



STRONG AMERICAN SCHOOLS

POLICY TOOLKIT

Section 2: Effective Teachers in Every Classroom

In collaboration with:



National Institute for
Excellence in Teaching

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Effective Teachers in Every Classroom

The Case for Action

Teachers have a greater impact on student learning than anything else in schools, yet states and districts do too little to attract and retain high-quality teachers. Current policies discourage effective teachers from staying in the profession, deter those who could become great teachers from entering the classroom at all, and give few incentives for strong teachers to take on tougher assignments. Ultimately, we are hindering teaching from becoming the esteemed profession that it ought to be.

America's schools will need to hire 2 million new teachers over the next decade, and they must do so amidst a fierce battle for human capital in an ultra-competitive global society. This is a national challenge of unprecedented proportions. But it is also an historic opportunity for the next president to inspire states, districts, and schools to recruit America's best and brightest to teach in our nation's classrooms.

The next president must inspire a national effort to solve this problem, an effort built on the recognition that:

- ✓ Good teachers are the key to helping students gain the skills necessary to succeed in college, careers, and life;
- ✓ Every student deserves an effective teacher who can help him or her succeed academically;
- ✓ Teachers must be valued and rewarded for their performance on the job, including the learning they help students achieve; and
- ✓ We must find ways to attract talented teachers to high-need schools and fill shortages in subjects like math and science.

■ Teachers have a greater impact on student learning than any other school related factor.

- Students assigned to the most effective teachers gain a full additional year's worth of learning over students assigned to the least effective teachers.²⁵
- Having strong teachers three years in a row can boost students' test scores as much as 50 percentile points (on a 100-point scale) above what they would gain with three ineffective teachers in a row.²⁶
- If we were to provide low-income students with good teachers rather than merely average teachers for five years in a row, we could eliminate the achievement gap entirely.²⁷
- Assigning students from any background to several ineffective teachers in a row deals them a crushing blow from which they seldom recover.²⁸
- There are huge differences among teachers—even among colleagues in the same school—in terms of their ability to produce student-learning gains.²⁹

■ Because an unprecedented number of teachers are nearing retirement, America's schools will need to boost recruitment by 35 percent and hire an additional 2 million new teachers over the next decade.³⁰

- Most school districts still compensate teachers only for years on the job and graduate school credits—neither of which do much to increase student achievement.
 - The biggest improvements in teachers’ effectiveness come *early* in their careers, typically during their first three to five years on the job.³¹
 - One recent study found that teachers who earn master’s degrees after they start teaching are, on average, *less* effective at improving student achievement than those who do not.³²

- Because we offer few opportunities for higher pay and advancement, many talented Americans are driven away from—or out of—teaching.
 - Seven in ten recent college graduates think teaching does not offer good opportunities for advancement.³³
 - Academically talented young people are less likely to train to become teachers, less likely to take a teaching job, and less likely to stay in the classroom.³⁴ Teachers who earned SAT or ACT scores in the top quarter are *twice as likely* to leave the profession within four years as teachers who scored near the bottom.³⁵
 - Outside the field of education, adults who have strong academic skills earn more than adults who do not, and they can improve their earnings at faster rates. Four years out of college, the earnings gap between teachers and non-teachers who scored high on SAT or ACT tests is \$10,709—but just six years later it nearly triples to \$28,533. Wage gaps are similar among adults who have technical degrees in subjects related to math and science.³⁶
 - Because they cannot earn higher pay for better performance, younger teachers have few options to build earnings earlier in their careers in order to save money, support a family, or buy a home.³⁷
 - Most careers offer opportunities for advancement. But as every ambitious young teacher eventually discovers, American educators face a painful choice: They can settle for less pay in order to keep teaching, or they can garner a better salary by leaving the classroom for an administrative job—or by abandoning education altogether.
 - Public schools once enjoyed a captive labor market because of discrimination in other professions against females and minorities. But now education must compete harder for top talent, and students are losing out.
 - ✓ The likelihood that a highly talented female in the top tenth of her graduating class would become a teacher shrank by half, from about 20 percent to about 10 percent, between 1964 and 2000.³⁸
 - ✓ A study by economists Caroline Hoxby and Andrew Leigh estimates that more than three-quarters of the decline in academic aptitude of teachers was caused by the compression of teacher salaries into uniform scales that only reward seniority and graduate degrees.³⁹

This is not to disparage the current generation of teachers, but rather to ask who the next generation of teachers will be. There are many talented, hard-working teachers in America's classrooms. But we must change our current policies if we have any hope of recruiting the best and brightest Americans to fill the 2 million teaching jobs our schools will have over the next decade.

