

Education Division
Contact: Bridget Curran, 202/624-5386 or
bcurran@nga.org
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Recruiting and Retaining Teachers for Hard-to-Staff Schools

By Barnett Berry and Eric Hirsch, Center for Teaching Quality

Summary

Although states have maintained a focus on recruiting and retaining teachers, many schools and districts still face daunting challenges in ensuring a qualified and competent teaching corps. It is particularly difficult for schools considered hard to staff—those with high concentrations of low-performing, low-income students; high teacher turnover; and relatively high percentages of teachers who are less than fully certified. States are experimenting with numerous strategies for recruiting and retaining teachers, and some of them are trying particularly to help hard-to-staff schools. To date, there is little hard evidence of the impact of many of their efforts. However, some practices appear promising. To help meet the needs of chronically hard-to-staff schools, governors should consider short- and long-term efforts to

- Evaluate and assess current strategies by collecting, analyzing, and using better data;
- Offer a flexible package of financial incentives to meet different local needs, possibly including substantial changes to traditional pay structures;
- Track, analyze, and improve teacher working conditions, including ensuring strong school leadership, time for teachers to develop their teaching craft, and sufficient materials and resources to teach effectively; and
- Improve preparation and support for beginning teachers.

Introduction

During the last decade, research has helped convince policymakers and business leaders of what parents have always known—teachers make the most difference in student achievement.¹ The authors of the No Child Left Behind Act (NCLB) of 2001 acknowledged this cause-and-effect relationship between teacher performance and student achievement when they coupled rigorous school accountability measures with requirements that try to ensure that all children are taught by "highly qualified" teachers.

To achieve the academic goals of NCLB, all states must address not only teacher quality but also the supply and distribution of the teaching corps:

- **Supply.** Many reports indicate that the country has an adequate supply of teachers overall, but several states do not produce enough qualified teachers to fill all their classrooms, especially in subjects such

as math and science and in special education. According to the U.S. Department of Education, 10 states issue more than 40 percent of all new licenses to individuals who received their teacher training in other states.²

- **Distribution.** Not all schools and districts are successful in staffing all their classrooms with quality teachers. The pressure to find highly qualified teachers is especially felt in what are commonly called hard-to-staff schools.³ Poor children and children of color are far more likely to be taught by inexperienced, underprepared, and less-effective teachers.⁴ For example, a recent analysis by the *Raleigh News and Observer* found that more than half of **North Carolina's** National Board Certified teachers (North Carolina has 8,281 board certified teachers, more than any other state) serve in the 20 percent of schools with the smallest percentages of disadvantaged students. More than one-quarter of North Carolina's schools serving poor and minority students have none of these quality teachers. Nationally, teachers working in schools that serve high-poverty students are less likely to be fully certified and more likely to be teaching on emergency waivers of certification requirements.⁵

Both of these issues must be addressed if all children are to have access to a qualified and competent teacher. During the past decade, many states have made great strides in boosting the overall supply of quality teachers through tiered licensing systems and investments in high-quality professional development and induction programs, but shortages remain in certain subjects, such as math and science, and in special education. Distribution remains a significant challenge, even in states and districts that have improved teacher quality, especially in urban and rural schools, schools with high percentages of poor students, and the lowest-performing schools.

High turnover among new teachers—up to 50 percent quit within the first five years—leaves many students, particularly in hard-to-staff-schools, facing a revolving door of untried novices who do not have the skills to help them reach higher academic standards.⁶ Annually about 16 percent of teachers leave the schools in which they work, but teachers are almost twice as likely to leave high-poverty as low-poverty schools.⁷ Without well-qualified teachers for the schools with the most disadvantaged students, it will be virtually impossible for education to make the kind of progress that policymakers, parents, and the general public are demanding.

Despite these challenges, evidence from research and experience around the nation offer some guidance for what governors can do to secure for every student access to qualified teachers and quality teaching.

What States Can Do to Recruit and Retain Teachers in Hard-to-Staff Schools

Most states have not addressed the root causes of the teacher distribution problem but instead have taken a trickle-down approach, hoping that by adding more teachers to the supply they will create a sufficient number of applicants for all teaching positions. That strategy has not proved effective. Furthermore, problems peculiar to individual districts, such as late hiring dates, transfer policies that encourage teachers to flee hard-to-staff schools, and inefficient and untargeted teacher hiring and assignment processes, work to the detriment of even the most aggressive state policy solutions.

Many states, particularly in the Southeast, have raised salaries, but few have created financial incentives

directed exclusively toward hard-to-staff schools. States are more likely to have broad programs that provide loans or scholarships for all prospective teachers than assistance programs exclusively for those who will teach the more difficult to staff subjects or in hard-to-staff schools. According to *Education Week*, more than half of the states provide about \$100 million in teacher loans and scholarships annually.⁸ Many states give incentives to retirees interested in teaching again but often provide the same incentives for returning to any school. Many states also have early outreach programs, like **South Carolina's** Teacher Cadets, that work with all students interested in teaching but do not target students in communities with chronically hard-to-staff schools. These strategies help place more teachers in the pipeline for the future, but they do not ensure that those teachers take jobs in schools where they are needed most.

