

CONNECTING THE DOTS: BUILDING A SYSTEM THAT IMPROVES TEACHER QUALITY

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WORKING PAPER

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WHY TEACHER QUALITY MATTERS

Every day, in classrooms across the United States, students crowd through the door, take their seats, and turn their attention to the teacher. As every parent, student and community member knows, having an excellent teacher at the front of that classroom is the best way to ensure that students succeed.

Research backs that up: no other school factor has more impact on how much students learn than the quality of their teachers. In fact, students who are taught by a highly effective teacher can make as much as another half year's gains *in addition to* expected annual grade-level progress. In other words, a child who starts third grade behind in math can, with the help of a highly effective teacher, master second *and* third grade material in the course of a single school year.

This finding has enormous implications. A wide achievement gap persists across our country, with many students – especially students of color in poorly functioning schools – starting each year ill-prepared to tackle challenging, grade-level work. *But effective teachers can reduce or eliminate that gap.* Consider, for example, the difference in grade level performance between African-American and white students, which experts estimate is roughly 34 percentile points. African-American students who have highly effective teachers several years in a row would rapidly close that gap.¹

Ensuring that at-risk students are taught by highly effective teachers is critical for the well-being of individual students, but it's also critical for our country's economic future.² Right now, our system works the other way: highly qualified teachers teach advantaged students, while their poor and minority peers sit in classrooms with teachers who are inexperienced or teaching subjects they were not trained to teach.

Why aren't we working to close the achievement gap by providing highest-need students with the one asset we know can help them catch up: excellent teachers?

First, we simply do not have enough highly effective teachers.

Second, we do not allocate effective teachers to reach children most in need.

Finally, we do not recognize or reward effectiveness in the classroom to keep the best teachers on the job and extend their reach to more students.

Remedying these failures is one of our country's greatest challenges. Secretary of Education Arne Duncan has put improving teacher quality especially for the students who most need

help among his top priorities. Many districts and states are focusing on new strategies. But there is still a long way to go.

This report summarizes the results of current research and practice on how to improve teacher supply, distribution and evaluation systems – what’s called “human capital management” in education. The overwhelming finding is that our current practices and policies provide inadequate support for high quality teaching. Most teachers are trained, selected, placed, evaluated and compensated under staffing models that were not built to ensure that teachers, especially those with the neediest students, are effective at promoting student learning. As the Teaching Commission, chaired by former IBM chairman and CEO Louis V. Gerstner, concluded in its 2006 report, “today’s teaching profession attracts and retains the most talented professionals by accident, not by design.”³

The research, and the work of pioneering educators, school districts and nonprofits, also make clear what it will take to deliver far better learning opportunities to the millions of children who continue to be “left behind.” *The single most important strategy for improving education for these children is systematic implementation of research-based, effective human capital management practices in schools across America.*

The report offers ten national imperatives to create a human capital management system that truly works for students. We hope it will be a primer for policymakers at all levels for transforming education and, finally, closing the achievement gap.

Teacher Quality: Ten National Imperatives

Improve the Pipeline

Improve training and certification to prepare teachers with the skills they need to be effective in the classroom

Identify Effectiveness

Redesign teacher evaluations to identify gradations of effectiveness, target development opportunities, and inform decisions about rewards or dismissal

Screen Effectively

Screen prospective teachers using criteria that correlate directly with teacher effectiveness

Hire Strategically

Redesign hiring and placement practices to direct the best teachers to the schools that need them most

Pay for Contribution

Redesign pay structures to create incentives and rewards for teachers who take on harder assignments, offer hard-to-find skills, and/or demonstrate greater success on the job

Support New Hires

Experiment to find the best models for supporting new teachers, and make sure that they are not routinely assigned to the most difficult classes

Develop Advanced Skills

Organize professional development to meet specific identified needs of individuals and schools; eliminate rewards for activities that have little proven impact on improving effectiveness

Reconsider Tenure

Redesign tenure systems to include clear criteria for identifying teacher effectiveness and defensible systems for dismissing poor performers

Rework Retirement

Rework retirement systems to provide incentives for improved quality and to promote financial stability

Leverage Talent

Enable the best teachers to reach more children by reorganizing roles and time within schools and using technology to extend great teaching everywhere

IMPROVE THE PIPELINE

Improve training and certification to prepare teachers with the skills they need to be effective in the classroom

RESEARCH

There is little evidence that current training and certification processes for teachers contribute much to their effectiveness in the classroom. They do, however, narrow the pool of potential candidates by posing barriers to entry into the teaching profession.

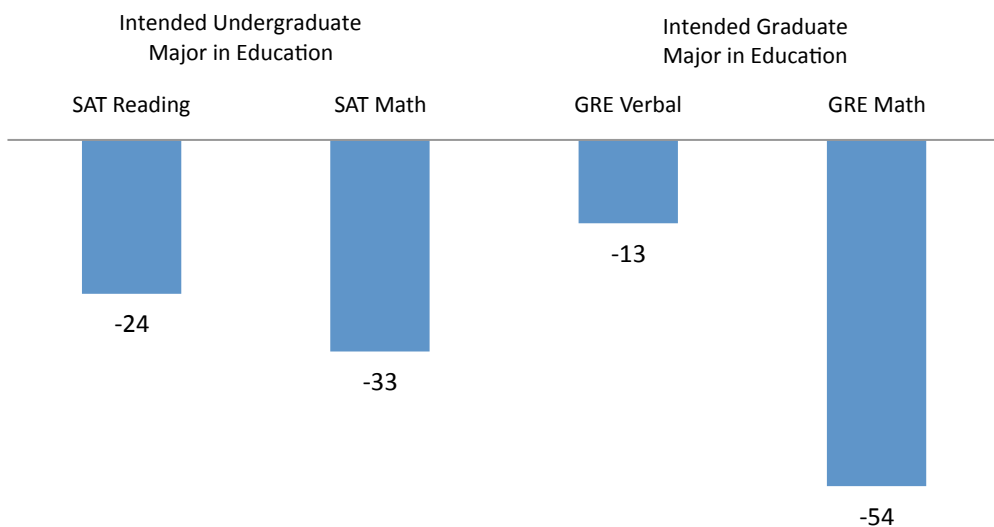
All states require some type of education training and “certification” before college graduates or mid-career professionals can take on responsibilities in the classroom. Many candidates participate in traditional education majors in college; others choose “alternative” programs, which require them to commit several months – and often several thousand dollars – to become eligible for a teaching position. Either way, certification is often not transferrable across state lines, effectively limiting the talent pool in each state.

Traditional routes into teaching. In 2006, approximately 100,000 students were awarded a bachelors degree in education, making education the third most popular field of study behind business and social sciences. On average, college students who major in education have much lower academic aptitude than students in other majors. In 2007, high school seniors who intended to major in education averaged 24 points lower in critical reading on the SAT than their college-bound peers, and 33 points lower in math. Among all college-bound seniors, those who intended to pursue a career in education scored in the bottom quartile of all test takers in both reading and math (see fig. 1).⁴ As they finish college, the pattern continues: those who major in education score significantly lower on the GRE, LSAT, and GMAT than students with other majors.⁵

Such figures indicate that the talent pool for teachers is weak compared to that for other professional jobs. This contrasts sharply with talent pools in some other countries.⁶ Worse, over the past several decades, the quality has actually been declining.⁷ One study found that in 1971-74, one in four teachers scored in the top ten percent of their high school class on standardized achievement tests. By 2000, that number had dropped to one in ten.⁸

Figure 1: Does Education Attract Top Students?

Difference between Mean Score of Intended Education Majors and Mean Overall Test Scores, 2008



Source: Educational Testing Service (2008). *Guide to the Use of Scores 2008-09*; College Board SAT. (2008). *College-Bound Seniors: Total Group Profile Report*. The College Board.

The formal training program offered in colleges includes coursework in both education methodologies and content areas. Teachers who complete the program take a licensing test in order to be “certified” to teach in a public school, as required by every state except Montana and Nebraska.

Are teachers who participate in a formal training program and earn certification more effective at improving student learning than those who lack such training and certification? This makes intuitive sense, and some studies find a correlation between credentials and student outcomes.⁹ Another body of evidence, however, suggests this correlation is weak. Several studies that use strong research methods have found that teacher training may benefit some individuals, but that, on average, teachers with traditional certification are not more effective at helping students learn than teachers who take an alternative route to teaching. Other studies suggest that certification itself is not a strong predictor of student learning.¹⁰

States themselves have not done a thorough job of evaluating whether existing training programs are preparing teachers qualified to boost achievement.