- Teacher attrition rates are too high and too costly.
 - Approximately one-third of teachers quit during their first three years, and by the fifth year half have left the profession.⁴⁰ Those with high test scores are twice as likely to leave.⁴¹
 - Teacher attrition has risen 50 percent over the last 15 years and now stands at about one in six teachers annually.⁴²
 - According to one estimate, teacher attrition costs the nation more than \$7 billion each year to recruit, hire, and train new teachers.⁴³
 - Providing new teachers with greater support from mentor teachers would help reduce attrition rates, ensure that fewer low-income students are taught by novice teachers, and save taxpayers money related to turnover. In fact, novice teachers who participate in comprehensive induction programs which include mentoring by a teacher in the same subject are only half as likely to quit as those who receive no mentoring or only a bare bones induction program.⁴⁴
- Teachers are not motivated solely by money, but compensation does influence them—just as it does most people.⁴⁵ Although working conditions matter greatly, low salary is one of the main reasons teachers leave high-poverty urban schools.⁴⁶
- We are not attracting and retaining enough experienced, effective teachers to work in our most disadvantaged and high-minority schools.
 - High-poverty urban schools lose more than one-fifth of their teachers each year—enough for an entire staff to turn over every half decade.⁴⁷ Because vacancies are often filled with novices, America's low-income and minority students are about twice as likely to be taught by inexperienced teachers.⁴⁸
 - More than 70 percent of math classes in America's high-poverty and high-minority middle schools are taught by teachers who lack even a college minor in math or a math-related field.⁴⁹
 - Some states can now measure the impact of classroom teachers on student learning—and there are big inequities in teacher “effectiveness,” too. In Tennessee, African American students are 50 percent more likely to be assigned to ineffective teachers.
 - Courses in high schools serving mostly Latino students are nearly twice as likely to be taught by unqualified teachers as those in high schools with few Latino students.⁵⁰

- We are not attracting enough teachers to fill critical fields and subject areas.
 - More than one-third of math classes in U.S. middle and high schools are taught by someone who lacks even a college minor in a math-related field.⁵¹
 - All told, more than 12 million American students in grades seven to 12 are taught academic courses by teachers who have no college degree in the subject they're teaching.⁵²

- The public recognizes the importance of teacher quality and supports proposals to improve it.
 - Ninety-one percent of Americans believe that ensuring there are quality teachers in every classroom is very important.⁵³
 - Ninety percent of parents favor increased pay for teachers who demonstrate high performance as a way to attract and retain good teachers.⁵⁴

Effective Teachers in Every Classroom Policy Options

Teachers have a bigger impact on student learning than anything else in schools. In fact, students assigned to the most effective teachers gain a full additional year's worth of learning over students assigned to the least effective teachers. Research shows that giving low-income students good teachers for five years in a row would close the skills gap with their middle-class peers.

Sadly, current policies do little to put effective teachers in every classroom. In fact, most districts still compensate teachers based on seniority and graduate school credits—neither of which does much to boost student learning. We cannot expect to recruit and retain effective teachers in every classroom until we begin to value and reward teachers for the results they achieve on the job—not just how long they have been doing the job.

A president need not take on the role of “national school superintendent” to demonstrate strong leadership in this area. Working with other national leaders, he or she can leverage new and existing federal resources to inspire innovation by providing support to states and districts willing to implement cutting-edge initiatives to measure teachers’ performance in the classroom, help teachers improve their skills, and pay teachers more for producing superior results or taking on challenging assignments.

Key questions to answer in crafting such a policy include:

1. What should performance-based compensation be based on?
2. How should we measure student outcomes?
3. Should we base awards on individual or group performance?
4. If we include incentives based on teachers’ knowledge and skills, how can we best measure those things?
5. Should the plan include rewards for teachers who take on additional responsibilities or leadership roles in their schools?
6. Should the plan offer market incentives to attract qualified teachers to shortage fields and effective teachers to hard-to-staff schools?
7. How large should bonuses or additional compensation be?

1. What should performance-based compensation be based on?

At a minimum, performance pay should reward teachers for results in the classroom—how much their students actually learn. However, for both political and practical reasons, policymakers should consider additional ways to value and reward teacher’s on-the-job performance. For example, most plans include multiple measures of performance, such as demonstrating advanced skills and knowledge or performing well on evaluations.

Multiple measures of teacher performance help solve a practical problem. Many teachers work in grade levels or subject areas where there are no standardized assessments of student learning, so additional measures can enable all teachers in a school to participate in the program. (Another way to ensure that every teacher can participate is to include a mix of individual and group incentives, as discussed in question three below.)

Some experts worry that having too many measures can dilute the focus on student learning and spread available compensation too thin. *We agree with the recent report of the Working*

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*Group on Teacher Quality, which recommended that teacher compensation be based **primarily** on gains in student academic achievement.*⁵⁵

2. How should we measure student outcomes?

Objective measures of student achievement, such as those based on valid and reliable standardized assessments, are essential for the plan to have credibility. Such measures should focus on achievement *gains*—rather than end-of-year scores—to recognize that children are not randomly assigned to classrooms and students enter a teacher’s classroom with different levels of preparation.

