## Recruiting and Retaining Teachers: Turning Around the Race to the Bottom in High-Need Schools

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It was overwhelmingly working condition-based things that would make teachers leave....How teachers are paid was a part of it, but overwhelmingly the things that would destroy the morale of teachers who wanted to leave were the working conditions,...working in poor facilities, having to pay for supplies, etc. – Los Angeles teacher, about a high turnover school

"Harris" was a difficult place to work. It was a very big school. The multi-track yearround [schedule] was very hard on teachers. The poor condition of the facilities made it an uncomfortable place to teach. Teachers who had to rove...found that so detrimental to the teaching process and the learning process and the professional growth process that they did not want to continue to have to work in that environment. – California teacher, about a high turnover school

I arrived at my first teaching job five years ago, mid-year.... The first grade classroom in which I found myself had some two dozen ancient and tattered books, an incomplete curriculum, and an incomplete collection of outdated content standards. Such a placement is the norm for a beginning teacher in my district. I was prepared for this placement, and later came to thrive in my profession, because of the preparation I received in my credential program. The concrete things Mills [College] gave me were indispensable to me my first year as they are now: the practice I received developing appropriate curricula; exposure to a wide range of learning theories; training in working with non-English speaking students and children labeled "at risk".... It is the big things, though, that continue to sustain me as a professional and give me the courage to remain and grow: my understanding of the importance of learning from and continually asking questions about my own practice, the value I recognize in cultivating collegial relationships, and the development of a belief in my moral responsibility to my children and to the institution of public education...attribute this wholly to the training, education, and support provided to me by Mills.

- Oakland, California teacher

What is it that keeps some people in teaching and chases others out? What can be done to increase the power of the teaching profession to recruit and retain effective teachers and to create a stable, expert teaching force in all kinds of districts? This issue of the *Journal of Curriculum and Instruction* explores these questions from a number of different angles, illuminating a range of strategies that can be used to address them. In this article, I examine the central factors affecting teacher recruitment and retention in high-need schools and the strategies that have been found to be effective in getting and keeping high-quality teachers in the neediest communities.

Recruiting and retaining good teachers should be one of the most important agendas for our nation. Substantial evidence suggests that, among all school resources, well-prepared, expert, experienced, teachers are among the most important determinants of student achievement. Studies at the state, district, school, and individual level have found that teachers' experience, as well as their academic background, preparation for teaching, and certification status, matter for teachers' effectiveness (Darling-Hammond, Wei, & Johnson, 2009; Darling-Hammond, 2010; Wilson, Floden, & Ferrini-Mundy, 2001).

In combination, teachers' qualifications can have very large effects. For example, a recent study of high school students in North Carolina found that students' achievement was significantly higher if they were taught by a teacher who was certified in his or her teaching field, fully prepared upon entry, had higher scores on the teacher licensing test, graduated from a competitive college, had taught for more than two years, or was National Board Certified (Clotfelter, Ladd, & Vigdor, 2007). While each of these traits made teachers more effective, the combined influence of having a teacher with most of these qualifications as compared to one having few of them was larger than the effects of race and parent education combined. That is, the difference between the effect of having a very well-qualified teacher rather than one who was poorly-qualified was larger than the average difference in achievement between a typical white student with college-educated parents and a typical black student with high-school educated parents. The achievement gap would be much reduced if low-income minority students were routinely assigned such highly-qualified teachers, rather than the poorly-qualified teachers they most often encounter.

A similar study of teachers in New York City also found that teachers' certification status, pathway into teaching, teaching experience, graduation from a competitive college, and math SAT scores were significant predictors of teacher effectiveness in elementary and middle grades mathematics (Boyd, Lankford, Loeb, Rockoff, & Wyckoff, 2008). A student's achievement was most enhanced by having a fully certified teacher who had graduated from a university pre-service program, who had a strong academic background, and who had more than two years of experience. Students' achievement was hurt most by having an inexperienced teacher on a temporary license—again, a teaching profile most common in high-minority, low-income schools with ongoing teacher turnover. In combination, improvements in these qualifications reduced the gap in achievement between the schools serving the poorest and most affluent student bodies by 25%.

