harsher educational conditions. Applying an educational cost index formula to school finances in New York, for example, the Committee found that upstate suburbs must spend $.91 to achieve the same performance that the average New York district achieves spending $1.00. New York City, on the other hand, needs to spend almost four times as much as the average district to achieve the same standard. These results, combined with similar results from calculations of educational cost indexes in Wisconsin121 and Michigan,122 demonstrate the large cost differences of providing adequate schools for all teachers and students under highly variable local conditions.

- Use money as a catalyst for system improvement rather than as a carrot or a stick in an accountability system. As several states know, reward systems that distribute funds to schools based on performance measures usually end up giving money to districts that need the least help and denying those funds to hard-to-staff schools. Building a state system of school improvement that is linked to a system of teacher recruitment and retention, on the other hand, requires sufficient funds, along with support to help spend those funds effectively, to flow to the schools that are hardest to staff.

- Develop uniform accounting measures to help researchers understand the exact relationship be-

between school finance, school quality, and teacher recruitment and retention. Uniform accounting measures make it easier to undertake across-district comparisons of school expenditures and outcomes, and new technology makes the integration of uniform accounting measures across a state easier than ever. Still, few states require schools to adopt uniform accounting measures.123 Florida is an exception, and has a school-level data collection system that collects financial, student, and staff data online. Hawaii also has adopted software that can track classroom resources (teacher salaries, benefits, teaching materials, and computers) and compare expenditures on resources between average schools and schools serving at-risk students.124

- Don’t expect miracles overnight. Allocating fiscal resources to support teacher recruitment and retention alongside school improvement requires a long-term commitment to provide for the personnel, curricular, information, and financial needs of every school. If used fairly, wisely, and consistently, money can contribute significantly to improving teaching and learning. School improvement does not always happen overnight, however, and schools that are implementing significant strategies to improve teaching and learning need to know that financial support will be steady and adequate. The Committee on Education Finance made this point very clearly:

[Switching to a finance system based on educational cost indexes] would not immediately bring high-cost districts up to the performance standard. Even if the resources needed to meet the standard were available to them, these districts would have to alter some existing practices, design new programs, and hire at least some new teachers, administrators, and counselors. These steps would take time. A reasonable approach, in our view, would be for a state to move to a performance-based aid system over a period of several years, providing along the way both management assistance and new research evidence about the effects of various educational programs. In combination with these extra steps, moving to a performance-based aid system would allow a state to say that it had provided each district with the resources it needs to meet the performance standard, as determined by the best available information and the current state of knowledge about educational costs.]125
Appendix A: Five Core Propositions of the National Board for Professional Teaching Standards

Teachers are committed to students and their learning. This includes the following elements:

- Making knowledge accessible to all students;
- Believing that all students can learn;
- Treating students equitably;
- Recognizing and taking account of individual differences among students;
- Adjusting teaching practice based on students’ interests, abilities, skills, knowledge, family circumstances, and peer relationships;
- Incorporating the prevailing theories of cognition and intelligence into teaching practice;
- Being aware of the influence of context and culture on behavior;
- Developing students’ cognitive capacity and respect for learning; and
- Fostering students’ self-esteem, motivation, character, civic responsibility, and respect for human differences.

Teachers know the subjects they teach and how to teach those subjects to students. This includes the following elements:

- Appreciating how knowledge is created, organized, linked to other disciplines, and applied to real-world settings;
- Developing the critical and analytical capacities of students;
- Knowing how to convey and reveal subject matter to students;
- Understanding and knowing how to work with preconceptions and background knowledge that students often bring to each subject;
- Knowing where difficulties in student learning are likely to arise and modifying their practice accordingly; and
- Creating multiple paths to the subjects being taught and teaching students how to pose and solve their own problems.

Teachers are responsible for managing and monitoring student learning. This includes the following elements:

- Creating, maintaining, and altering instructional settings to grab and hold the interest of students and to make effective use of time;
- Engaging students and adults to help with teaching;
- Enlisting other teachers’ knowledge and expertise to complement their own;
- Being accomplished in a range of instructional techniques, and knowing when it is appropriate to apply each;
- Being aware of ineffective or damaging teaching practice;
- Knowing how to engage groups of students to ensure a disciplined learning environment, and how to organize instruction to allow the schools’ goals for students to be met;
- Setting norms for social interaction among students and between students and teachers;
- Understanding how to motivate students to learn and maintain their interest even during moments of failure;
- Assessing the progress of individual students and of the class as a whole;
- Employing multiple methods for measuring student growth and learning; and
- Explaining student performance to parents in a clear manner.

Teachers think systematically about their practice and learn from experience. This includes the following elements:

- Personifying the virtues they work to inspire (such as curiosity, tolerance, honesty, fairness, respect for diversity, and appreciation of cultural differences);
- Demonstrating the ability to reason and take multiple perspectives, to be creative and take risks, and to adopt an experimental and problem-solving orientation;
- Drawing on their knowledge of human development, subject matter and instruction, and their understanding of students to make principled judgments about sound educational practice;
- Engaging in lifelong learning and encouraging it in their students; and
• Examining their practice in order to expand their repertoire, deepen their knowledge, sharpen their judgment and adapt their teaching to new findings, ideas, and theories.

Teachers are members of learning communities. This includes the following elements:

• Working collaboratively with other educational professionals on instructional policy, curriculum development, and staff development;

Appendix B:

Interstate New Teacher Assessment and Support Consortium (INTASC) Model Standards for New Teachers

Principle #1: The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.

Principle #2: The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social, and personal development.

Principle #3: The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.

Principle #4: The teacher understands and uses a variety of instructional strategies to encourage students’ development of critical thinking, problem solving, and performance skills.

Principle #5: The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

Principle #6: The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

Principle #7: The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

Principle #8: The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.

Principle #9: The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

Principle #10: The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students’ learning and well-being.

Endnotes

1 Measures of teacher expertise include scores on licensure exams and other standardized tests, earned master’s degrees, and amount of teaching experience.


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found that one shared key to their success was the 
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