Fortunately, over the last 15 years, researchers have developed reliable ways to measure growth in student learning, including “value-added” measures that take into account each student’s starting point and expected progress. Those methods can be used—and, indeed, are already used in many places—to provide a fairer picture of each teacher’s contribution to his or her students’ learning. (For more on this, see the additional resources section of this *Toolkit*, including the paper entitled *The Test of Seriousness: Student Achievement and Performance-Based Compensation*.)

Of course, there are other ways to measure student learning growth in addition to state assessments. Denver’s ProComp system allows teachers to earn a small amount of additional compensation for meeting individually negotiated objectives for student growth. The objectives are based on diagnostic pre- and post-tests, high school end-of-course assessments, and other objective measures.

However, ProComp incentives that are tied to student gains on the Colorado Student Assessment Program are three times larger than the incentives tied to individually negotiated objectives. According to a new book by several of the plan’s architects, “Denver proved it is possible to build into a salary system a component that takes into account the state test and grants significant salary increases to teachers whose students outperform expectations based on previous assessments of student learning.” The plan’s architects believe Denver’s voters would not have approved the program otherwise.⁵⁶

NOTE: It is easier to measure value-added growth in student learning in schools whose districts or states have developed longitudinal data systems, which can track student achievement from year to year and link student test scores to individual classroom teachers. Therefore, policymakers may want to include financial support for states to develop such systems. (However, it is possible to implement school-level models such as the Teacher Advancement Program (TAP) in states that have not yet developed full longitudinal data systems.)

3. Should we base awards on individual or group performance?

All plans should include strategies to evaluate and reward the performance of individual teachers. Research shows that classroom teachers are the key school related factor in student learning, so we must begin to compensate teachers based on their classroom performance and the results they achieve with their students.

However, since *all* teachers should have the opportunity to receive performance awards, many experts recommend a combination of shared and individual incentives, meaning that part of the performance compensation is based on teachers’ individual performance and part on school-

wide or team performance. Team incentives can include any group of teachers who work together to raise student achievement—within a grade level, a department, or on interdisciplinary teams.

Plans should not limit the number of teachers who can earn awards. If every teacher contributes to improving student achievement, every teacher should be able to earn more. However, plans that include both individual and group incentives should place more weight on individual performance. For example, in the TAP model, approximately 20 percent of performance pay is based on school-wide student learning gains, while 80 percent is based on a combination of a teacher's classroom student learning gains (approximately 30 percent) plus evaluations of that teacher's classroom performance (approximately 50 percent).

4. If we include incentives based on teachers' knowledge and skills, how can we best measure those things?

Rewarding teachers for obtaining, demonstrating, and exhibiting advanced knowledge and skills has become increasingly popular. Some plans provide awards to teachers who obtain new skills through ongoing professional development and document their impact in the classroom. Others award teachers who obtain certification from the National Board for Professional Teaching Standards. Still others implement evaluations of teachers' professional practice that include multiple classroom observations.

For example, in schools implementing the TAP model, teachers undergo a rigorous evaluation of their professional practice that:

- includes classroom observations conducted at least four times per year;
- relies on trained mentor and master teachers as well as administrators;
- is based on a framework that clearly describes good teaching practice and has been validated by research;⁵⁷
- gathers a range of additional evidence of the teacher's impact on student learning; and
- provides detailed feedback to help teachers improve.

Such evaluation systems can avoid the major problem with so-called "merit pay" programs attempted in decades past, which often relied exclusively on principals' personal evaluations of teachers. Teachers reasonably worried that some administrators might play favorites rather than reward true excellence. Recent research suggests that principals are, in general, fairly accurate in identifying highly effective and highly ineffective teachers.⁵⁸ However, along with value-added methods for measuring actual student learning gains, modern evaluation systems can go a long way toward overcoming concerns about the fairness of performance-based compensation.

5. Should the plan include rewards for teachers who take on additional responsibilities or leadership roles in their schools?

In addition to incentives based on individual and group performance, some plans create career ladders that offer additional compensation to effective teachers who are willing to shoulder important responsibilities outside the classroom. The benefits can be great if responsibilities include mentoring colleagues and leading school improvement efforts. Career ladders can help spread good teaching practices, help more teachers become effective, help recruit and retain greater numbers of talented Americans to the teaching profession, and reduce the huge—and costly—turnover rates among novice teachers in many schools.

Career ladders also can serve as the cornerstone of another important element in any performance pay system—opportunities for teachers to raise their skills through job-embedded, school-based professional development. If teachers are to be paid based on performance, they need the tools and the time to learn new skills by observing accomplished colleagues, collectively analyzing student work, and using data to determine areas that may need improvement. Such programs are best developed and directed by master and mentor teachers who provide ongoing coaching and individual assistance to colleagues.

Again, however, career ladders should *complement* rather than supplant compensation based on results. Ideally, mentor and master teachers should be recruited from the most *effective* teachers in a school or district.

6. Should the plan offer market incentives to attract qualified teachers to shortage fields and effective teachers to hard-to-staff schools?