According to *Education Week's Quality Counts 2005*, 26 states provide incentives for teaching hard-to-staff subjects, and 14 have policies and programs to recruit and retain teachers in high-poverty or low-performing schools.⁹ But these programs often suffer from inconsistent funding and often do not consider how to combine multiple incentives to provide the most powerful leverage for placing teachers in hard-to-staff schools.

Very few of these recruitment approaches have been systematically evaluated, so cost-benefit analyses and comparisons of their results remain virtually impossible. It is clear, however, that recruiting and retaining qualified and effective teachers for the schools that need them most will require new ways of thinking about and implementing state policy and new ways of allocating resources.

Perhaps most important, research shows that salary and other financial incentives are necessary, but not sufficient, to attract qualified teachers to hard-to-staff schools. For example, teachers—particularly in high-poverty, urban schools—cite poor leadership and lack of decision-making authority, more than salary, as critical in their decisions to leave schools.¹⁰ Better working conditions—including effective leadership and teacher involvement in decision making—and better preparation and support must be part of efforts to attract and retain a sufficient supply of qualified teachers who are ready and willing to work in hard-to-staff schools.

Target Financial Incentives

Many policymakers realize that teacher salaries may be too low to attract and retain enough talented and well-prepared people to the teaching profession, and especially to challenging schools, leading some states toward policies that improve salaries or change the nature of the teacher salary schedule. These increases and changes may be necessary, but also are not likely to be sufficient. About half of the teachers who leave schools cite poor salary as a factor, and approximately two-thirds say that better salary would encourage teachers to remain in the profession.¹¹ The national average teacher salary of about \$46,000 compares unfavorably with those of midlevel accountants (\$54,503), computer analysts (\$74,534), and engineers (\$76,298). But what is most striking is that “since 1972 . . . teachers gained only \$2,600 in inflation-adjusted wages (about 6 percent), which averages out to less than \$100 per year.”¹²

New York City dramatically reduced—by one-half—the number of emergency-credentialed teachers, many of whom tend to teach in the most challenging schools, when beginning salaries increased by 22 percent.¹³ Similar stories have surfaced in **Maryland**, where a recent state program provides additional

funds to local districts that raise salaries, and in Anaheim, California, where increased salaries also improved the supply of certified teachers.¹⁴

Although it is an important strategy for making the teaching profession more attractive to potential educators, raising overall salaries does not necessarily help hard-to-staff schools relative to schools that can offer that same compensation with better, less-isolated, and more supportive working conditions. Some states are addressing this problem by targeting salary increases, or providing bonuses, to those who are willing to teach in hard-to-staff schools or who are qualified to teach hard-to-staff subjects. For example, the Teach Louisiana First program provides qualified teachers from \$4,000 to \$6,000 per year for four years to work in “critical-shortage” areas (low-performing and disadvantaged schools). Districts, such as Denver, that are experimenting with differentiated compensation not only pay teachers for performance but also provide additional increases (approximately \$1,000 annually) to those willing to work in hard-to-staff schools and subjects.

But how much will states have to offer in bonuses or salary adjustments to address the problem effectively? One of the few economic studies conducted on the topic concluded that teachers would need to be paid at least 50 percent more to teach in hard-to-staff schools.¹⁵ Yet even bonuses at these levels may not be sufficient incentive, but could create a significant financial burden for a state. Since the late 1990s, **South Carolina** has tried to recruit experienced “teacher specialists” to work in the state’s lowest-performing schools. Despite a bonus equal to one-half of the average teacher salary in the Southeast (about \$20,000), the state attracted only 20 percent of the 500 teachers it needed in the first year of the program and has only attracted 208 teachers after four years. The application deadline for teachers to participate was extended this year for the fourth consecutive year. Interviews with officials revealed that some teachers who applied were not qualified, and others declined to move to these hard-to-staff positions because of location, lack of administrative support, poor working conditions, and the additional preparation and support required for the difficult teaching tasks at hand.¹⁶

In 1998 **California** enacted a policy of paying any teacher earning National Board Certification a one-time \$10,000 bonus. In July 2001 the state adopted a policy of awarding board-certified teachers (NBCTs) who teach in low-performing schools—those below the 50th percentile on the state’s academic performance index—a bonus of \$20,000 over a period of four years. Recently, the state ended the \$10,000 bonus for all NBCTs but retained the targeted \$20,000 award. Since these incentives were enacted, an additional 2,644 California teachers have become board certified. Researchers have found that California’s NBCTs are more likely to teach in low-performing schools. Los Angeles appears to be most responsible for that statistic. There, most of the schools are low performing, and the district offers a 15 percent salary boost, in addition to the state bonus, to teachers who become board certified. Yet even this apparent success, upon further examination, illuminates the difficulty of attracting accomplished teachers to hard-to-staff schools. Los Angeles Unified School District (LAUSD) is organized into 11 subdistricts, and NBCTs are not evenly distributed among them. Although each subdistrict contains low-performing schools, District I—which encompasses South Central Los Angeles—has the highest concentration of low-performing schools and schools serving poor students and the fewest NBCTs.¹⁷

Among other financial incentives states have deployed, **Florida** not only provides bonuses specifically for teachers in low-performing schools but also has created a Critical Teacher Shortage Student Loan Forgiveness Program and established housing programs that provide apartment rental discounts and assistance for new teachers buying a home.