- **Meaningful data.** Only 18 states collect meaningful data on the effectiveness of teacher training programs, according to a 2007 review.¹¹

- **Information on successful models.** Only Louisiana and Tennessee have systems to measure the characteristics of teacher training programs that drive student learning gains. Until states require education schools to systematically measure these characteristics, they won't know how to better prepare their teacher graduates for the demands of 21st century classrooms.

Alternative routes into teaching. An increasing number of teachers enter public schools through alternative routes: estimates range from one in five to one in three new teachers nationwide.¹² These routes were originally conceived as programs that operate outside a university setting, designed to enable talented college graduates and mid-career professionals to enter public school classrooms with special – often fast-tracked – training, without the requirement of an education degree. However, recent research questions how *alternative* these routes really are.

- **Same course requirements.** Almost 69 percent of alternative route programs are overseen by schools of education and 54 percent have the same course requirements as traditional routes.¹³
- **Same academic standards.** Twenty-one states do not require alternate route candidates to meet any academic standard, and only 12 states require alternative route programs to be academically selective in enrolling students.¹⁴
- **Same time commitment.** A survey of 49 alternative certification programs found that the majority (67%) take more than one year to complete,¹⁵ similar to the time it takes to get an undergraduate teaching degree. For new teachers who are managing classrooms during the day and taking classes at night, these course requirements can be especially burdensome.

Evidence on the effectiveness of alternative approaches is mixed. A recent study in New York City found that teachers who came through alternative routes (the New York City Teaching Fellows program and Teach for America) appear to have contributed to improved student achievement.¹⁶ On the other hand, a recent IES study suggests that, on average, students taught by teachers who went through alternative routes perform no better or worse than traditionally certified teachers.¹⁷

Such findings suggest that the route that teachers take – traditional or alternative – is not a decisive contributor to their effectiveness as teachers. There is far more variation in quality *within* each group than there is between the two groups. Neither route guarantees quality.

EMERGING SOLUTIONS

Leaders at both the state and district levels have significant opportunities to improve teacher training and certification that would yield results quickly. Broadly speaking, *state* policymakers can reduce barriers that prohibit highly talented people from entering the profession, increase barriers that keep out less capable people, and insist that teacher training programs prove their value.¹⁸ *District* policymakers can become far more results-focused in their recruitment. They must experiment more with alternative sourcing of teachers, use more predictive criteria and processes to evaluate candidates, and measure – and then further improve – the effectiveness of both hiring criteria and recruitment sources.

IDEAS FOR POLICYMAKERS

Improve the Pipeline

State policymakers can...

- Eliminate certification requirements entirely, or grant certification only after a teacher demonstrates effectiveness
- Set meaningful pass rates on licensure tests (above the 30-40% most states allow)
- Lower the costs for entering the profession and offer reduced tuition for highly desirable candidates, including candidates in scarce fields or with scarce skills and characteristics
- Fund research to identify assessable characteristics that predict later success
- Reduce barriers to certification acceptance across state lines
- Enable multiple organizations (higher educational institutions, nonprofit organizations, districts) to offer teacher preparation programs
- Measure and report the teaching effectiveness of graduates of each program; tie program approval to these measures
- Use data on teacher effectiveness by program to grow the strong programs and ensure that weak ones are fixed or closed
- Subsidize state teacher preparation programs based on the number and percentage of graduates that demonstrate effectiveness

District policymakers can...

- Actively cultivate individual candidates and sources of candidates with high potential for teaching effectiveness
- Partner with entrepreneurial efforts to recruit talented teachers from new sources
- Create preparation programs, in-house or through partnerships with higher education and nonprofits, that truly equip candidates for the district's teaching roles
- Collect data on effectiveness of teacher preparation programs and act on results; don't hire from ineffective programs
- Collect information on applicants' previous academic performance and give it to principals before interviews
- Collect information on performance of student teachers and make sure districts aggressively recruit for full-time positions those who show special promise
- Once rigor of tenure process has been increased, publicize the tenure attainment rate for each pipeline program

IDENTIFY EFFECTIVENESS

Redesign teacher evaluations to identify gradations of effectiveness, target development opportunities, and inform decisions about rewards or dismissal

RESEARCH

Teacher evaluations, as currently designed, are rarely used to distinguish top performers from those who are reasonably good or barely adequate, or to improve the quality of individual teachers or of the faculty as a whole. As The New Teacher Project concluded in its 2009 report *The Widget Effect*, “teachers’ effectiveness – the most important factor for schools in improving student achievement – is not measured, recorded, or used to inform decision-making in any meaningful way.”¹⁹

Instead, in the great majority of schools:

- **Evaluations are rarely based on teachers’ effectiveness in the classroom and their contributions to student learning.** Teacher evaluations typically do not measure the work that teachers do in the classroom (except in the most cursory way) or student learning results.²⁰ Some evaluations include items such as “teacher promotes anti-gang activity” but lack items directly related to learning. Several studies have also raised concerns about the accuracy of principals’ ratings,²¹ and whether they are fairly and consistently applied.²² One study found that principals could identify the best and worst teachers – the top 10 percent and the bottom 10 percent – as measured by student gains on standardized tests, but they were not able to accurately predict the effectiveness of most teachers who fell in the middle.²³ Student progress on standardized tests can provide more objective information about a teacher’s effectiveness, especially with adjustments for factors outside of the teacher’s control (known as “value-added assessment”).

Early findings of the Measures of Effective Teaching (MET) project – a two-year study of multiple measures of teaching effectiveness involving over 3,000 teachers in six urban school districts – suggest that a teacher’s past “value-added” is one of the best predictors of his or her ability to increase student achievement on state tests in the future.²⁴ But because the tests are only given in some subjects and at some grade levels, they cover only some teachers (by some estimates, about half).²⁵ And only 23 states have testing and data systems that allow a “value-added” assessment; a small but growing number use value-added data to evaluate teacher effectiveness.²⁶

- **Evaluations fail to differentiate teachers based on their performance.** Most evaluations are based on scheduled classroom observations, during which administrators typically choose from ratings such as “satisfactory” or

“unsatisfactory” on a series of items. Surveys suggest that many teachers know it is easy to receive high ratings on their evaluations, even if students are not learning. “My perspective on the evaluation process is that it is a joke,” commented a Chicago teacher who received a rating of “superior.” “I have never seen or heard of someone getting anything less than superior.”²⁷ One investigation found that only 1 out of every 930 evaluations of tenured teachers in Illinois results in an “unsatisfactory” rating.²⁸ This mirrors findings in Chicago. A 2007 report found that 69 out of 87 failing schools in Chicago did not issue a single unsatisfactory teacher rating in three years.²⁹

Figure 2: Do Ratings Mean What They Say?

<i>Teacher Evaluations in a Chicago Middle School, 2007</i>	
Enrollment:	PK – 8; 500 students
Students:	90% Low Income; 100% African-American
Performance:	18% proficient in Reading; 27% proficient in Math
No teachers were rated Unsatisfactory All 51 ratings were Superior (78%) or Excellent (22%)	

Source: The New Teacher Project. (2007). *Hiring, Assignment, and Transfer in Chicago Public Schools*.

- **Few if any consequences result from evaluations.** Because administrators are reluctant to give teachers low ratings, current evaluation systems are rarely used to weed out low performers or reward high performance. A recent investigation found that of the nearly 100,000 tenured teachers in Illinois, on average only two are fired each year for poor performance.³⁰ Evaluations are rarely if ever linked to professional development; no targeted assistance is identified to address weak spots. Finally, in the great majority of districts, even positive evaluations are not used to reward or recognize high performers.

Because evaluations have so little weight, how long a teacher has served is often more important than how effective he or she has been for purposes of layoff or transfer decisions. District transfer and “last in, first out” rules mean that if a senior teacher wishes to change positions, a newer teacher can be “bumped” to another position or laid off entirely, regardless of the quality of either teacher’s work in the classroom. The New Teacher Project found that, in three of the five large urban

districts it studied, anywhere from 10 to 50 percent of new teachers were at risk of losing their jobs if more senior teachers wanted to transfer into their position – regardless of their performance.³¹

- **Once teachers are tenured, formal evaluations are rare.** Even when teachers are just starting out, evaluations can take place as little as once per year. Once a teacher receives tenure, evaluations are even more rare. While there is no way to know how often principals informally observe teachers, according to the 2008 NCTQ database only 14 states require school districts to evaluate tenured teachers once a year. More commonly, tenured teachers are evaluated once every 2 – 3 years.³² Studies of collective bargaining contracts in the 50 largest U.S. school systems show that 17 districts have policies to evaluate tenured teachers once a year, and six districts only require evaluations every five years.³³

Effective evaluations – the bedrock of any strong performance management system – could reap enormous benefits for students, prompting improvements in teacher recruitment, screening, training, professional development, and career management. But because it raises the possibility of removing ineffective teachers, revamping teacher evaluation is one of the most contentious issues in education.