Yes. Despite massive shortages of teachers in some fields and huge inequities in access to effective teachers in disadvantaged schools, fewer than 15 percent of school districts now offer such pay incentives.⁵⁹ Policymakers have several options:

- i) Propose a combined program that offers teachers performance pay only if they also teach in hard-to-staff positions or schools;
- ii) Propose a combined program in which teachers need not work in hard-to-staff positions or schools to be eligible for performance pay, but those who do are eligible for bigger performance-based awards than those who do not; or
- iii) Propose market incentives for hard-to-staff subjects and schools as part of a separate grant program, so that states or districts that do not want to craft performance pay plans are still eligible.

If policymakers choose the third option, we recommend they attach some kind of teacher quality requirement to the market incentives. For example, in Hamilton County, Tennessee, only teachers who have high effectiveness scores on the Tennessee Value-Added Assessment System are eligible to earn a \$5,000 bonus plus a range of other incentives to work in one of Chattanooga's low-performing schools. As a recent report by a panel of expert teachers put it:

Don't offer incentives to just any teacher who wants to teach in a high-needs, low-performing school. Limit these incentives to teachers who can demonstrate that they are effective with high-needs students and will be able to address the school's specific learning needs. Sending a willing but unqualified or underprepared teacher to such a school could do more harm than good.⁶⁰

7. How large should bonuses or additional compensation be?

Most current programs offer relatively small bonuses or salary increases, often too small to make much of a difference. Most experts now recommend that policymakers offer significant performance rewards, for example, bonuses of *at least* five percent of teachers' salaries, while some say it will take even more. As described above, one possibility is to combine market-based incentives with performance-based incentives. For example, under the proposed TEACH Act, teachers who work in a shortage field in a high-needs school *and* meet performance criteria based on strong student learning gains and classroom evaluations could earn an additional \$12,500 per year.

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The Bottom Line

Table 1 provides a summary of possible elements to include in a proposal to support states or districts that want to implement performance-based systems for providing effective teachers in every classroom. Some policymakers might want to offer more flexibility for states and districts to mix and match these or other elements, while others might want to ensure that local plans include certain elements.

Our view is that plans should **at least** include performance pay for individual teachers based on student gains in academic achievement, plus market incentives for hard-to-staff subject areas and schools. If, as many experts recommend, policymakers allow or require states and districts to use multiple measures of teacher performance, compensation should be based primarily on gains in student achievement.

Table 1: Possible elements of a plan to support performance-based programs

| Differential Pay Options |
|---|
| 1. Student gains in academic achievement |
| a. Individual teachers |
| b. Teams of teachers |
| c. School-wide |
| 2. Knowledge and skills, such as meeting benchmarks on rigorous evaluations |
| 3. Career ladders that reward mentor and master teachers who agree to take on additional responsibilities |
| 4. Market Incentives |
| d. Hard-to-staff fields |
| e. Hard-to-staff schools |

Example: A proposal to attract and retain effective teachers in America's classrooms

This plan would double the federal investment in teacher quality by providing matching grants to states and districts to support their efforts to attract and retain the most effective teachers in our nation's highest-need classrooms and critical subject areas. It would challenge educators, states, and districts to reform teacher compensation systems to better reflect student achievement goals by outlining key elements of teacher compensation reform, providing national support for state and local efforts, and encouraging educators to take a leadership role in shaping these systems.

- **Reward effective teachers and encourage them to teach in high-need schools.** Provide grants to states and districts to develop performance-based compensation plans that reward teachers who demonstrate high skill and obtain better results, and offer those teachers additional incentives to teach in America's neediest schools. The plan would encourage local innovation while keeping the focus on student achievement by specifying that performance rewards should be based primarily on student learning gains. It would also provide funding for states and districts to develop data systems that can identify highly effective teachers based on value-added student achievement gains.

- **Retain effective teachers by offering greater opportunities for professional advancement without leaving the classroom.** Provide grants to states and districts to develop career ladders that provide successful teachers with opportunities to earn greater compensation by taking on additional leadership roles and responsibilities. These expert teachers would lead comprehensive mentoring and professional development programs for their colleagues, helping to improve student achievement school-wide and reducing costly turnover rates among newer teachers. State and district plans must include objective systems for identifying highly effective teachers and rewarding all teachers who demonstrate high skills and obtain better results.
- **Ensure students have teachers with expertise in the subjects they teach.** Provide funding for states to create local incentive programs to attract and keep qualified teachers in shortage subjects such as math and science, with an emphasis on shortages in high-need schools. The system should provide ongoing rewards for teachers with demonstrated aptitude in high-need schools and subjects, as opposed to one time recruitment bonuses, since one time bonuses can result in ineffective teachers being recruited or effective teachers leaving after a short period of time.

States and districts could apply for grants under multiple programs if they wanted to combine incentives in innovative ways.