Mississippi Recruitment Initiatives Producing More Teachers

With almost two-thirds of its students eligible for subsidized meals and areas of the state, such as the Delta, where it is difficult to find and keep teachers, Mississippi faces significant recruitment and retention challenges. Since the Critical Teacher Shortage Act was enacted in 1998, several policies and programs have been established that are helping to ensure that all the state's students have access to highly qualified educators.

- The Critical Needs Teacher Scholarship Program offers tuition and other incentives to those who become licensed and teach in critical-shortage areas. As of 2004, about 750 scholarship recipients were teaching in Mississippi classrooms, and 550 were in critical-shortage districts.
- During the past six years the William Winter Scholar Program has provided 7,250 eligible undergraduate education students with student loans. College juniors and seniors are eligible to receive up to \$4,000 annually in student loans, which are forgiven in return for service in a Mississippi school district for up to three years.
- The Mississippi Teacher Fellowship Program provides funds to pursue a master's of education or an educational specialist degree (including tuition, books, materials, fees, and a computer) to qualified teachers in critical-shortage areas. As of 2004, 331 teachers had participated.
- More than 200 Mississippi teachers in critical-shortage areas have taken advantage of the state's employer-assisted housing program, receiving loans of up to \$6,000 to help with closing costs in purchasing a house. More than 600 teachers have received reimbursement of up to \$1,000 from the state for the expenses of moving to teach in a geographic critical-shortage area.

Improve Working Conditions

In virtually any business or organization, the conditions in which employees work are integral to their satisfaction and productivity. Yet whereas businesses often focus on employee satisfaction, many schools fail to understand the importance of teacher working conditions or may struggle with ways to improve them. Teachers, particularly in hard-to-staff schools, report feeling isolated in their classrooms, needing basic materials to do their jobs, and feeling inundated with work. Teachers feel that they have no input in the design and organization of schools and that they have minimal prospects for career advancement and professional growth. Such conditions are fundamentally related to difficulties in recruiting and retaining teachers, but they are often overlooked by school reform strategies.

Teachers are more likely to leave high-poverty schools because of working conditions—inadequate

administrative support, poor student discipline policies and practices, and limited authority to make key decisions—than because of salaries.¹⁸ Researchers in **New York** found that more-qualified teachers “seize opportunities” to move to more “appealing environments.”¹⁹ A study in **Massachusetts** found that dissatisfied educators sought new teaching positions where they could have more reasonable assignments, sufficient help with the curriculum, positive communication with parents, and support from colleagues and the principal.²⁰

Many states have not addressed teacher working conditions. Little systematic data gathering and analysis has been done to help schools, districts, and states understand the magnitude of the problem, particularly in hard-to-staff schools. Under the leadership of Governor Mike Easley, **North Carolina** became the first state to study teacher working conditions by surveying teachers and administrators and providing customized reports to individual schools about how their teachers feel about their school and what matters to them in making decisions about whether to stay. These data are essential to help policymakers design flexible and effective policies that can be adapted to the unique needs of individual school communities. **South Carolina** has conducted a similar initiative. Analyses in both states have shown clear connections between working conditions, on the one hand, and student achievement and teacher retention on the other.²¹ **Georgia** and **Ohio** were conducting working conditions pilot studies in spring 2005, and **Virginia** is examining working conditions through teacher surveys as part of Governor Mark R. Warner's Teacher Incentives in Hard-to-Staff Schools Pilot.

Additionally, **North Carolina** has devoted funds specifically for professional development, with a working conditions focus, in 16 high-needs pilot districts. Governor Easley recently presented eight schools with awards for their performance and working conditions and has proposed legislation that would provide hard-to-staff schools with funds to implement reforms based on their working conditions data. The legislation (S1057) also includes the following:

- Revision of evaluation standards so that teacher working conditions, recruitment, and retention are factors in principals' evaluations
- Participation for first year principals in the state's Principal Executive Program, which focuses on the improvement of working conditions
- A requirement that Masters in School Administration degree programs include components that focus on school climate, teacher support, and retention
- A study of exemplary uses of planning time for teachers in schools that provide at least five hours of such time per week