EMERGING SOLUTIONS

Despite the barriers, many state and district policymakers recognize that better teacher evaluation systems are a critical step toward developing a human capital management system that encourages continuous improvement and selectively retains the highest performing teachers.³⁴ Accurately measuring teacher effectiveness is one key to unlocking many of the other strategies that will lead to a higher performing system – improved hiring, placement, pay, tenure, and dismissal practices. For this reason, policy changes in this area should be an urgent priority.

State leaders are well-positioned to insist on the inevitability of improvements to teacher evaluation systems, and to provide support for district leaders willing to undertake reform. State leaders should prioritize their research and development investment to resolve the critical design challenges outlined above, particularly tying evaluation to student performance and assessing non-quantitative aspects of teaching in a rigorous way. While these challenges are significant, they are by no means insurmountable. State policymakers can also work with key stakeholders, including teachers unions and teacher training programs, to ensure that improved measurement systems are perceived as fair.

District leaders need to embrace and test new teacher evaluation practices and provide continuous feedback to the designers. District leaders must lead the way in establishing a

culture of continuous improvement and transparency that motivates teachers to receive feedback and improve their professional work. That said, district leaders also must use performance measurement to encourage and reward high performers and to identify struggling teachers for intervention or dismissal.

IDEAS FOR POLICYMAKERS

Identify Effectiveness

State policymakers can...

- Create data systems linking individual teachers with their students' academic results
- Require annual effectiveness assessments of all teachers with at least four rating categories, with student results the primary factor
- Report effectiveness data by school, district, and student and school subgroups
- Set consequences in state statute for any teacher who gets multiple unsatisfactory ratings; use mandates or transparency requirements to induce districts to dismiss chronically ineffective teachers
- Require classroom observations as part of teacher assessments
- Support district efforts by providing funding for third party evaluators
- Require that effectiveness data be reported not as averages but as how many fall into different rating categories
- Encourage continuous improvement in evaluations, constantly increasing the correlation between measures used and student learning results

District policymakers can...

- Assess teachers using at least four levels of performance that differentiate high and low performers
- Train school leaders, department heads and master teachers to conduct rigorous evaluations
- Require principals to identify the strongest and weakest teachers in their buildings
- Insist that evaluations be backed up with evidence of impact on student learning. Any mismatch should be cause for discussion; continued mismatches should be cause for action
- Base other teacher systems (induction, professional development, evaluation, tenure) on results of evaluation
- Support principals in efforts to dismiss chronically low-performing teachers and provide options for underperformers to exit voluntarily
- Have third party observers conduct unannounced observations and assess correlation with principal ratings; if principals are routinely ranking people incorrectly, hold them accountable

SCREEN EFFECTIVELY

Screen prospective teachers using criteria that correlate directly with teacher effectiveness

RESEARCH

Even if they want to (and many do), district leaders do not know how to choose the candidates who will make effective teachers.

In part because of ineffective teacher evaluations, we know far too little about which characteristics predict candidates' future success in the classroom. One prominent researcher has concluded that all of the readily available measures of teacher qualifications combined—including advanced degrees, experience, verbal ability, and performance on licensure exams—explain only 3 percent of the variation in their effectiveness with students.³⁵ Because we do not know how to quantify or measure 97% of what makes a teacher effective, our current efforts focus on a few measures with limited impact.

What do we know about the correlation between traditional, observable measures of teacher qualifications and their effectiveness in the classroom?

- **Advanced degrees.** In general, teachers with advanced degrees are not more effective at raising student achievement. The exception appears to be teachers with advanced degrees in science or math who teach these subjects in high school.³⁶
- **Experience.** In the first few years, research suggests that experience does have a positive effect on student learning. After their first year of teaching, teachers typically show steady improvement for a few years, but the effect disappears after that.³⁷
- **Verbal ability.** Teachers' verbal ability is more predictive of effective teaching than any other easily measured teacher characteristic; and yet districts do not always make it a high priority in their hiring decisions.³⁸ Several studies conclude that teachers' verbal ability, as measured by their performance on standardized tests such as the ACT, SAT, or GRE, accounts for significant variations in their students' learning.³⁹ (Given this correlation, it is particularly distressing that, as reported earlier, students who enter education have lower SAT scores, on average, than their peers.)

Clearly, we have a long way to go to understand what makes a good teacher or explaining the variation in teacher effectiveness.

EMERGING SOLUTIONS

To create more rigorous forms of evidence to screen prospective teachers for effectiveness, states and districts should focus their initial efforts on collecting and analyzing data that links teacher characteristics with later effectiveness. At the state level, this could include information about past academic performance, training experiences, and licensing test results. Through interviews and work demonstrations, principals and district officials can gather qualitative information that could be critical to teachers' future effectiveness. By widely sharing their findings on which characteristics predict future success, states and districts could rapidly improve screening processes and make big improvements in overall teacher quality.

IDEAS FOR POLICYMAKERS

Screen Effectively

State policymakers can...

- Build statewide database that links teacher characteristics with student achievement, to identify training, skills and experience that contribute to better teaching
- Disseminate research-based information about competencies linked to teaching effectiveness
- Reserve certification for teachers until after they have a demonstrated track record of effectiveness with students

District policymakers can...

- Collect and analyze data establishing links between teacher characteristics and teacher effectiveness – for example, every district should know how many times a teacher has had to take a licensing test
- Select rigorously based on competencies linked to teaching effectiveness
- Create a feedback loop that uses information about teacher effectiveness in the district to change the selection model for future teachers – and revisit annually

HIRE STRATEGICALLY

Redesign hiring and placement practices to direct the best teachers where they're most needed

RESEARCH

Very few districts prioritize staffing decisions to meet the needs of low-performing or high-poverty schools; and principals of such schools often have relatively little opportunity to choose from a pool of strong candidates.

District human resource departments often play a larger role in selecting candidates than principals do. HR staff members prescreen applications and do initial interviews, often at job fairs or in the district office, then direct candidates to particular schools for school-level interviews. Candidates themselves have little or no say in where they are placed⁴⁰ – and may not even see their future workplace until they set foot in the classroom.⁴¹ These practices undermine principals' ability to find and persuade teachers to fill critical roles.

Ineffective hiring practices. On the surface, it seems far more efficient to have human resource offices screen applicants than to have principals poring over hundreds of applications and conducting dozens of interviews. But research suggests that district HR offices often suffer from serious mismanagement. Burdensome application processes, poor customer service, and inadequate data systems not only slow down the process, but can frustrate potential candidates.⁴²

Even effective human resource offices often do not know how to match teachers with schools where they will be most effective. In addition, late hiring timelines are a serious barrier to placing talented candidates in positions where they are needed. In many districts, the hiring timetable is driven by policies that allow current teachers to wait until the summer to notify the district that they are leaving or want to transfer. At one large district a few years ago, this meant district officials did not make a single job offer until August 12 – with the start of a new school year just days away.⁴³

The New Teacher Project documents the detrimental effect of late hiring on teacher quality. In a study of four urban districts, between 30 and 60 percent of new teacher applicants withdrew from the pool, often to take jobs in higher-performing schools in the suburbs, where districts had an accelerated hiring timeline.⁴⁴ In follow-up analysis, TNTP found evidence that the applicants who withdrew had significantly higher undergraduate GPAs and were 40 percent more likely to have a degree in their teaching field. One candidate from the study is quoted as saying, "The hiring process took too long. By the time I was able

to schedule a first interview... I already had four other interviews and offers.”⁴⁵ In other words, districts lose candidates who have other options.

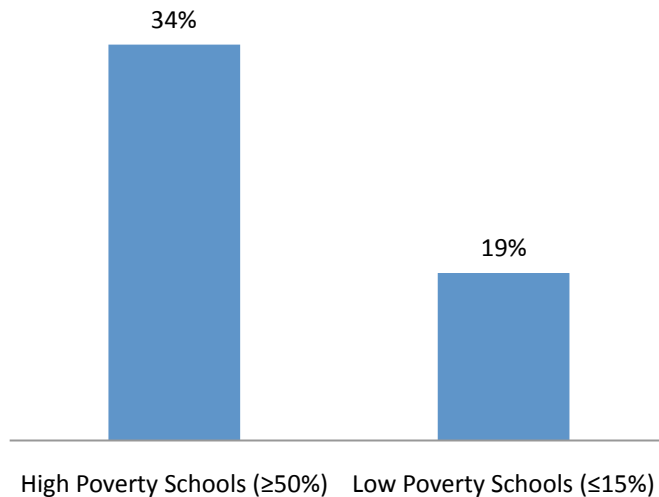
Internal transfers. In most districts, teachers who seek to move to a new school or those whose jobs are eliminated are guaranteed another job in the district by collective bargaining and contractual agreements. This means that sometimes a more junior teacher who is more effective with students can be displaced by a transferring teacher with more seniority. It also means that a teacher who is not successful at one school can be passed among many other schools, rather than getting help or facing dismissal.