Examples: Existing proposals and programs

- S. 1339, “The Teacher Excellence for All Children Act of 2007” (and H.R. 2204)
 - ✓ “Recruiting Talented New Teachers”
 - Creates TEACH Grant programs to provide students with up-front scholarships of up to \$4,000 per year for four years in a bachelor’s degree program or two years in a master’s degree program in exchange for a commitment to teach a shortage subject in a high-need school for at least four years.
 - Creates a \$200 million grant program for institutions of higher education to recruit teachers from among students majoring in math, science, foreign languages, special education, or English Language Learning.
 - Increases teacher loan forgiveness from \$17,500 to \$20,000 and expands it to include reading specialists; provides loan forgiveness in incremental sums over a five-year commitment; and makes the program permanent.
 - ✓ “Closing the Teacher Distribution Gap”
 - Creates a \$2.2 billion matching grant program for districts to provide annual bonuses to “exemplary, highly-qualified” teachers and principals to work in high-need schools for four years, with extra compensation for teachers in shortage subjects in high-need schools. Exemplary rating must take into account:
 - learning gains made by the teacher’s students;
 - evaluations based on research-validated rubrics and multiple classroom observations by master teachers and principals;
 - evidence of teaching skill documented in performance-based assessments; and
 - National Board certification.
 - Establishes a \$200 million grant program for districts to implement career ladder programs. These programs augment the salaries of teachers who take on additional responsibilities—for example, becoming mentor or master teachers in high-need schools—and provide annual bonuses to career, mentor, and master teachers based on their performance.
 - ✓ “21st Century Data, Tools, and Assessment”
 - Creates a \$200 million grant program to assist states and districts in creating value-added data systems to track teacher effectiveness and improve classroom instruction.
 - ✓ “Keeping Our Best Teachers in the Classroom”
 - Creates \$100 million grant program to enable districts or consortia of districts to establish and support Teacher Centers that provide high-quality professional development.
 - Provides tax relief for teachers and principals in high-need schools and teachers in shortage subjects (\$15,000 annual exclusion from income; \$25,000 for those teaching in a high-need school and subject).
 - Increases the above-the-line tax deduction for teaching supplies by elementary and secondary teachers (from \$250 to \$500) and makes the provision permanent.

■ S. 1775, “No Child Left Behind Act of 2007”

✓ Expands the Department of Education’s ten state growth model demonstration to all 50 states in order to measure individual student progress towards grade-level proficiency. Eligible states must adhere to the No Child Left Behind Act’s 2014 proficiency deadline, have robust data systems, maintain well-established assessments, and set annual goals based on grade-level proficiency standards.

✓ Recognizing that high-quality teachers are the most important factor in improving student achievement, the bill:

- Emphasizes alternative certification and incentive, differential, and performance-based pay; and
- Requires states and districts to implement a plan ensuring low-income and minority children are as likely to be taught by highly-qualified teachers as their peers in more affluent schools.

✓ Additional teacher provisions include:

- Authorization of the Teacher Incentive Fund; and
- Allowance for districts and principals to renegotiate collective bargaining agreements, giving them greater ability to reward quality teachers who agree to teach in high-poverty schools through incentive, differential, or performance-based pay.

■ S. 114, “Innovation Districts for School Improvement Act”

✓ Offers competitive grants to 20 districts (10 in urban areas and 10 in non-urban areas) to:

- Establish longitudinal data systems that can determine the value-added effectiveness of specific teachers;
- Assess the effectiveness of individual teachers based on value-added measures using national, state, or district averages to determine one year of expected growth;
- Award incentives for effective teaching, including incentives for individual teachers based on student gains, a professional evaluation, and team performance;
- Establish a differentiated pay scale to provide incentives for effective teaching; teaching shortage subjects such as math, science, and special education; and teaching in hard-to-staff or low-performing schools; and
- Establish a career ladder and additional compensation for novice teachers, career teachers, mentor teachers, and master teachers. Mentor and master teachers are required to create a “learning community” in each school that provides professional development based on analysis of student outcomes, individual coaching, and study teams.

■ “Teacher Incentive Fund” program authorized by Public Law 109-149

✓ Provides grants to states, districts, and charter schools to develop, implement, or improve comprehensive performance-based compensation systems for teachers and principals, especially in high-need schools, who raise student achievement and close the achievement gap. The performance-based compensation system must:

- consider, among other factors, gains in student academic achievement as well as classroom evaluations conducted multiple times during each school year, and
- provide educators with incentives to take on additional responsibilities and leadership roles.

■ H.R. 1761, “Teacher Incentive Fund Act”

✓ Authorizes the Teacher Incentive Fund and will:

- Assist states, districts, and nonprofit organizations to develop, implement, or improve comprehensive performance-based compensation systems for teachers, especially in high-need schools, who raise student achievement and close the achievement gap. Requires differentiated compensation to be based primarily on measurable increases in student achievement and allows:
 - Incentives for hard-to-staff schools or shortage subject areas;
 - Incentives for successfully fulfilling additional responsibilities; and
 - Incentives based on evidence of skills and knowledge, such as mastery of content knowledge and superior teaching skills.
- Study and review performance-based compensation systems for teachers and principals to evaluate their effectiveness, fairness, quality, consistency, and reliability.