Other states have made progress on working conditions. **Arkansas** requires districts to provide teachers with at least 200 minutes per week for instructional planning. More than three-fifths of the states have passed legislation requiring reductions in class size, and more than 40 provide some state assistance for facilities (grants, debt service for capital outlays, etc.). Because strong school leadership increasingly is recognized as critical to a positive environment where teachers want to work and can be effective, states are starting to develop stronger policies to ensure that all schools are led by effective principals. A recent NGA Center brief—[Improving Teaching and Learning by Improving School Leadership](#)—profiles the

numerous steps that states have undertaken to improve the preparation, licensing, and support of principals and to equip schools with leaders who can create the types of working conditions necessary to recruit and retain teachers.²²

Provide Better Preparation and Support

To succeed in hard-to-staff schools, teachers must command sufficient knowledge and a variety of instructional skills and strategies to help struggling students learn. For veteran teachers, strong school principals can provide quality professional development opportunities and time for teachers to collaborate with and support one another. However, to fill all teaching positions in hard-to-staff schools requires new teachers, as well, and they need improved preparation and training, including some kinds of preparation that may deviate from the traditional. Moreover, new teachers need the support of their experienced colleagues as leaders and mentors. New teachers with training in the selection and use of instructional materials and in learning theory, and who had observed classes, practiced teaching, and received feedback, have been found significantly more likely to remain in the profession beyond their initial year.²³ New teachers entering challenging school environments may need specialized training—pre-service and in-service—to develop the skills to be successful with the students they teach.

Prepare teachers in new and different ways. Customized preparation is necessary for working in hard-to-staff schools, which are often urban, with a high proportion of students with special needs. Research on the University of California at Los Angeles' (UCLA) two-year, postbaccalaureate teacher education program—in which much of the preparation occurs on site in urban schools—has revealed that only 10 percent of this program's graduates have left teaching after three years, compared with over 50 percent in most urban schools.²⁴ The program extensively prepares future teachers to meet the needs of the racially, culturally, and linguistically diverse children in California and to become the agents of change who can help turn around low-performing schools. Nationwide, however, state policies provide few incentives, through funding or program approval, for institutions of higher education to create such programs.

Given the grave difficulty of attracting recruits to certain geographic areas, developing “local talent” is a key component of the hard-to-staff school solution.²⁵ A few states have supported “grow-your-own” preparation programs that target paraprofessionals already working in hard-to-staff schools. In 1990 **California** established the state's paraprofessional teacher training program, providing academic scholarships to defray the costs of tuition, books, and fees, for those seeking certification. Between 1995 and 2001, more than 300 teachers entered California classrooms through the program, yielding a 99 percent retention rate, and the program continues to expand. In 2001 there were 42 programs across the state, serving almost 3,000 paraprofessionals in 90 districts at an average cost of \$3,000 per assistant.

States also have tried to overcome the scarcity of traditionally prepared teachers willing to teach in hard-to-staff schools by making it easier fill classrooms with teachers who enter the profession through alternative routes. Several states— **California, Colorado, New Jersey, and, Texas**, for example—rely so significantly on these alternative routes that they have grown from a contributing strategy for filling some hard-to-staff positions to the primary means of preparing teachers. Almost every state has alternative routes into the profession, but the quality and duration of preparation through those routes varies dramatically,

even within states.²⁶

It appears that alternative route programs have been somewhat successful in diversifying the teaching force, but two recent analyses of the teacher preparation research concluded that it is still unclear just how effective alternative preparation has been.²⁷ Recently, the North Central Regional Education Laboratory (NCREL) found six characteristics that are common to effective alternative programs:

- High standards and proper screening of candidates
- Solid academic instruction in pedagogy, subject matter, classroom management, and child development before the candidate begins to work in a school
- An organized and comprehensive system of support by experienced, trained mentors
- A period of observation and assistance in the classroom, by an experienced teacher, before the candidate begins teaching alone
- Ongoing training, instruction, and reflection
- Continuous monitoring, evaluation, and feedback on performance to allow for improvement

These are many of the same characteristics of effective traditional programs. The differences are in the prospective teachers they attract, how and where the training is delivered, and often the time it takes to complete the program. Significantly, targeted alternative route programs could help to attract midcareer professionals interested in changing careers, and they often attract more minorities and men. Regardless of the means of preparation, governors can play a role in ensuring quality by adopting indicators of effectiveness and holding programs accountable for outcomes.

Hold teacher education—traditional and alternative—accountable. States try to ensure the quality of their teacher preparation programs largely through the program approval process. But few states have successfully used program approval to really measure effectiveness and leverage improvements. Even fewer have tried to address the production of an adequate supply of teachers by targeting the institutions of higher education that prepare them. In **Louisiana**, state leaders are using program approval to do both. In reaction to recommendations of the state's Blue Ribbon Commission on Teaching Quality, state leaders created a new system of teacher preparation program approval. Three areas—teacher quantity, institutional performance, and authentic university-school partnerships—make up an equal component of a program's ratings under the system. Unlike most program approval systems, Louisiana's looks not only at quality indicators but also at quantity. Programs must achieve target numbers of program completers and show growth in the numbers of graduates entering critical subject areas and working in districts that are chronically hard to staff. The state will also pilot an effort to measure graduates' impact on student learning and include that information in the program approval process. It is too soon to fully evaluate this program's outcomes, but all of the institutions that prepare teachers have undergone redesign, and some have made significant improvements on the initial indicators.