These “internal transfers,” which can constitute a large number of new hires in any given school, are typically made without principals’ input. A recent study of five large urban districts found that 40 percent of school-level vacancies were filled by transferring teachers, with little or no say from the schools themselves.⁴⁶ Many districts weigh teacher seniority and tenure over quality considerations (e.g., student outcomes, demonstrated expertise, or advanced training in a particular field) when accommodating internal transfers.⁴⁷ In one district, 64 percent of principals said they had not wanted one or more of these teachers in their school the previous year, but had been forced to hire them.⁴⁸

When experienced teachers transfer, they often leave vacancies in the district’s most challenging schools. These policies exacerbate the staffing inequities that begin with the hiring process. Across the country, low-income students are more likely than their higher-income peers to have teachers who are not certified, who performed poorly on college and licensure exams, and who are teaching outside of their field of study.⁴⁹ A 2006 survey of school staffing practices in Ohio, Illinois and Wisconsin found that 34 percent of core academic classes in high-poverty schools were assigned to an out-of-field teacher, compared with 19 percent in low-poverty schools (see fig. 3).⁵⁰ Another study found that teachers in schools serving large numbers of poor and minority students tend to transfer more often or leave teaching altogether than teachers in more affluent schools.⁵¹

Figure 3: Who's Teaching What?

Percentage Teaching Subjects Outside Their Field of Study



Source: Peske, H. G. & Haycock, K. (2006). *Teaching Inequality: How Poor and Minority Students are Shortchanged on Teacher Quality*. Washington, DC: The Education Trust.

EMERGING SOLUTIONS

In 2008, districts across the country hired approximately 200,000 teachers.⁵² The large number of teachers leaving for retirement or other reasons will require districts to hire an estimated two to three million K-12 teachers over the next decade.⁵³ Redesigning district policies and processes to ensure that highly effective teachers are directed to schools where they are most needed could have an immediate positive impact on student learning. This means setting aggressive goals for early hiring and placement, enabling high-need schools to vie successfully for the best candidates, and ensuring that all schools have the support they need to review applicants efficiently. Policymakers at the state level can make sure budgets are timed to allow districts to hire early and use discretionary measures to ensure that persistently low-performing schools are able to hire the teachers they need to improve student achievement.

Hire Strategically

State policymakers can...

- Using the best available proxies for teacher quality, report data on the quality of new hires by school, district, and school and student subgroups
- Act on problems made clear in the data, particularly when it is evident that poorest students are getting the least qualified teachers
- Prohibit district policies that result in late hiring and forced placements, especially in failing schools
- Require districts to prioritize recruitment and hiring for high-poverty schools over higher-wealth schools in the same district
- Make sure budgets are finalized in time to enable schools to meet staffing needs

District policymakers can...

- Move hiring timelines to late winter or early spring and streamline processes to obtain the best candidates
- Hire based on mutual consent of candidates and schools
- Offer training and supportive technology to help school leaders hire
- Track the quality and date of hires to determine when the candidate pool is strongest and when it begins to deteriorate
- Make sure principals have value-added data on teacher performance or teacher evaluations before hiring veteran teachers

PAY FOR CONTRIBUTION

Redesign pay structures to create incentives and rewards for teachers who take on harder assignments, offer hard-to-find skills, and/or demonstrate greater success on the job

RESEARCH

In other professions, compensation is viewed as a powerful tool to improve employee performance and determine who stays and who leaves.⁵⁴ Teacher pay does not work that way. In fact, the evidence suggests that current compensation systems actually work *against* quality teaching, encouraging lower performers to enter the profession while giving higher performers reason to stay away or leave in higher numbers.

Almost all public school teachers are paid according to a single salary schedule. Teachers under this system get a salary bump for every year they teach and for earning an advanced degree. On average, districts pay 11 percent more for a master's degree, 14 percent more for an education specialist's degree, and 17 percent more for a doctorate over what a teacher would earn with a bachelor's degree only.⁵⁵ But these characteristics have a limited impact on teacher effectiveness.⁵⁶ In 2004 alone, districts across the country spent over \$8.5 billion paying for these advanced degrees that research overwhelmingly shows do not matter for student learning.⁵⁷

On a single salary schedule all teachers with the same level of experience and education are paid the same, regardless of their effectiveness in the classroom, the level of challenge in their schools, or what the wider market would pay for their expertise. This pattern poses serious barriers to improving teacher quality:⁵⁸

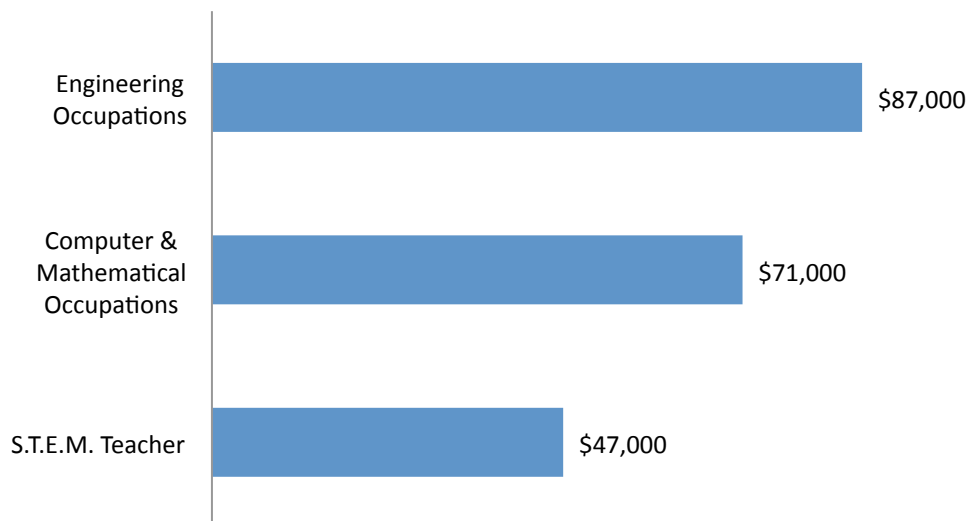
- **Preventing districts from offering pay incentives.** There are widespread shortages of teachers in particular fields – including science, math, special education and programs for English-language learners.⁵⁹ Very few districts offer premiums for these positions, even though candidates in these fields often have higher-paying options (see fig. 4).⁶⁰

Nor do salary schedules typically include premiums for difficult assignments. Most districts do not deviate from the standard salary schedule to offer special compensation to attract top teachers to challenging schools.⁶¹ That leaves high-poverty schools with teachers who have fewer choices because they may not be certified, performed poorly on college and licensure exams, or are teaching outside

of their field of study.⁶² This may help explain the turnover rate, which is 20 percent in high poverty schools compared to 15 percent overall.⁶³

Figure 4: How Does Science and Math Teaching Compete with Related Professions?

Average Science, Technology, Engineering and Mathematics (STEM) Teachers' Salaries vs. Comparable Private Sector Salaries



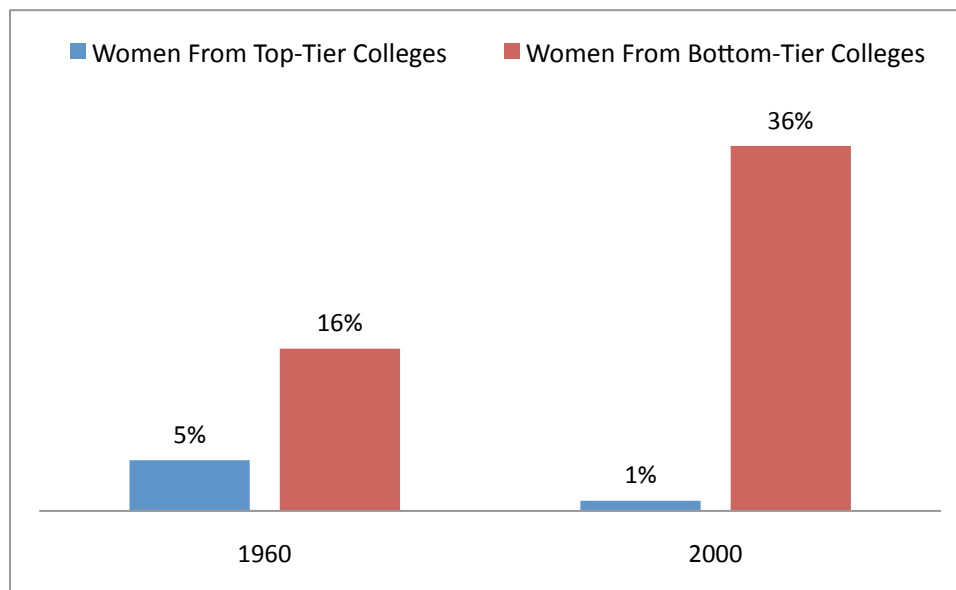
Source: Fuller, E. (2009). *Secondary Mathematics and Science Teachers in Texas: Supply, Demand and Quality*. Texas Business and Education Coalition.