■ Public Law 110-28 (May 25, 2007), Title IV, Chapter 7, “Hurricane Education Recovery”

✓ \$30 million for use by Louisiana, Mississippi, and Alabama for recruiting, retaining, and compensating new and current teachers, principals, assistant principals, and other educators who commit to work for at least three years in public elementary or secondary schools in areas affected by Hurricane Katrina and Hurricane Rita. The funds can be used for paying salary premiums, performance bonuses, housing subsidies, signing bonuses, relocation costs, and loan forgiveness.

✓ Funds may also be used to:

- build capacity, knowledge, and skills of teachers, principals, and other educators so that they can provide an effective education, including the design, adaptation, and implementation of high-quality formative assessments;
- establish partnerships with nonprofit entities with a demonstrated track record in recruiting and retaining outstanding teachers, principals, and other educators; and
- pay for release time for teachers and principals so that they can identify and replicate successful practices from the fastest-improving and highest-performing schools.

✓ Any state that elects to use part of the funds for performance bonuses will collaborate with local education agencies, teachers’ unions, local principals’ organizations, local

parents' organizations, local business organizations, and local charter school organizations to develop a plan for a rating system for the bonuses. If no agreement is reached, the state department of education must notify Congress of non-agreement and will have 30 days to establish and implement a rating system based on classroom observation and feedback more than once annually, conducted by multiple sources (including, but not limited to, principals and master teachers), and evaluated against research-based rubrics that use planning, instructional, and learning environment standards to measure teacher performance. (These provisions do not apply to any states that enacted a state law in 2006 authorizing performance pay for teachers.)

■ “All Students Can Achieve Act of 2007” introduced by Senators Lieberman, Landrieu, and Coleman

- ✓ States must create comprehensive data systems that track students' academic progress and any other factors that affect their success. Data systems must link student achievement data to teachers, allowing states to measure teacher effectiveness.
- ✓ Would provide grants for programs that change teacher compensation, including better pay for more effective teachers, and incentives for effective teachers to teach in high-need schools.
- ✓ Calls for school-based reward systems for teachers, administrators, and other staff members that work in high-need schools in order to close the achievement gap.

Table 2: Summary of existing proposals and programs

| Bill or Proposal | Performance and Market Incentives | Career Ladders |
|---|---|---|
| S. 1339 “The Teacher Excellence for All Children Act of 2007” | Creates \$2.2 billion matching grant program for districts to provide annual bonuses for “exemplary, highly qualified teachers” to work in high-need schools or shortage subjects in high-need schools. Exemplary rating based on performance measures, including 1) strong student learning gains; and 2) evaluations based on research-validated rubrics and multiple classroom observations by master teachers and principals. | Establishes \$200 million grant program for districts to establish and implement career ladders that augment salaries of teachers based on additional responsibilities and effective performance. |
| S. 1775 “No Child Left Behind Act of 2007” | Emphasizes incentive, differential, and performance pay. | Provides funding for development of multiple career paths and increased compensation for teachers. |
| S. 114 “Innovation Districts for School Improvements Act” | Provides grants to districts to create data systems that can evaluate teacher effectiveness based on student learning gains; offer incentives for effective teaching; establish differentiated pay scales to compensate teachers for effective teaching and teaching in shortage subjects or hard-to-staff and low-performing schools | Calls for career ladders for teachers to work as mentor and master teachers. Additional compensation for teachers with enhanced roles or responsibilities. |
| H.R. 1761 “Teacher Incentive Fund Act” | Authorizes the Teacher Incentive Fund, which awards grants for the development, implementation, or improvement of comprehensive performance-based compensation systems. | Allows for increased pay for teachers who successfully fulfill additional responsibilities. |
| Public Law 110-28 (May 25, 2007) | Allocates funds for recruiting and retaining educators in LA, MS, and AL through such mechanisms as paying salary premiums, performance bonuses, housing subsidies, etc. Educators must commit to staying three years. | |
| “All Students Can Achieve Act” | Establishes grants for programs that change teacher compensation, including better pay and incentives. Calls for school-based reward systems. | |

Effective Teachers in Every Classroom Frequently Asked Questions and Myths vs. Realities

Frequently Asked Questions

Q: Why should we focus on policies related to teacher compensation and not other reforms aimed at improving teacher quality in America?

Research has confirmed that teacher quality is the most important school-related factor for student achievement. Teacher compensation is a key workforce tool that can be used to promote teacher quality and thus improve student achievement. Teacher compensation reform is promising because: 1) research shows that there is little connection between the current single-salary schedule and teacher quality, 2) research shows that teachers, and those considering teaching, are influenced by financial incentives, 3) compensation reform can reach all teachers in the workforce, and 4) such policies align teacher compensation with student achievement goals. Research also shows that incentive programs are more cost effective at raising student achievement than other programs, such as those that only provide teachers with additional resources.⁶¹

Q: Why offer bonuses for effective teachers?