Provide new teachers with additional support and on-the-job training. Good teacher preparation is important, but so are new-teacher induction programs that provide mentoring and other types of support.

Well-developed support programs for novice teachers are extensions of their training and can increase retention and improve student achievement. When school districts allocate enough well-trained mentors for their novices, classes taught by new teachers can achieve gains comparable to those of classes taught by more experienced teachers.²⁸ The process of induction is particularly crucial for hard-to-staff schools, given the proportion of staff that is new and often alternatively licensed and the challenging student population.

Research has consistently demonstrated higher attrition among new teachers and the importance of strong induction support to stem it. One national study found an attrition rate for new teachers of only 15 percent for those who had participated in induction programs, compared with 26 percent for those who had not. Such figures translate into thousands of dollars in savings for districts and states, given the costs of preparing and recruiting teachers.²⁹ Yet few states provide the types of support necessary to achieve these savings. Only 14 states provide funding—which ranges from as little as \$40 to as much as \$3,000 per teacher. At the high end, **California** contributes more than \$3,000 in state dollars toward the \$5,000-per-teacher program cost.³⁰

Much has been written about new teachers' need for a great deal of support in understanding how to implement curriculum, teach and assess standards-based lessons, and address specific student needs, as well as their need to learn from expert peers who are teaching in their subject areas. Sound induction programs that raise retention rates provide novices with on-the-job training that includes these components:

- Opportunities to observe and analyze good teaching in real situations
- Guidance and assessment by highly trained, content-specific mentors
- Reduced workloads to provide more learning time
- Assistance in meeting licensure standards through performance-based assessments

Connecticut's Beginning Educator Support and Training (BEST) program comes closest to fitting this description. BEST has made the most progress in the nation in connecting assessment and support components through a well-institutionalized, performance-based licensing system. The traditional teaching observation process has been replaced with an ambitious, subject-specific, portfolio system framed by an elaborate support structure that includes content-specific seminars and highly trained mentors. These strategies are not inexpensive—Connecticut's program costs the state \$3.6 million annually and provides almost \$1,500 per new teacher over two years—but can be built into a more comprehensive system of teacher development.

Paying more for the right kind of preparation and induction programs can lower costs in the long run. A major study from **Texas** found that the state's 15.5 percent annual teacher turnover rate (40 percent for new teachers within their first three years) was costing the state a minimum of \$330 million, and perhaps as much \$2.1 billion, annually.³¹

Districts Take Action

Given their immense staffing challenges, many school districts—particularly in large, urban areas—are not waiting for the state to provide incentives for teachers to work in hard-to-staff schools. These districts have stopped treating all schools alike and are combining bonuses and professional support to attract qualified teachers to chronically hard-to-staff and low-performing schools.

- **Chattanooga, TN.** The district provides a comprehensive menu of recruitment incentives for those teaching in the district's nine lowest-performing schools: free tuition toward a master's degree in urban education; a \$10,000 loan, forgivable after five years of service, toward the down payment on a house near an eligible school; an individual \$5,000 bonus for teachers whose students consistently show more than a year's growth on the state's value-added assessment; and a team bonus of up to \$2,000 for boosting student test scores.
- **Miami-Dade, FL.** By eliminating 707 noninstructional positions, the district is reallocating more than \$35 million to increase salaries for all teachers and to a new program for 39 chronically lower performing schools, dubbed the "School Improvement Zone" by new Superintendent Rudy Crew. Teachers in the zone work an additional hour each day and ten more days throughout the year, complete 56 hours of professional development, and make 20 percent more than teachers in schools outside of the zone.
- **Mobile, AL.** After reconstituting five of its lowest-performing schools, Mobile is using funds received through Title I and Title II of the No Child Left Behind Act to offer teachers in those schools a \$4,000 annual bonus for five years and up to an additional \$4,000 annually for meeting individual, group, and school performance objectives. In addition, the five schools receive a full-time teacher coach in their choice of reading, writing, or mathematics and additional professional development resources and support.

Recommendations for Governors

1. Evaluate and Assess Current Strategies.

States need to create new structures and to monitor and assess the effectiveness of strategies currently in use. While many states have programs to provide scholarships, loans, and incentives to attract new teachers, these efforts are seldom targeted for hard-to-staff schools. Many of these programs are also disconnected from other, existing and related state initiatives, and most states collect little data on their effectiveness, especially data on where and for how long aid recipients teach.

Immediate Action: States should analyze whatever data currently exist on the effectiveness of their recruitment efforts in schools and districts. Funding district-level audits would help determine how similar recruitment incentives perform in different geographic and socioeconomic settings within a state. This assessment process should eventually produce fine-grained data on recruitment and retention efforts, which can inform program implementation, help to align existing work, and help in directing aid to the districts that need it the most.