Given the strength of these effects, it is critically important that we develop much more effective policies to attract, retain, and support the continued learning of well-

prepared and committed teachers. When teachers have assembled the kind of training and experience that allows them to be successful with students, they constitute a valuable human resource for schools—one that needs to be treasured and supported if schools are to become and remain effective. While recruiting strong teachers is critically important, it is equally important to keep strong teachers, since attrition is a much greater problem in the overall teacher supply picture than is producing enough teachers to fill the nation's needs. School leaders and policymakers need to understand the reasons for teacher attrition if they are to develop effective strategies for keeping their best teachers.

### Unpacking the Dilemmas of Teacher Supply and Demand

Because of the strong evidence about how teachers matter to student achievement, the No Child Left Behind Act (2001) required that all schools be staffed by highly qualified teachers. Recruiting such teachers to all schools is a major challenge, especially in cities and poor rural areas. However, as a nation, we produce many more qualified teachers than we hire. Of the roughly 250,000 teachers newly hired each year, only about half are newly prepared. The others are current teachers who are changing jobs or individuals returning from the reserve pool. It turns out that a major part of the teacher quality challenge—both at the individual school level and for the profession as a whole—rests with keeping the teachers we prepare, especially in high-need schools.

The uphill climb to staff our schools with qualified teachers is made that much steeper if teachers leave in large numbers in the face of difficult conditions and few supports. Less than 20% of total attrition is due to retirement, and especially in hard-to-staff schools, both teacher dissatisfaction with the conditions of work and many teachers' lack of preparation are critical components of high turnover (Henke, Chen, & Geis, 2000; Ingersoll, 2001).

Teaching has long experienced steep attrition in the first few years of teaching, and about 30% of new teachers leave the profession within five years.<sup>1</sup> Rates of attrition from individual schools and districts run higher, as they include both "movers," who leave one school or district for another, and "leavers," who exit the profession temporarily or permanently. Taken together, movers and leavers particularly affect schools serving poor and minority students. Teacher turnover is 50% higher in high-poverty than in low-poverty schools (Ingersoll, 2001, p. 516), and new teachers in urban districts exit or transfer at higher rates than their suburban counterparts (Hanushek, Kain, & Rivkin, 1999).

<sup>&</sup>lt;sup>1</sup> Ingersoll (2001) extrapolated from cross-sectional data on teacher attrition (from the 1999-2000 Schools and Staffing Surveys) to develop a five-year attrition rate for beginning teachers of 46%; this figure includes private school teachers who have much higher sources of attrition than public school teachers. He calculates a five-year attrition rate of about 38% for public school teachers. This approach overestimates attrition because it does not take into account the return to teaching of individuals who left teaching for a year or two for childrearing or further study and re-entered during the first five years– a proportion that, other estimates suggest, could be about 20% of leavers. With this adjustment, the five-year cumulative attrition rate would be just over 30% for public school teachers. Another estimate, using longitudinal data from the 1993-94 Baccalaureate and Beyond surveys, finds a four-year attrition rate of about 30% overall and about 20% for teachers who entered teaching directly after college (Henke et al., 2000).

There are many reasons for higher attrition from high-poverty schools. Nationally, teachers in schools serving the largest concentrations of low-income students earn salaries, at the top of the scale, that are one-third less than those in higher income schools (National Center for Education Statistics, 1997), while they also face lower levels of resources, poorer working conditions, and the stresses of working with students and families who have a wide range of needs. Furthermore, more teachers in these schools are underprepared and unsupported, and research also shows that the extent of preparation teachers have for teaching influences whether individuals will stay in the profession.

The costs of early attrition from teaching are enormous. A Texas study, for example, estimated that the state's annual turnover rate of 15% in 1999, which included a 40% turnover rate for public school teachers in their first three years (Darling-Hammond, 2003b), cost the state a "conservative" \$329 million a year, or at least \$8,000 per recruit who left in the first few years of teaching (Texas Center for Educational Research, 2000). The study found that only 17% of this attrition was due to retirement. Adding the organizational costs of termination, substitutes, new training, and lost learning created an estimated national price tag of \$2.1 billion a year. More recent data from the National Commission on Teaching and America's Future suggests that replacement costs for teachers are now closer to \$15,000 for each teacher who leaves, and the national price tag may exceed \$7 billion annually (Darling-Hammond, 2009).

This turnover creates large inefficiencies in the nation's human capital system and unnecessary failure for students. Instead of using funds for needed school improvements, they are wasted on the costs of replacing teachers who leave. Given the strong evidence that teacher effectiveness increases sharply after the first few years of teaching (Kain & Singleton, 1996), this kind of churning in the beginning teaching force wastes money and reduces productivity in education overall since the system never realizes the eventual payoff from its investment in novices.