With more than 2 million teacher vacancies in the coming years, we need to better attract and retain effective educators in our nation's classrooms. This is particularly true in high-need schools and subject areas like math and science, in which there are often shortages of qualified, effective teachers. There is simply no way to help underachieving students excel without providing effective teachers. Bonuses, career opportunities, and professional support have been shown to improve teacher recruitment, retention, and effectiveness.

Q: Why not simply raise compensation across-the-board for all teachers?

The real question is, why does the current system pay effective and ineffective teachers the same? If the goal is to increase student achievement, the compensation system should promote that goal. Unlike an across-the-board pay raise, performance pay systems reward teachers for measurable improvements in their teaching skills and their ability to help students learn. Effective teachers are rewarded for their success, which helps to keep them in the classroom, particularly in high-need schools.

Additionally, the cost of an across-the-board raise for every teacher is very high. Bringing all teachers up to the nation's average teacher salary would cost more than \$9.5 billion per year. And giving all teachers a \$10,000 raise would cost approximately \$30.6 billion annually.⁶² Over time, we need to raise the compensation for teachers in order to attract the best talent to the profession. But that should be accomplished as part of a comprehensive rethinking of how we compensate teachers—including their performance and their willingness to take on tougher assignments. Recent college graduates believe teachers are underpaid, but they also believe that teaching does not offer enough opportunities for advancement based on hard work and results.⁶³ Policymakers should try to solve both of those problems at the same time.

Q: What are the benefits of giving teachers opportunities for career advancement?

Strong American Schools, a project of Rockefeller Philanthropy Advisors, is a nonpartisan campaign supported by The Eli and Edythe Broad Foundation and the Bill & Melinda Gates Foundation promoting sound education policies for all Americans. SAS does not support or oppose any candidate for public office and does not take positions on legislation.

Most careers offer opportunities for professional growth and advancement. Teaching has traditionally not offered this opportunity; teachers who want to take on more responsibility and earn greater pay are forced to leave the classroom and become administrators or enter other fields. A career path provides a way for teachers to remain in the classroom where they are desperately needed, and at the same time pursue greater professional challenges, accomplishment, and pay. Creating positions for master teachers, mentor teachers, and coaches will not only keep outstanding veteran teachers in the classroom, but will provide novice teachers with much needed mentoring and support. Giving teachers opportunities to assume greater roles and responsibilities also enables them to share instructional leadership with the principal and more effectively contribute to student achievement.

In addition, career ladders help attract outstanding educators to where they are needed most. There are cases of outstanding educators who leave schools in upper- and middle-class neighborhoods in order to take on positions with more responsibility and greater pay at schools with lower-income student populations.

Q: Why offer professional development as part of performance-based compensation plans? Why not just give bonuses for good results?

All educators pursue teaching with the aim of helping their students learn, but they often are not provided with the tools and support to meet their goals. Performance-based compensation helps focus educators on what's most important—student academic success. Quality professional development provides teachers with the support they need to ensure that success. By providing ongoing professional development aligned to student achievement goals and offering structured opportunities to collaborate and share best practices with colleagues, teachers will be more likely to help students make achievement gains. All teachers, even the most effective ones, can benefit from relevant and ongoing professional development. In addition, experience shows that teachers are willing to be held accountable if standards are clear and there are mechanisms for helping them improve their practice.

Myths vs. Realities

| Myth | Reality |
|---|---|
| <p><i>“Performance pay is just another term for the old ‘merit pay’ system where teachers were paid based on a single, year-end test or on an unfair and potentially biased evaluation by the principal.”</i></p> | <p>Historically, so-called “merit pay” programs were viewed as unfair because of the measures they used. Some programs rewarded teachers based only on end-of-year test scores, giving an advantage to teachers who worked with students who were already high-achievers. Other programs based awards on a single classroom visit by the principal, which led to accusations of bias and favoritism.</p> <p>But modern performance pay systems are very different. They are based on fair measures of teacher performance, such as growth in student achievement (i.e., value-added measurement of student learning gains), rather than year-end scores. Moreover, many systems include new ways to conduct more objective teacher evaluations, such as multiple classroom visits conducted by several trained/certified evaluators using clearly defined standards and objectives.</p> |
| <p><i>“Performance pay will create unhealthy competition among teachers by pitting one teacher against another in a profession dedicated to teamwork.”</i></p> | <p>Research and on-the-ground experience show that most teachers in schools with performance pay programs feel collegiality is very strong. For example, the pilot for Denver’s ProComp plan found that individual incentives did not sabotage collegiality among teachers. The plan therefore included only a very small group incentive and targeted the rest of the funds toward individual incentives.⁶⁴</p> <p>In addition, by allowing <i>all</i> teachers who meet the requirements to be eligible for a bonus—as opposed to setting a cap on the number of teachers who can earn a bonus—teachers can focus on improving their own skills and their students’ achievement and not worry about competing with the teacher next door.</p> |
| <p><i>“Performance pay is unfair because teachers with the ‘best’ students get the rewards, while teachers with more challenging students are at a disadvantage.”</i></p> | <p>All students can learn, regardless of external factors and socioeconomic conditions. Modern performance pay systems measure student achievement gains over the course of the year. “Value-added” assessments take into account</p> |