- **Failing to retain high performers.** Current pay systems do not give district leaders or principals the flexibility to reward or retain high-performing teachers.⁶⁴ Research across sectors indicates that the top 10 percent are most likely to leave because of lack of pay for superior performance and career advancement opportunities.⁶⁵ The fact that ineffective teachers are paid the same as exemplary teachers can undermine morale. Most teacher retirement plans also contain no incentives to retain top teachers – or encourage others to leave (for more on retirement, see below pages 34-36).⁶⁶
- **Failing to attract high-caliber candidates.** In a recent survey 78 percent of new teachers said that salary was a drawback of the profession, although this ranked below other issues.⁶⁷ Some research suggests that compensation packages that offer the same pay to all teachers with the same education and experience have a negative overall effect on the aptitude of teachers entering the profession. One study found a dramatic shift over the past several decades: in 1963, a female teacher from a highly-selective college was offered an 84 percent higher starting salary than her colleague from a bottom-tier college. By 2000, however, both groups were paid

the same. During this same time period, the share of new female teachers from highly-selective colleges fell from 5 percent to 1 percent, while the share of new female teachers who came from the lowest tier of colleges rose from 16 to 36 percent (see fig. 5).⁶⁸

Figure 5: Is Teaching Attracting Promising Candidates?

Percentage of Female Teachers Coming from Top-Tier and Bottom-Tier Colleges, 1960 vs. 2000

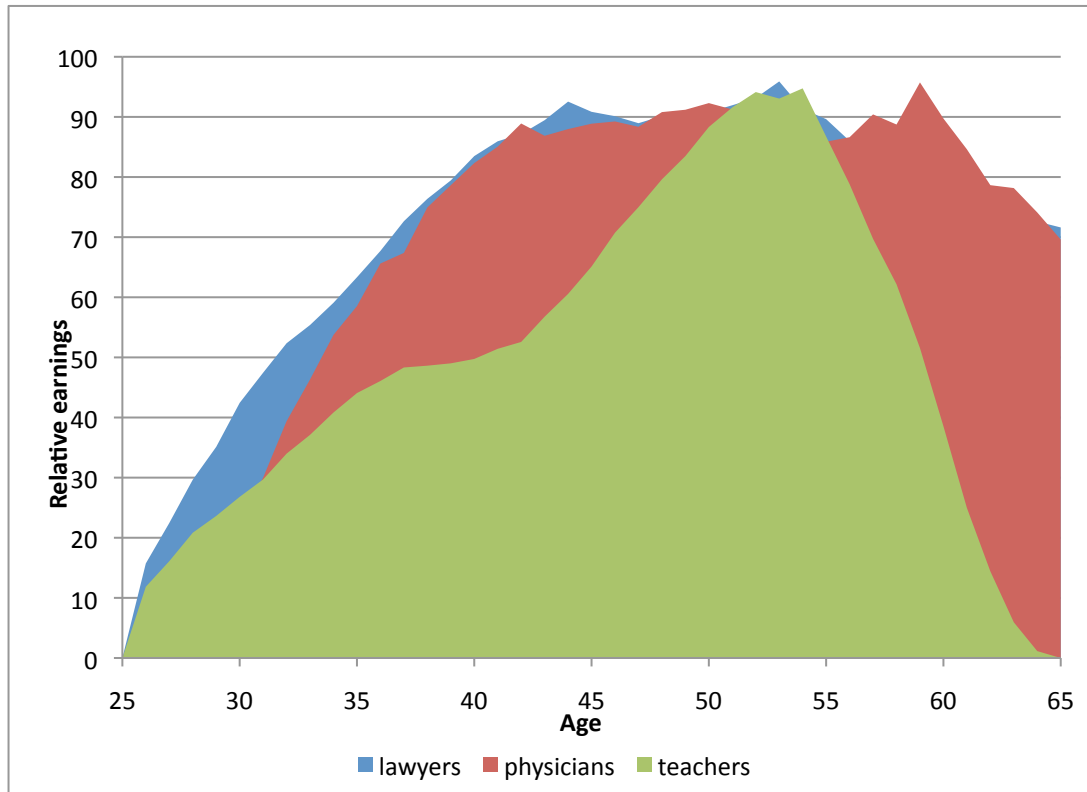


Source: Hoxby, C. M., & Leigh, A. (2005). Wage Distortion. *Education Next*, 4(2).

- **Failing to attract the next generation of teachers.** In general, teacher compensation is back-loaded, offering most of its rewards only near the end of a decades-long career⁶⁹ (higher salaries) or at retirement (pension and retirement health benefits). But younger workers – so-called GenYers – are more likely to switch careers than earlier generations, not wait around for eventual rewards. They are likely to be more attracted by a system where teachers reach their top earning potential more quickly (see fig. 6).

Figure 6: How Long Does It Take to Reach the Top?

When Teachers, Lawyers and Doctors Reach Peak Earnings*



Source: Vigdor, J. (2008). Scrap the Sacrosanct Salary Schedule. *Education Next*, 8(4).

*Note: This figure uses 5-year moving averages of annual reported earnings, relative to reported earnings at age 25 and peak earnings.

EMERGING SOLUTIONS

Designing a pay system that addresses current deficiencies and improves teaching quality is possible, but it will require bold leadership at both the state and district levels. By tracking which changes have the greatest impact on teacher quality in the shortest amount of time, policymakers can continue to refine pay systems over time to make them increasingly effective.

To make pay reform sustainable, policymakers should avoid short-term add-ons to the existing system to reward performance or other contributions. Instead, the aim should be to “re-slice the compensation pie” so that more existing dollars go to pay for contribution.⁷⁰

IDEAS FOR POLICYMAKERS

Pay for Contribution

State policymakers can...

- Set a goal for the proportion of teacher compensation that is “pay for contribution” and track progress toward it
- Eliminate restrictions that block district experimentation with compensation
- Invest state funds in promising local pilots of compensation reform, including ones that pay more for scarcity, effectiveness with kids, and include pension reforms
- Offer large performance-based awards to teachers who succeed in hard-to-staff schools

District policymakers can...

- Engage in continuous adjustment of pay systems to find the right mix of incentives
- Use special resources (state pilots, federal TIF grants, private donations) to transition to new systems – not as temporary add-ons
- Phase out input-oriented differentials (e.g. extra pay for master’s degrees) and redirect to fund higher salaries for effective and scarce teachers
- Make it possible for outstanding teachers to reach the top of the pay scale no later than year 8, and for very good teachers to reach it by year 12
- Do not give annual salary increases to teachers who are in the lowest third of effectiveness

SUPPORT NEW HIRES

Experiment to find the best models for supporting new teachers, and make sure such teachers are not routinely assigned to the most difficult classes

RESEARCH

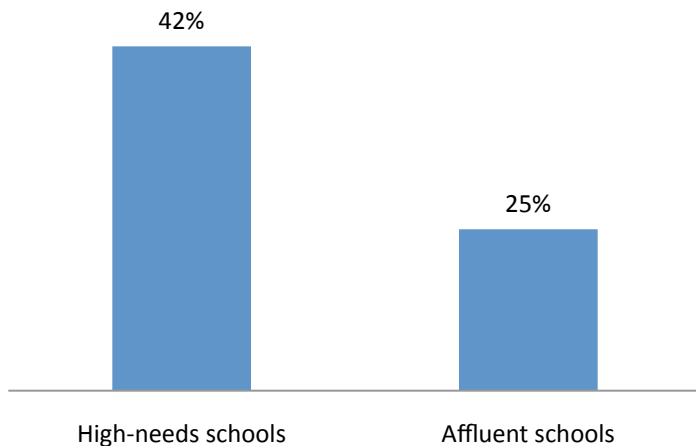
Beginning teachers, however talented they are, by definition have less practice in knowing how to reach challenging students. Nevertheless, they are routinely assigned to the most difficult classes, with little or no effective support to succeed.