In addition, high levels of turnover and staff instability create additional problems for schools beyond the effects of individual teachers who may be weak. As a study by Stanford Research International found in California, in the many low-income, highminority schools with large shares of inexperienced, underprepared teachers, high turnover drains both financial and human resources (Shields et al., 2001). Such schools must continually pour money into recruitment efforts and professional support for new teachers, many of them untrained, without reaping dividends from these investments. Other teachers, including the few who could serve as mentors, are stretched thin and feel overburdened by the needs of their colleagues as well as their students. Scarce resources are squandered trying to re-teach the basics each year to teachers who come in with few tools and leave before they become skilled (Carroll, Reichardt, & Guarino, 2000). A principal in one such school noted: [H]aving that many new teachers on the staff at any given time meant that there was less of a knowledge base. It meant that it was harder for families to be connected to the school because—you know, their child might get a new teacher every year. It meant there was less cohesion on the staff. It meant that every year, we had to recover ground in professional development that had already been covered and try to catch people up to sort of where the school was heading.

Most important, such attrition consigns a large share of children in high turnover schools to a continual parade of relatively ineffective teachers, with all of the long-term costs of remediation, grade retention, and dropping out experienced by the society at large. Unless policies are developed to stem such attrition through better preparation, assignment, working conditions, and mentor support, the goal of ensuring qualified teachers for all students—especially those targeted by No Child Left Behind (2001)—cannot be met.

### **Factors Influencing Teacher Recruitment and Attrition**

Policies that can address the root problems of high turnover must address the four major factors that exert strong influences on teacher entry and retention: (a) salaries, (b) working conditions, (c) preparation, and (d) mentoring and support. Among teachers who leave their jobs due to dissatisfaction, salaries and working conditions such as poor administrative support run neck and neck as reasons for leaving. The relative importance of these features varies depending on the conditions of work that teachers experience. For example, poor administrative supports are mentioned more often by teachers leaving low-income schools where working conditions are often more stressful, while salaries are mentioned somewhat more often by teachers leaving more affluent schools.

#### Salaries

Even if teachers may be more altruistically motivated than some other workers, teaching must compete with other occupations for talented college and university graduates each year. To attract its share of the nation's college-educated talent and to offer sufficient incentives for professional preparation, the teaching occupation must be competitive in terms of wages and working conditions. From this viewpoint, although overall demand can be met, there is reason for concern, because teacher salaries are relatively low and have been declining in relation to other professional salaries since the early 1990s. Even after adjusting for the shorter work year in teaching, teachers earn 15-30% less than individuals with college degrees who enter other fields, depending on the field and the region of the country.

Teachers are more likely to quit when they work in districts with lower wages and when their salaries are low relative to alternative wage opportunities, especially for teachers in high demand fields like math and science (Brewer, 1996; Mont & Rees, 1996; Murnane & Olsen, 1990; Murnane, Singer, & Willett, 1989; Theobald, 1990; Theobald & Gritz, 1996). However, salary differences seem to matter more at the start of the teaching career (Gritz & Theobald, 1996; Hanushek et al., 1999). Among experienced teachers, transfers from one school to another appear to be influenced more by factors like administrative supports and working conditions (Loeb & Page, 2000). In particular, professional teaching conditions that allow teachers to be efficacious are cited by teachers as critical to their decisions about whether to stay in a particular school or in the profession.

# **Working Conditions**

Surveys of teachers have long shown that working conditions play a major role in decisions to move schools or leave the profession. Teachers' plans to stay in teaching and their reasons for actually having left are strongly associated with how they feel about administrative support, resources for teaching, and teacher input into decision making (Darling-Hammond, 1997; Ingersoll, 2001, 2002). Further, there are large differences in the support teachers receive in high- versus low-wealth schools. Teachers in more advantaged communities experience easier working conditions, including smaller class sizes and pupil loads and greater influence over school decisions (National Center for Education Statistics, 1997, Table A 4.15). Teachers in high-poverty schools are more than twice as likely to leave due to dissatisfaction as those in low-poverty schools (Darling-Hammond, 1997).