Long-Term Action: States should provide consistent leadership in collecting, analyzing, and using data about the impact of teacher recruitment and retention strategies. One strategy for making better use of data involves establishing a third-party “center of excellence”—such as **South Carolina**’s award-winning Center for Recruitment, Retention and Advancement. Such a center should provide leadership in analyzing data, in establishing and evaluating statewide programs, and in offering direct technical assistance to hard-to-staff schools and systems. To be most effective, the center would need sufficient funding and autonomy to provide the kind of leadership and information necessary to address the hard-to-staff challenge in all its aspects.

2. Offer a Flexible Package of Incentives to Meet Different Local Needs.

The model must provide a broad array of incentives and supports and offer choices to potential recruits. There is no single solution to recruiting and retaining quality teachers for our hard-to-staff schools. The evidence is clear that although salary supplements are necessary, they are not sufficient. It is also true that the incentives needed to recruit and retain an outstanding 22-year-old novice are not the same as those needed to recruit and retain a 45-year-old, National Board Certified teacher or a 58-year-old retired teacher who could be lured back into service.

Immediate Action: State policymakers need to create an array of incentives and supports that allows recruits a menu of choices, such as the following:

- Specialized scholarships for learning to teach in hard-to-staff schools
- Retention bonuses if teachers go to, and stay in, hard-to-staff schools for at least five years
- Pay for performance and bonuses for teaching hard-to-staff subjects (pilot programs)
- Relocation reimbursement
- Tuition-free advanced degrees at state universities
- Housing subsidies (mortgage reduction, teacher housing villages, etc.)
- State income tax credits
- State university scholarships for children of recruited and retained teachers
- Early retirement incentives or incentives for retirees to return
- Targeted professional development
- Reduced teaching loads and nonteaching duties
- Additional teaching assistants

Many of these take significant planning and effort, but initial steps can be acted on immediately. For example, making significant changes to the teacher pay system, to include performance pay or extra pay for teaching in shortage subjects or hard-to-staff schools, takes significant investments of political capital and financial resources. As an initial step, states might fund and pilot a package of incentives and supports in a few selected districts, as **Kentucky** is doing.

Long-Term Action: States may consider substantial changes to traditional pay structures, giving schools the flexibility to pay teachers according to need and demand and to reward teachers who commit to challenging assignments and demonstrate performance. However, states also should develop systemic and sustainable policy solutions that go beyond financial incentives and address the fundamental design of hard-to-staff schools and their leadership. States must learn from previous efforts to attract highly accomplished teachers to these schools, which failed because of the false assumption that dollars alone would prove sufficient. Supportive working environments that promote teacher satisfaction must be created. A combined policy approach that addresses school design and leadership, along with comprehensive incentive packages, can allow states to address the underlying problems facing chronically hard-to-staff schools and districts.

3. Track, Analyze, and Improve Teacher Working Conditions.

Teacher shortages have as much to do with the inability of schools to retain teachers as with their inability to recruit them. The data are clear: teachers leave schools when they do not have adequate administrative support and have limited influence in decision making and when they face large classes, a poor school discipline system, and students whom they are not prepared to manage and lead. Teachers remain in schools where they have strong principals, time to develop their teaching craft with colleagues, and sufficient resources to teach students effectively.

Immediate Action: States should collect data by asking teachers about their working conditions. North Carolina is the first state to conduct a statewide survey, asking teachers questions regarding their perception of working conditions at their schools. The results, compiled for the state according to school system, allow school-by-school reports that identify specific local problems with working conditions and teacher job satisfaction. Additional states should follow North Carolina's lead in collecting data to understand the factors behind teacher turnover (see <http://twc.learnnc.org/gov/twc.nsf>).

Long-Term Action: States should develop plans to provide the resources and tools to schools and districts to act on the information that they acquire, especially those that need the most help in improving working conditions. Documenting teacher working conditions is the initial step (see www.teacherworkingconditions.org). States should provide some discretionary funding for districts to gather data, develop action plans, and implement school-based improvements. States should also develop ways to ensure that hard-to-staff schools receive priority in the allocation of discretionary working condition funds. The funds should be closely monitored, and effective program designs and strategies documented and replicated for other schools facing similar challenges.

4. Improve Teacher Preparation and Support.

To ensure that all children have access to well-prepared teachers, states must provide the types of initial and ongoing support that teachers need to be successful. Teachers are more likely to stay in schools when they are successful and feel they are improving student learning. To do this, teachers must be ready with the knowledge and skills to help all students learn and must continue to develop them.

Immediate Action: States should change funding formulas for higher education so that more dollars are allocated for teacher clinical internships—on par with other professional programs. Additional incentives should be available for programs that increase the number of their graduates who work in hard-to-staff subjects or take jobs in hard-to-staff schools. States should also support quality alternative-route preparation programs and grow-your-own strategies to make it easier for midcareer professionals, as well as teaching assistants and underprepared teachers from hard-to-staff communities, to enter teaching with the training they need.