A recent national survey found that almost half of the new teachers in high-need schools had been assigned to the most challenging students (42 percent), compared to 25 percent of the new teachers in more affluent schools (see fig. 7).⁷¹ Thus, not only are new teachers more likely to be placed in hard-to-staff schools, but within schools they are assigned to the most challenging classes.

They also get little effective help in taking on that challenge. Although “induction” programs for new teachers exist in most districts, research suggests that they rarely focus enough attention on improving instruction, nor do they meet teachers’ desire for support with classroom management. Research also indicates that very few teachers receive comprehensive induction that includes the help of a supportive mentor and opportunities to collaborate with other teachers.⁷² A few national induction programs, such as that of the New Teacher Center, have tried to remedy this weakness with some promising results. But recent research suggests that our ability to deliver a high-quality induction program, particularly for teachers in high-needs schools, is far from complete.

Figure 7. Who Gets Assigned to Which Kids?

Percent of New Teachers Assigned to the Most Challenging Students



Source: Public Agenda. (2007). They're Not Little Kids Anymore: The Special Challenges of New Teachers in High Schools and Middle Schools. *Lessons Learned: New Teachers Talk About Their Jobs, Challenges and Long-Range Plans*. A Report from the National Comprehensive Center for Teacher Quality and Public Agenda.

Some research suggests that teachers who participate in high-quality mentoring programs are more likely to stay in teaching. One study found that after their first year of teaching, teachers who received no induction were twice as likely to leave teaching as those who had received a robust induction that included mentoring, opportunities to collaborate with colleagues, and additional resources.⁷³ Another study found that teachers in Chicago who participated in high-quality induction programs were more likely to plan to stay in the profession.⁷⁴ Of course, retention is not a sufficient end in itself: incapable teachers should be encouraged to leave. But induction appears to be a powerful way to help more teachers be successful and keep them longer in the classroom.

Even when states and districts do provide support for new teachers, the evidence of impact on student achievement is mixed. A recent study examining two comprehensive first-year induction programs did *not* find that these programs had a positive impact on student achievement, changed teacher's instructional practices, improved teacher retention, or boosted student test scores any more than the less comprehensive programs in which teachers in a control group participated.⁷⁵ This study focused only on first-year results; positive effects may show up later in a teacher's career. Other research has shown that students taught by teachers who receive comprehensive induction support for at least two years demonstrate significantly higher learning gains as a result.⁷⁶ Taken together, these findings suggest we still have a ways to go in designing an induction program that has an immediate, large impact on student learning.

EMERGING SOLUTIONS

Given that research has not yet been able to determine which aspects of induction have the greatest payoff in student learning, states and districts should work together to fund promising models and rigorously evaluate their impact on teachers' effectiveness over several years. In the meantime, states and districts can ensure that new teachers are not routinely assigned to the most challenging classrooms.

IDEAS FOR POLICYMAKERS

Support New Hires

State policymakers can...

- Fund several high-quality, intensive induction programs that use promising practices to support new teachers and build their skills
- Measure impact of induction programs on student learning and invest in scaling up the most effective programs

District policymakers can...

- Use intensive induction to set high expectations for performance and behavior and overcome individuals' specific challenges
- Experiment with different induction models and rigorously measure their impact on a range of teacher and student outcomes
- Ban or at least radically reduce the number of new – and therefore untested – teachers assigned to the most challenging schools and/or classrooms

DEVELOP ADVANCED SKILLS

Organize professional development to meet specific identified needs of individuals and schools; eliminate rewards for activities that have little proven impact on improving effectiveness
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RESEARCH

Professional development is universal, but often poorly focused; most such activities have little or no demonstrated impact on the quality of teaching and learning.

Teachers typically spend dozens of hours a year in training activities, and many spend far more. Some estimates suggest that public schools spend as much as \$14 billion a year on professional development.⁷⁷ A 2002 study found that Chicago Public Schools spent an average of \$123 million annually on professional development, but its offerings were not integrated into a comprehensive strategy for improving instruction.⁷⁸ This is typical of many districts, in which teachers choose much of their own professional development independent of supervisors' evaluations or any overarching school or district strategy. As in so many other areas, there is little evidence connecting professional development to improvements in student learning.⁷⁹

The research on professional development is voluminous – a recent analysis identified 1,300 studies – but inconclusive. Of those 1,300 studies, only 9 met rigorous scientific standards.⁸⁰ The high quality research shows that, when professional development activities are focused on the academic content that students are expected to learn and are embedded in teachers' daily activities, instruction and student achievement are likely to improve.⁸¹ Promising strategies include teachers collectively examining and discussing student assignments, trying new strategies in practice, observing each other's teaching, and collaboratively analyzing student test results.

Professional development activities often fall short of this standard.

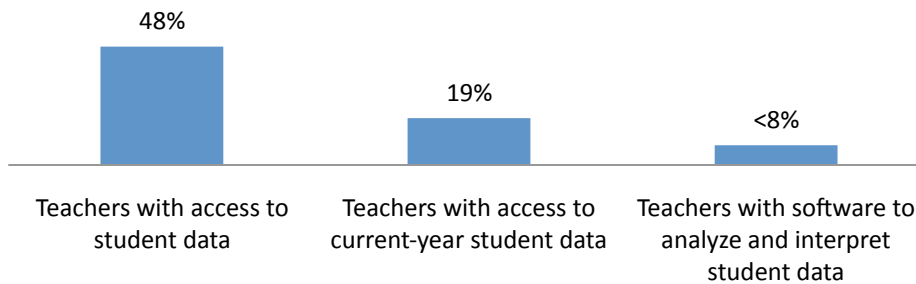
- **Prevalence of “one-stop” activities.** In one large study, 79 percent of teachers participated in “traditional” forms of professional development: workshops, seminars, and institutes. Many of these training experiences were generic one-day workshops with little follow-up, and they were not connected to the content students were expected to master or to current, classroom-level data on student

achievement.⁸² Not surprisingly, researchers found that these activities had little impact on teaching and learning.⁸³

- **Little access to data.** Studies of high-performing schools suggest that teachers who have access to ongoing information about student progress, and who use this information to adjust their teaching, are better able to improve student learning. Too many teachers lack access to real time data: in a recent survey on use of electronic data systems, just 19 percent of responding teachers said that they had access to current-year test scores for their students (see fig. 8).⁸⁴ Lacking the data, district and school leaders responsible for planning professional development can't effectively tailor teacher's professional development plans to student needs.

Figure 8: Just the Facts?

Teachers' Access to Student Data and Data Systems



Source: Means, B., Gallagher, L., & Padilla, C. (2007). *Teachers' Use of Student Data Systems to Improve Instruction*. Washington, DC: U.S. Department of Education, Office of Planning, Evaluation and Policy Development.

EMERGING SOLUTIONS

All teachers, even the most effective, have room to improve and hone their skills. When students are not making expected gains, teachers need the tools to evaluate their strategies and make corrections. District officials should create opportunities for teachers to receive targeted, rather than general, assistance. This can take many forms, but the essential element is tying development to evaluation – what does this teacher need to know and do to be more successful? State officials can invest in and encourage districts to adopt evaluation systems that offer this kind of targeted assistance. In addition, states can collect

data on individual districts' professional development efforts and disseminate information about promising practices.

IDEAS FOR POLICYMAKERS

Develop Advanced Skills

State policymakers can...

- Phase out salary supplements for low-value masters' degrees; redirect funds to high-value professional development chosen by schools and districts based on needs
- Invest in rigorous and data-informed evaluation systems that identify development areas for teachers
- Focus professional development on math, science, language arts, and the analysis and use of data

District policymakers can...

- Inventory existing professional development expenditures; cease low-value activities and redirect funds to high-value professional development
- Create opportunities for small groups of teachers or school faculties to work together to advance curriculum.
- Integrate professional development with evaluation
- Base professional development on specific needs of individuals and schools for content knowledge and teaching strategies that meet identified student needs
- Allow excellent teachers to select their own professional development opportunities entirely; direct weaker teachers to activities closely aligned to their need areas

RECONSIDER TENURE

Redesign tenure systems to include clear criteria for identifying teacher effectiveness and defensible systems for dismissing poor performers

RESEARCH

Tenure decisions could be a powerful opportunity for schools to reward high performers and weed out poorly-performing teachers, but they rarely work that way.

Tenure policies vary from state to state, but in general are designed to give teachers enhanced job security, far beyond what is common in other fields. Once teachers are awarded tenure, they cannot be dismissed without formal charges of an “actionable offense” (typically defined by statute or case law), a hearing, and multiple appeals. Under this system, principals typically cannot dismiss mediocre teachers – only those that are egregiously bad.