Many studies have found that teachers are prone to leave schools serving high proportions of low-achieving, low-income, and minority students for more economically and educationally advantaged schools. These higher turnover rates are often attributed to the characteristics of students, which, if true, would limit strategies to correct the problem. However, recent evidence suggests that this attrition is more a function of the poor working conditions typically found in schools serving less advantaged students– including poorer facilities, less availability of textbooks and supplies, fewer administrative supports, and larger class sizes– than it is of the students themselves (Loeb, Darling-Hammond, & Luczak, 2005). This finding suggests that working conditions should be an important target for policies aimed at retaining qualified teachers in high-need schools.

Most important are the conditions that teachers feel enable them to succeed with students—including administrative supports, strong colleagues, and opportunities to participate in decisions. A recent poll by the Public Agenda Foundation found that almost 80% of teachers would choose to teach in a school where administrators supported them, as opposed to only about 20% at one where there were significantly higher salaries (Rochkind, Ott, Immerwahr, Doble, & Johnson, 2007). As one National Board Certified Teacher noted in a discussion of what would attract him to a high-needs school:

I would move [to a low-performing school], but I would want to see social services for parents and children, accomplished leadership, adequate resources and facilities, and flexibility, freedom and time....One of the single greatest factors in school success is principal leadership. Effective administrators are magnets for accomplished teachers. In addition, it is amazing to me that attention is being paid to teaching quality in hard-to-staff schools when little is done to address the sometimes appalling conditions in which teachers are forced to work and students are forced to learn....Finally, as an accomplished teacher, my greatest fear is being assigned to a hard-to-staff school and not being given the time and the flexibility to make the changes that I believe are necessary to bring about student achievement.

### **Teacher Preparation**

An often overlooked factor is the effect of preparation on teacher retention. A growing body of evidence indicates that attrition is unusually high for those who lack preparation for teaching. An analysis of teacher survival rates by the National Center for Education Statistics found that 49% of uncertified entrants left within five years, as compared to only 14% of certified entrants (Henke et al., 2000). In California, the state standards board found that 40% of emergency permit teachers left the profession within a year, and two-thirds never receive a credential (Darling-Hammond, 2002).

New recruits who have had training in specific aspects of teaching (e.g., selection and use of instructional materials, child psychology, and learning theory), who have experienced practice teaching, and who received feedback on their teaching leave the profession at half the rate of those who have had no training in these areas (Darling-Hammond, 2003a). Similarly, first-year teachers who feel they are well prepared for teaching are much more likely to plan to stay in teaching than those who feel poorly prepared (Darling-Hammond, Chung, & Frelow, 2002; NCTAF, 2003).

High turnover is often linked to teachers' sense of effectiveness. For example, a report on the loss of nearly 100 recruits from a Florida district in the first few months of the school year noted that most were alternative certification candidates trying to learn on the job. Microbiologist Bill Gaulman, a 56 year-old African American former Marine and New York City firefighter, left before mid-year; his comments reflected the experiences of many: "The word that comes to mind is 'overwhelmed,'" said Gaulman, "People told me 'Just get through that first year.' I was like, 'I don't know if I can get through this week.' I didn't want to shortchange the kids," Gaulman emphasized. "I didn't want to fake it. I wanted to do it right." Erika Lavrack, a 29-year old psychologist without education training who was assigned to teach special education resigned on her second day. "The kids were nice enough," Lavrack said, "but they were running all over the place. There was no way I could teach them anything if I couldn't get them to sit down. I didn't know what to do" (Hegarty, 2001, p. 1B).

Others, like this recruit who entered teaching after a few weeks of summer training, find that they end up blaming the students for their own lack of skills:

I stayed one year. I felt it was important for me to see the year out but I didn't necessarily feel like it was a good idea for me to teach again without something else. I knew if I wanted to go on teaching there was no way I could do it without training. I found myself having problems with cross-cultural teaching issues blaming my kids because the class was crazy and out of control, blaming the parents as though they didn't care about their kids. It was frustrating to me to get caught up in that.

Although the federal government has encouraged the expansion of alternative routes to teaching—in part to address recruitment problems in high-need schools– those that prepare teachers inadequately both add to the revolving door in poor schools and undermine student achievement. For example, rates of early leaving were 44% over three years for the Massachusetts Initiatives for New Teachers (MINT) program (Fowler, 2008), and attrition was over 50% after three years for alternate route candidates in New York City and Houston, who were also found to be less effective than fully prepared beginners (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2006; Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005; Kane, Rockoff, & Staiger, 2006).