Providing induction assistance for teachers in hard-to-staff schools, which are often populated with less-experienced, less-prepared teachers, is a particular challenge. States should consider providing funding for induction that takes these challenges into account, allowing hard-to-staff schools to provide customized training for mentors to work with alternatively prepared teachers (who often begin teaching with no student teaching experiences) and more time for mentors and mentees to work together closely.

Long-Term Action: States should develop higher education accountability provisions that promote a focus on preparing and supporting teachers where a state needs them most, including in hard-to-staff schools. Accountability and funding mechanisms should also encourage teacher education programs to develop customized programs and support clinical internships in these hard-to-staff schools. All new teachers in hard-to-staff schools should have effective supports provided jointly by the district and university, such as continued access to college faculty, mentors in their content area (with the expectation that some mentoring can be provided online), ongoing professional development, and access to a network of colleagues teaching in similar environments. New staffing allocations need to be designed based on the number of new, inexperienced, and underprepared teachers in a school and the kinds of supports they need from veteran teachers and university faculty.

Conclusion

To help students achieve at higher levels and meet state standards, as well as meet the adequate-yearly-progress requirements of NCLB, states need well-prepared and well-supported teachers for all children. Governors must lead a concerted and coordinated effort to overhaul state recruiting, preparation, licensing, induction, and support policies to ensure that every student has access to high-quality teaching in every classroom, every day. To do so, governors especially need comprehensive policy strategies for hard-to-staff schools. A comprehensive strategy should include good data systems that allow states to evaluate and refine policies and programs to recruit, train, and retain teachers. It should also include new financial incentives, improved working conditions, and better preparation and support. Money alone will not be enough. Teachers need to feel supported, prepared, and justly rewarded, and they need to believe they can succeed with the challenging students in hard-to-staff schools. These schools need to be places where teachers want to work if we are to help all students learn.

NOTE: Barnett Berry is the founder and president of the (initially named Southeast) Center for Teaching Quality. Eric Hirsch is the vice president for policy and partnerships. CTQ, based in Chapel Hill, N.C., is a national organization with a mission to ensure that all students have access to high-quality teaching. CTQ improves student learning by shaping policies through developing teacher leadership, building coalitions,

and conducting practical research. For more information about CTQ, visit www.teachingquality.org, “where teachers are central to improving schools.”

Endnotes

¹ Ronald F. Ferguson, “Paying for Public Education: New Evidence on How and Why Money Matters,” *Harvard Journal on Legislation* 28, no. 2 (1991): 465-498; Dan D. Goldhaber, and Dominic J. Brewer, “Evaluating the Effect of Teacher Degree Level on Educational Performance,” in *Developments in School Finance, 1996*, ed. William J. Fowler (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, 1997), 197-210; Eric A. Hanushek, *School Resources and Achievement in Maryland* (Baltimore, Md.: Maryland State Department of Education, 1996); Richard J. Murnane, “Understanding the Sources of Teaching Competence: Choices, Skills, and the Limits of Training,” *Teachers College Record* 84, no. 3 (1983): 564-589; William L. Sanders and June C. Rivers, *Cumulative and Residual Effects of Teachers on Future Student Academic Achievement* (Knoxville, Tenn.: University of Tennessee Value-Added Research and Assessment Center, 1996).

² U.S. Department of Education, Office of Postsecondary Education, *Meeting the Highly Qualified Teachers Challenge: The Secretary's Third Annual Report on Teacher Quality* (Washington, D.C., 2004).

³ In our previous work we have defined hard-to-staff schools as having the following characteristics: (a) 50 percent or more of students are below grade level; (b) 50 percent or more of students are eligible for free or reduced-price lunches in elementary schools, or 40 percent in high schools; (c) a minimum 15 percent annual teacher turnover rate; and (d) 25 percent of teachers have provisional licenses or are lateral entry (up to five years to earn full licensure), emergency, or temporary, or have a probationary license.

⁴ Charles T. Clotfelter, Helen Ladd, Jacob L. Vigdor, and Roger A. Diaz, “Do School Accountability Systems Make It More Difficult for Low Performing Schools to Attract and Retain High Quality Teachers?” (Paper prepared for the annual meeting of the American Economic Association, Washington, D.C., February 2003), revised.

⁵ U.S. Department of Education, Office of Postsecondary Education, *Meeting the Highly Qualified Teachers Challenge*.

⁶ Richard M. Ingersoll, “The Teacher Shortage: A Case of Wrong Diagnosis and Wrong Prescription” (Presentation at the Mid-Atlantic Regional Teacher Project Annual Meeting, Baltimore, Md., March 19, 2004).

⁷ Richard M. Ingersoll, “Teacher Turnover and Teacher Shortages: An Organizational Analysis,” *American Educational Research Journal* 38, no. 3 (2001): 499-534.

⁸ Education Week, *Quality Counts 2000: Who Should Teach?* (Bethesda, Md.: Editorial Projects in Education, 2000).

⁹ Education Week, *Quality Counts 2005: No Small Change: Targeting Money Toward Student Performance* (Bethesda, Md.: Editorial Projects in Education, 2005).