Evidence from around the country indicates that districts almost always award tenure without considering *any* evidence of a teacher’s performance.

- **Tenure is awarded automatically.** Almost all teachers who stay in teaching beyond two or three years are given tenure, which in most states means that unless they do something truly egregious, they are guaranteed permanent employment. A recent review indicates that 33 states award tenure after 3 years, and 10 states allow districts to grant teachers tenure in two years or less. Only Iowa and New Mexico require any evidence of effectiveness to be part of tenure decisions; elsewhere, tenure decisions are virtually automatic.⁸⁵
- **Tenure does not reward high performers.** Teachers, principals and the general public do not view the tenure decision as a significant accomplishment in a teacher’s career. About 70 percent of teachers in a recent national survey said receiving tenure is just a formality that has little to do with whether a teacher performs well.⁸⁶
- **Very few tenured teachers dismissed.** It is extremely tough to dismiss even very poorly performing teachers. The New Teacher Project, studying five urban districts, found that in one district contracts and state law practically mandated that the evaluation process take a year and at least 100 hours of observation and documentation. In another district, lawyers reported that it took two years of observations and write-ups and approximately 10 to 15 percent of a principal’s time just to bring a termination case to a hearing.⁸⁷ Even after such a lengthy process,

only one or two teachers in these districts were formally terminated for poor performance each year.⁸⁸ With odds like this, most principals are unlikely to attempt to dismiss even their lowest-performing teachers, so they have less opportunity to build a team of teachers who are the best fit for their building. Research suggests that, if districts were to dismiss the lowest quartile of teachers every year, student performance would go up significantly in just a few years. Researchers found that dismissing the lowest-performing Los Angeles teachers would result in student scores in the district as a whole rising an average of 1.2 percentile points each year, and 14 points over the twelve years that a given cohort of students is in school.⁸⁹

EMERGING SOLUTIONS

Some observers argue that tenure should be eliminated altogether, on the grounds that civil rights protections passed over the last several decades adequately protect teachers from unfair and arbitrary dismissal. But constructing a tenure policy that offers due process protections while providing incentives for teacher quality is possible. A few districts have developed systems that include clear criteria for demonstrating teacher effectiveness and defensible systems for dismissing poorly performing teachers. These efforts depend on clear and shared standards for teacher effectiveness, as well as tools and procedures that more accurately measure performance. Building a strong tenure system starts by building a strong teacher evaluation system that includes evidence of student learning. With such a system in place, tenure could potentially become a powerful lever for improving teacher quality as teachers better understand and agree on the steps they need to take to demonstrate the high levels of performance necessary to be granted tenure.

IDEAS FOR POLICYMAKERS

Reconsider Tenure

State policymakers can...

If retaining tenure at state level:

- Extend the time required to four or five years to collect more data about performance.
- Set a high bar for tenure based on measured effectiveness
- Require districts to have systems in place that dismiss ineffective tenured teachers; reexamine legal obstacles and prolonged due process found in statutes; track data
- Offer an option for teachers to give up tenure in return for higher pay opportunities

District policymakers can...

If retaining tenure:

- Extend the time required to attain it
- Set a high bar based on measured effectiveness
- Hold hearings requiring teachers to make the case for getting tenure
- Reward tenure with a big pay increase
- Create mechanisms to dismiss tenured teachers who have multiple unsatisfactory evaluations
- Renegotiate contracts to limit extended, repeated appeals on due process
- Offer an option for teachers to give up tenure in return for higher pay opportunities

REWORK RETIREMENT

Rework retirement systems to provide incentives for improved quality and to promote financial stability

RESEARCH

Almost all public school teachers are covered by traditional defined benefit pension systems, which require teachers to contribute a portion of their salary every year in exchange for a defined benefit that will be paid every year after they retire. The amount each teacher receives is based on formulas developed by legislatures which vary considerably. Once a teacher is vested, usually after she has worked for five to ten years, she becomes eligible to draw a full pension upon reaching a certain age and/or length of service. Many states allow a teacher to draw a full pension before age 65, but benefits are typically backloaded so that a teacher will not earn maximum benefits unless she remains a teacher in the same state over several decades. Costs, however, are incurred from the time teachers enter the profession, and can be quite significant. In some cases, contributions from the district and the teacher combined can exceed 20 percent of a teacher's pay.⁹⁰

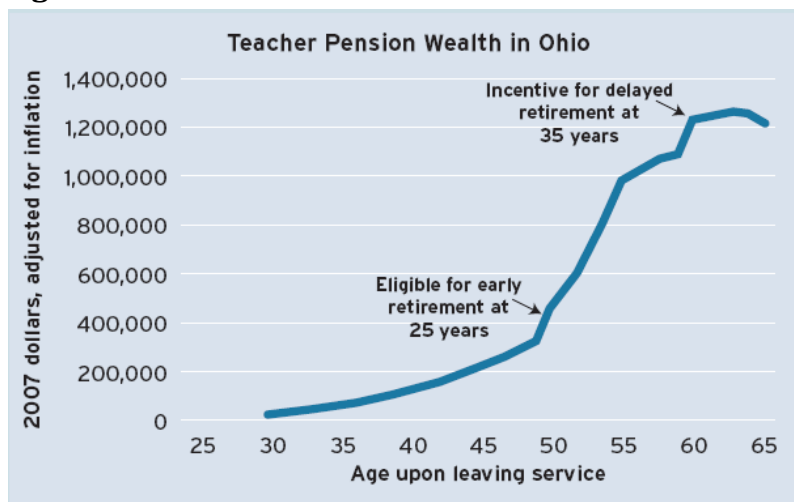
A well-planned retirement benefit system would provide incentives for the most effective teachers to stay in the profession as long as possible, encourage the least effective to leave, and entice (or at least not discourage) new, talented candidates to enter the profession. In far too many states, however, current pension systems work against these goals.

- **Providing incentives for low performers to stay in profession.** In most states, pension benefits are small until teachers reach their early fifties, when much larger benefits start to accrue. In some states, the pension wealth of a teacher who leaves the profession in her early sixties can be hundreds of thousands of dollars more than it would have been a few years earlier (see fig. 9). The system therefore pulls teachers to “put in their time” until their retirement benefits reach the maximum, whether or not they are successful in the classroom.⁹¹
- **Encouraging successful teachers to leave early.** At the same time, in some states the accrual of pension wealth begins to *slow* in a teacher's late fifties and sixties – so that the optimum time to retire occurs often well before traditional retirement age. These incentives can serve to push teachers out of the profession relatively early, regardless of their effectiveness in the classroom.⁹²
- **Discouraging talented candidates from entering the profession.** Teachers must begin contributing a significant portion of their salary to the pension fund at the start of their career, but will not be eligible to receive payments until decades later. This delayed compensation may discourage young candidates, who often change

jobs multiple times over their career, and might prefer to retain a greater portion of their salary rather than pay into a system from which they may never benefit.⁹³ For many of these young workers, the typical teacher pension system – as opposed to a more portable retirement benefit, such as a 401K — may be a disincentive to entering the profession.

- **Discouraging interstate mobility of teachers.** The combination of multi-year vesting periods and the fact that benefits typically accrue most quickly in the late years of a teacher’s career means that teachers who move from one state to another suffer severe penalties. A teacher who works for 30 years in a single state will accrue vastly more pension wealth than a teacher who teaches for 15 years each in two states.⁹⁴ From a national perspective, teacher mobility is important to accommodate shifts in enrollment as state populations grow and shrink. Penalizing teachers who move can make it harder to achieve the optimal distribution of quality teachers over time.
- **Spiraling costs.** Retirement systems in many states are not adequately funded to fulfill their obligations. The large numbers of impending retirements among baby boom teachers, as well as longer life spans (and thus longer periods of payment) mean that states will be paying out ever-larger sums. Funding these benefits requires collecting larger contributions from employers and younger employees; in Ohio, for example, pension officials have recommended an increase to 29 percent of teachers’ salaries to ensure adequate funding for pensions and health benefits.⁹⁵

Figure 9: Scramble to Retirement



Source: Costrell, R., & Podgursky, M. (2008). Peaks, Cliffs and Valleys: The Peculiar Incentives of Teacher Pensions. *Education Next*, 8(1), 22-28.