In the worst cases, students actually regress in their learning. For example, a recent mathematical study found that, in the high-minority, low-income schools that hire such teachers, the reading and math achievement of students taught by teachers from what the study called "low-coursework" alternative programs actually declined between fall and spring of the academic year (Constantine et al., 2009; Darling-Hammond, Wei, & Johnson, 2009). Teachers from the "high-coursework" alternative programs did better, and their traditional route counterparts did better still, suggesting that more complete preparation for teachers leads to better outcomes for students. Students of fully prepared teachers did significantly better than those of alternatively certified teachers who were still taking coursework while they taught.

To create a stable supply of well-prepared teachers in high-need schools, we need new models that can simultaneously improve teacher competence and retention and meet pressing supply needs in hard-to-staff urban and rural locations. States like North Carolina have stemmed shortages by launching an aggressive fellowship program to recruit hundreds of able high school students into teacher preparation each year by entirely subsidizing their college education. The highly selective North Carolina Teaching Fellows program—launched in 1986 and still in operation today—pays all college costs, including an enhanced and fully funded teacher education program, in return for several years of teaching. The program enhances the teaching pool by bringing a disproportionate number of males, minorities, and math and science teachers into the profession. After seven years, retention rates in teaching for these recruits have exceeded 75%, with many of the other alumni holding positions as principals or central office leaders (Darling-Hammond, 1996).

Another important strategy is the teacher residency program model that places mid-career entrants who want to commit to urban schools in paid apprenticeships with expert mentor teachers for a year while they complete credential coursework in curriculum, teaching, and learning with local partnering universities. When they become teachers, these recruits also receive two years of mentoring. In exchange for this high-quality preparation, candidates pledge to spend at least four years in the district's schools. This model has already shown teacher retention rates of over 85% after four or more years for graduates in Chicago, Boston, and Denver (Berry, Montgomery, & Synder, 2008).

#### **Mentoring and Support**

As the residencies suggest, the commitment effects of strong initial preparation are enhanced by equally strong induction and mentoring in the first years of teaching. A number of studies have found that well designed mentoring programs improve retention rates for new teachers along with their attitudes, feelings of efficacy, and instructional skills.

Districts like Cincinnati, Columbus, and Toledo, Ohio and Rochester, New York, have reduced attrition rates of beginning teachers by more than two-thirds (often from levels exceeding 30% to rates of under 5%) by providing expert mentors with release time to coach beginners in their first year on the job (Darling-Hammond, 1996). These young teachers not only stay in the profession at higher rates but become competent more quickly than those who must learn by trial and error. Each program was established through collective bargaining and is governed by a panel of seven to ten teachers and administrators. The governing panel selects consulting teachers through a rigorous evaluation process that examines teaching skills and mentoring abilities.

One reason for the programs' success is the intensive assistance provided by consulting teachers who are freed up to focus on this job. A full-time consulting teacher might mentor up to 10 teachers in his or her subject matter area, ensuring that adequate help and documentation occur over the course of the year. Mentors meet with one another to share what they are learning about mentoring. The value of the advice offered is increased by the high levels of expertise of the consulting teachers, who are selected for teaching excellence and who generally are matched by subject area and grade level with the teacher being helped.

On the state level, induction programs that are tied to high quality preparation can be doubly effective. In Connecticut, cooperating teachers are trained to use the state portfolio assessment system for beginning teachers that their student teachers will later encounter when they undertake independent classroom teaching. Districts who hire beginning teachers must also provide them with mentors who are also trained in the state teaching standards and portfolio assessment system that were introduced as part of reforms during the 1990s. These reforms also raised and equalized salaries for teachers, so that urban and rural districts could compete for qualified teachers; required more preparation in content and pedagogy before entry; and created an assessment of teaching for professional licensure modeled after that of the National Board for Professional Teaching Standards. The result of the combined initiatives was an end to teacher shortages, a greatly improved and more stable teaching force, and strong gains in student achievement (Wilson, Darling-Hammond, & Berry, 2001).