¹⁰ National Center for Education Statistics, *Teacher Attrition and Mobility: Results of the Teacher Follow-Up Survey, 2000-2001* (Washington, D.C.: NCES, 2004), 301.

¹¹ Ingersoll, “The Teacher Shortage.”

¹² F. Howard Nelson, Rachel Drown, and Jewell C. Gould, *Survey and Analysis of Teacher Salary Trends 2002* (Washington, D.C.: American Federation of Teachers, 2003).

¹³ Richard Rothstein, “Lessons: Teacher Shortages Are Usually a Myth,” *New York Times*, 25 September 2002, Late Edition-Final. Available at: <<http://www.nytimes.com/2002/09/25/education/25LESS.html>>.

¹⁴ Southeast Center for Teaching Quality, *Recruitment and Retention Strategies in a National and Regional Context* (Chapel Hill, N.C.: Southeast Center for Teaching Quality, 2003). Available at: <<http://www.teachingquality.org/resources/SECTQpublications.htm>>.

¹⁵ Eric A. Hanushek, Joel F. Kain, and Steven G. Rivkin, *Why Public Schools Lose Teachers* (Cambridge, Mass.: National Bureau of Economic Research, 2001).

¹⁶ Southeast Center for Teaching Quality, *Recruitment and Retention Strategies*.

¹⁷ Julia E. Koppich, Daniel C. Humphrey, and Heather Hough, "Sharing the Wealth: National Board Certified Teachers and the Schools that Need Them Most" (Paper Presented at the Annual Meeting of the American Education Research Association, San Diego, Calif., April 2004).

¹⁸ Richard M. Ingersoll, *A Different Approach to Solving the Teacher Shortage Problem* (Seattle: University of Washington, Center for the Study of Teaching and Policy, 2001).

¹⁹ Hamilton Lankford, Susanna Loeb, and James Wycoff, "Teacher Sorting and the Plight of Urban Teachers: A Descriptive Analysis," *Educational Evaluation and Policy Analysis* 24, no. 1 (2002): 37-62.

²⁰ Susan Moore Johnson and Sarah E. Birkeland, "The Schools That Teachers Choose," *Educational Leadership* 60, no. 8 (2003): 20-24.

²¹ See Eric Hirsch, *Teacher Working Conditions are Student Learning Conditions: A Report to Governor Mike Easley on the 2004 North Carolina Teacher Working Conditions Survey* (Chapel Hill, N.C.: Southeast Center for Teaching Quality, March 2005); and Eric Hirsch, *Listening to the Experts: A Report on the 2004 South Carolina Teacher Working Conditions Survey* (Chapel Hill, N.C.: Southeast Center for Teaching Quality, March 2005). Available at: <<http://www.teachingquality.org/TWC.htm>>.

²² Christopher Mazzeo, "Improving Teaching and Learning by Improving School Leadership" (Washington, D.C.: National Governors Association Center for Best Practices, 2003). Available at <http://www.nga.org/center/divisions/1,1188,C_ISSUE_BRIEF^D_5891,00.html>.

²³ Thomas Smith and Richard M. Ingersoll, "Reducing Teacher Turnover: Do Induction and Mentoring Programs Help?" (Paper prepared for presentation at the Annual Meeting of the American Educational Research Association, Chicago, Ill., April 21-25, 2003).

²⁴ Karen Hunter Quartz and the TEP Research Group, "Too Angry to Leave: Supporting New Teachers' Commitment to Transform Urban Schools," *Journal of Teacher Education* (in press).

²⁵ Southeast Center for Teaching Quality, *Recruiting Teachers to Hard-to-Staff Schools: Solutions for the Southeast and the Nation* (Chapel Hill, N.C.: Southeast Center for Teaching Quality, 2002).

²⁶ Education Week, *Quality Counts 2004: Count Me In: Special Education in an Era of Standards* (Bethesda, Md.: Editorial Projects in Education, 2004).

²⁷ See Michael B. Allen, *Eight Questions on Teacher Preparation: What Does the Research Say?* (Denver, Colo.: Education Commission of the States, 2003); and Suzanne M. Wilson, Robert E. Floden, and Joan Ferrini-Mundy, *Teacher Preparation Research: Current Knowledge, Gaps and Recommendations* (Seattle: Center for the Study of Teaching and Policy, University of Washington, 2001).

²⁸ Stephen Fletcher, Michael Strong, and Anthony Villar, *An Investigation of the Effects of Teacher Experience and Teacher Preparedness on the Performance of Latino Students in California* (Santa Cruz, Calif.: New Teacher Center, University of California, Santa Cruz, 2003).

²⁹ Robin R. Henke, Xianglei Chen, and Sonya Geis, *Progress Through the Teacher Pipeline: 1992–93 College Graduates and Elementary/Secondary School Teaching as of 1997* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 2000).

³⁰ Education Week, *Quality Counts 2005*.

³¹ Texas Center for Educational Research, *The Cost of Teacher Turnover* (Austin: Texas Center for Educational Research, 2000).