EMERGING SOLUTIONS

Defined-benefit retirement systems have the advantage of offering employees a relatively simple and certain retirement calculation. But as currently designed, they often have negative impacts on teachers and school systems. State and district leaders should start by examining their own states' pension systems to identify unintended draws and incentives embedded in current eligibility and payment requirements. Relatively straightforward reforms could eliminate some of the more troublesome incentives to teachers to leave too soon, stay too long, or avoid teaching altogether. If more comprehensive reforms are necessary, policymakers should ensure that new systems meet two criteria: (1) they are designed to be supportive of efforts to attract and retain high-quality teachers; and (2) they are fiscally sustainable over the long haul.

IDEAS FOR POLICYMAKERS

Rework Retirement

State policymakers can...

- Examine the state pension system to identify unintended incentives in current eligibility and payment requirements
- Pursue legislative and administrative solutions to create the right incentives for teachers and ensure financial sustainability

District policymakers can...

- Collect data during recruitment and hiring about how current pension incentives influence new hires
- Advocate for changes that provide incentives for top performers to stay in profession by publicizing data on quality teachers who retire early
- Build support among teachers for common sense pension reforms that would incentivize quality improvements

LEVERAGE TALENT

Enable the best teachers to reach more children by reorganizing roles and time within schools and using technology to extend great teaching everywhere

RESEARCH

Along with extra pay, employers frequently use recognition and opportunities for advancement to attract and retain talented people.⁹⁶ In education, offering advanced opportunities and rewards to high-performing teachers would not only attract good teachers but would also make the most of their talents, directing them to the students who need them most and/or enabling them to reach more students.

While a few school districts have begun to adopt such strategies, most systems don't exercise this flexibility.

- **Few opportunities for advancement.** The only opportunity most teachers have for advancement is to become an administrator. Schools have a smattering of other roles for teachers, such as reading specialists or peer mentors, but most who stay in teaching remain classroom teachers for their entire careers. Few opportunities exist for top-notch teachers to reach more students, specialize in specific aspects of their craft, or help other teachers in meaningful ways. There are few systems to identify and cultivate top people for the advanced roles that do exist; instead, teachers generally self-select for these roles.⁹⁷ This contrasts sharply with high-performing education systems in other parts of the world. In Singapore, for example, annual teacher evaluations include a place for evaluators to note a teacher's "current estimated potential."⁹⁸ This enables evaluators to comment on whether a teacher would be a good candidate for an alternative role within teaching or a school leadership position that would enable them to serve the school and develop their skills.⁹⁹
- **Discouraging talented candidates.** High-performing college graduates considering career choices are deterred by the fact that teaching lacks opportunities for advancement. About 7 in 10 recent college graduates who did not go into teaching reported in a national survey that a lack of opportunity for advancement was a downside to teaching.¹⁰⁰
- **Discouraging high performers.** Lack of opportunity leads some teachers to leave the profession: in one survey 41percent of teachers who left teaching listed a lack of

opportunity for professional advancement as one reason for their dissatisfaction.¹⁰¹ There is evidence that teachers with higher academic credentials leave at higher rates, but studies linking teachers to student performance show that public education retains highly effective and ineffective teachers in equal proportions. What is apparent is that our public schools are not doing a good job of keeping more of the best.¹⁰²

EMERGING SOLUTIONS

Districts and states that make the changes mentioned thus far – increasing the number and distribution of excellent teachers, compensating teachers for their contribution to learning, providing targeted professional development, and dismissing low-performers – can significantly influence student learning. But all these efforts combined will not meet every student’s need. As Public Impact demonstrated in its Joyce-funded report *Opportunity at the Top*, most students would still lack access to the best teachers even if we made amazing advances in recruiting higher caliber candidates and dismissing chronically struggling teachers.¹⁰³

Extending the reach of the best teachers would help improve this picture. Districts would need to rethink how schools are organized so that excellent teachers could have more of an influence on other staff members or on more students (e.g., by reducing their non-instructional duties to free up time to give personalized attention to more students). At the state level, policymakers could extend the reach of great teachers by investing in technology that enables students everywhere to have access to great teachers, even if their schools are not able to attract and retain enough of them.¹⁰⁴ The possibilities are unlimited and, as yet, largely unknown. Getting to the “next generation” of ideas should be one of our top priorities.

IDEAS FOR POLICYMAKERS

Leverage Talent

State policymakers can...

- Build data systems to identify effective teachers
- Create financial incentives for the best teachers to stay, serve more students and take on advanced roles
- Invest in technology platforms to extend the reach of highly effective teachers to more students and hard-to-staff schools

District policymakers can...

- Identify the district’s most effective teachers
- Use multiple career advancement opportunities, pay incentives and other rewards to retain effective instructors
- Vigorously seek out ways to expand the reach of high performers by enabling them to teach more children and/or help other teachers excel

- Develop mentoring and induction programs tailored to teachers in low-performing schools and rigorously measure results

WHERE TO GO FROM HERE

Our schools could do much more to attract, retain, and use the talents of highly effective teachers to make the most difference for children. In low-income communities, access to truly effective teaching could be the ticket out of poverty for millions of kids. The good news is that we see solutions bubbling up in pioneering school districts, entrepreneurial nonprofits, and progressive teacher organizations. They include efforts to recruit new talent into schools, and to prepare teachers for their enormous challenges in new ways. They involve innovative ways to measure teacher effectiveness, and to make effectiveness matter for compensation, tenure, and career advancement. These experiments are producing measurable effects on the quality of teaching and learning. We now know that effective teaching for every child is within our grasp.

As powerful as these individual initiatives are, reforms have even greater potential if pursued in conjunction with each other: measuring effectiveness, for example, in turn leads to using the new measures to guide all decisions affecting teachers. Leading-edge cities and states are moving in this direction, and Secretary of Education Arne Duncan has made it one of his top priorities. Major philanthropic organizations are increasingly investing in holistic efforts to create new teacher systems that cover all the issues. But as of this writing, we have yet to see comprehensive efforts to “connect the dots” to reach their full potential.

The hope for a comprehensive solution should not deter innovators from continuing to make progress on the “dots.” But by keeping our focus on the whole picture, we have a much better chance of realizing that vision, dot by dot.

Many actors have critical roles to play in this work.

STATE POLICYMAKERS CAN:

- Connect the dots: create and share a holistic vision for improving teacher effectiveness
- Set clear statewide goals for improving teacher effectiveness and equity, and use data to shine a bright light on successes and continuing challenges
- Build a state data system that makes it possible to gauge teachers’ impact on student learning; require districts and schools to measure teachers’ effectiveness
- Support improved teacher evaluation and ensure that impact on student learning is the dominant criterion

- Identify and clear away state-level barriers that block improvements to teacher effectiveness
- Induce districts, schools and individuals to take action to improve teacher effectiveness and equity – through incentives where possible, and mandates where necessary

DISTRICT POLICYMAKERS CAN:

- Set clear district-wide goals for improving teacher effectiveness and equity, and use data to shine a bright light on successes and continuing challenges
- Ban assignment of ineffective teachers or teachers with unknown effectiveness to the most vulnerable students and schools
- Identify the district policies most in need of change and create plans for improvement
- Negotiate high-priority policy changes with teacher organizations and the state
- Build the capacity of school-level leaders (both administrators and teachers) to select, develop, and evaluate teachers effectively
- Use communications to build and maintain support for teacher effectiveness policies among educators, parents, and the public

PROGRESSIVE TEACHER ORGANIZATIONS

- Make improving teacher effectiveness a primary objective of the organization, with specific goals and metrics
- Identify and pursue roles the organization can play to advance teacher effectiveness, such as providing induction services and participating in rigorous evaluations
- Take the initiative to propose compensation systems that “pay for contribution” in ways that teachers agree are meaningful
- Take the initiative to propose fair but speedy systems to remove ineffective teachers
- Understand the diversity within the membership’s ranks; be an advocate for policies that meet different teachers’ needs

PARENTS AND COMMUNITY ADVOCATES

- Demand data about teaching effectiveness in your schools; learn how to use the information
- Advocate for policies that ensure that low-income and minority students get their fair share of effective teachers
- Develop an advocacy agenda based on the data, as suggested in these pages
- Educate other parents and community members about the importance of policies that would improve teacher effectiveness and equity
- Use an array of advocacy techniques to inform policymakers and communicate concerns
- Hold state and district officials accountable for enacting policies that support teacher effectiveness

ENDNOTES

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- ⁷ A few recent studies have challenged this consensus, most notably a 2007 study that asked people taking the most common teacher licensure exam in the US, the Praxis, to report on their GPA. These reports indicate that the percentage of candidates earning higher than a 3.5 GPA increased from 27 percent to 40 percent between 1997 and 2002. Gitmoer, D. H. (2007). *Teacher Quality in a Changing Policy Landscape: Improvements in the Teacher Pool* (p. 13). Educational Testing Service.
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