## **Combining Incentives with Supports for Teacher Learning**

Many policymakers have tended to emphasize monetary bonuses or "combat pay" to attract teachers to high-need schools over investments in the professional working conditions and supports for teacher learning that evidence suggests are critically important. Indeed, getting good teachers and leaders to transform high-need schools—and developing greater competence from within—has been found to be more effective than offering bonuses for teachers to go to dysfunctional schools that are structured to remain that way. One recent summary of the literature notes:

(S)chool districts have tried offering additional pay for high-needs schools without much positive result, even when substantial bonuses are awarded. In 2004, Palm Beach, Florida eliminated its \$7,500 high-needs school stipend after few teachers took the offer. Dallas's offer of \$6,000 to accomplished teachers to move to challenging schools also failed to generate much interest.... Decades ago, South Carolina set out to recruit "teacher specialists" to work in the state's weakest schools. Despite the offer of an \$18,000 bonus, the state attracted only 20% of the 500 teachers they needed in the first year of the program, and only 40% after three years (Berry, 2009a).

While money can help, teachers are primarily attracted by principals who are good instructional leaders, by like-minded colleagues who are committed to the same goals, by having the teaching conditions and instructional materials they need readily available, and by having learning supports that enable them to be efficacious.

Transforming schools so that they can recruit good teachers and support strong learning requires attention to all of these factors and more. A good case in point is the turnaround story of nine of Tennessee's lowest-performing schools in Chattanooga's Hamilton County School District where, on average, only 12% of third graders could read at grade level at the start of the intervention. With the help of the Benwood Foundation and the Public Education Foundation, a comprehensive strategy was forged, which began with but was not limited to financial incentives.

Bonuses of \$5,000 were offered to recruit teachers with high value-added student scores to the nine schools. Some of these teachers were willing to transfer, but not nearly enough. For those who did, the greater attraction was often the opportunity to work with visionary principals and to engage in collegial professional learning communities. The school district replaced many of the previous principals, created a leadership program for teachers, and funded teacher-coaches, while transforming professional development from one-shot workshops to job-embedded activities led by teachers. Teachers were also supported to pursue a specialized master's degree in urban education.

This comprehensive support raised third grade reading proficiency levels to 74% and fifth grade scores to 80% of students by 2005. Comparable improvements occurred in math. At the end of the day, it turned out that the largest student gains were produced not by the teachers who had been imported with bonuses but by existing staff who had become more much effective. An Education Sector report concluded: "The Benwood Initiative was about much more than pay incentives and reconstitution; the district invested heavily in programs to train teachers, in additional staff to support curriculum and instruction, and in stronger and more collaborative leadership at the school level" (Silva, 2008, p. 129).

Similarly, the turnaround from failure to success at Mitchell Elementary School in Phoenix relied on the use of incentives as learning supports, rather than bonuses. The strategy was to grow teacher expertise from within through an intensive commitment to the National Board certification process. In this low-income Latino community where most students are English language learners, more than 60% of the teachers—most of whom are from the community and reflect their student population—are either National Board Certified or in the process of earning certification. Not only has the school's achievement dramatically improved, teacher turnover is no longer a problem (Berry, 2009b).

## Conclusion

These findings suggest several lessons for educational policy and practice:

- Investments in competitive salaries are important. However, recruiting and keeping good teachers—both novice and experienced teachers—is equally a matter of attending to key working conditions that matter to them. In addition to those often considered, like class sizes, teaching loads, and the availability of materials, these include teacher participation in decision-making, strong and supportive instructional leadership from principals, and collegial learning opportunities.
- Seeking out and hiring better prepared teachers has many payoffs and savings in the long-run, both in terms of lower attrition and higher levels of

competence, which reduce later costs for dealing with unnecessary student failure as well as unnecessary teacher failure. Investments that enable candidates to become well-prepared through service scholarships and programs like urban teacher residencies can provide pipelines of wellprepared teachers who both enter and stay in high-need schools.

 When the high costs of attrition are calculated, many of the strategic investments needed to support competent teachers in staying, such as mentoring for beginners and ongoing learning and leadership challenges for veterans, actually pay for themselves in large degree. A stable teaching force that becomes increasingly effective reduces the high costs of attrition while also reducing the costs of student failure.

As a number of studies have found, there is a magnetic effect when school systems make it clear that they are committed to finding, keeping, and supporting good teachers as a primary focus of school and district management. In urban centers just as in suburban and rural districts, good teachers gravitate to places where they know they will be appreciated. They are sustained by the other good teachers who become their colleagues, and together these teachers become a magnet for still others who are attracted to environments where they can learn from their colleagues and create success for their students. Effective leaders and policymakers create great school environments in which accomplished teaching can flourish and grow.

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