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| | <p>students' starting points and expected gains, rather than simply looking at end-of-year scores. Regardless of where their students start the year academically, teachers are evaluated and rewarded based upon their own contributions to student learning.</p> <p>By using value-added measurements, performance pay systems reward all teachers who make significant progress with their students.</p> |
| <p><i>“Test scores should not be used to measure teacher performance because they do not accurately measure student academic achievement. It is especially unfair to base a teacher’s performance on students’ scores on a single test.”</i></p> | <p>Education researchers and economists have documented that standardized tests <i>do</i> provide meaningful information. In fact, research has found that test scores predict students’ later success in education and the job market. (See <i>The Test of Seriousness: Student Achievement and Performance-Based Compensation</i> in the ‘Additional Resources’ section and at http://www.edin08.com/uploadedFiles/Issues/Issues_Pages/SAS%20PolicyBrief%20TestsPerfPay%20July20%202007.pdf for more information.)</p> |
| <p><i>“Teachers oppose performance pay.”</i></p> | <p>Many of the most successful performance pay programs have been designed and put in place with the full support and active participation of teachers. For example, teachers voted in large majorities to institute performance pay in Denver and in a number of cities that implemented the Teacher Advancement Program (TAP), including Minneapolis, Chicago, Cincinnati, and Columbus, Ohio.</p> <p>Some well-intentioned teachers oppose performance pay out of fear because they do not know what “performing well” will entail. When professional development and other support is provided and achievement goals are clear, teachers support performance pay.</p> |
| <p><i>“Performance pay systems will never happen because teachers’ unions will oppose them.”</i></p> | <p>Since teachers are the key to the success of any incentive pay program, their support is essential. That’s why successful programs require teacher buy-in, often through a vote from the faculty before a school starts the program.</p> <p>As a result, local teachers’ associations affiliated with the National Education Association (NEA)</p> |

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| | <p>and the American Federation of Teachers (AFT) have shown a willingness to try performance pay when they have strong, grassroots support from their membership. In Denver, Cincinnati, Minneapolis, and Columbus (OH), the local teachers' unions were responsible for bringing performance pay to schools in the district.</p> |
| <p><i>“Performance pay wouldn’t work because teachers are not in it for the money.”</i></p> | <p>Teaching offers many sources of satisfaction beyond pay. But it is a mistake to treat teachers like volunteers rather than paid professionals. Economists have shown that current and prospective teachers <i>do</i> respond to monetary incentives. Based on his own and others’ research, the Urban Institute economist Dan Goldhaber sums it up: “Research shows that teachers are responsive to monetary incentives,” and “There is, in fact, ample evidence that teachers are sensitive to differences in compensation, especially when they work in high-minority and high-poverty schools.”⁶⁵</p> |

Effective Teachers in Every Classroom Model Programs and Local Examples

Below are brief descriptions of selected teacher incentive programs in operation or in final planning stages across the country.

■ The Teacher Advancement Program (TAP)

In 1999, the Milken Family Foundation created the Teacher Advancement Program (TAP), a bold new strategy to attract, develop, motivate, and retain talented teachers. TAP has been in operation since 2000. Now a part of the National Institute of Excellence in Teaching (NIET), TAP operates in more than 130 schools in 14 states plus the District of Columbia and reaches 4,000 teachers and 60,000 students.

TAP's goal is to draw more talented people to teaching and to keep them in the classroom by making the profession more attractive and rewarding. TAP provides the opportunity for good teachers to earn higher salaries and advance professionally, just as they would in other careers, without leaving the classroom. At the same time, TAP helps teachers become the best they can be by giving them opportunities to learn better teaching strategies and by holding them accountable for their performance in the classroom.

TAP is based on four elements:

1. Multiple career paths. TAP allows teachers to pursue a variety of positions throughout their careers—career, mentor, and master teacher—depending upon their interests, abilities, and accomplishments. As teachers move up the ranks, their qualifications, roles, and responsibilities increase—as does their compensation. Multiple career paths allow good teachers to advance without leaving the classroom.
2. Ongoing applied professional growth. TAP schools must restructure their schedules to provide time during the regular school day for teachers to meet, learn, plan, mentor, and share ideas with other teachers so they can constantly improve the quality of their instruction. Ongoing Applied Professional Growth focuses on instructional issues that specific teachers face with specific students. Teachers use data to target areas of need instead of trying to implement the latest fads in professional development.
3. Instructionally focused accountability. TAP has developed a comprehensive system for evaluating teachers, and it rewards teachers for how well they teach their students. Teachers are held accountable for meeting the *TAP Teaching Skills, Knowledge and Responsibility Standards*, as well as for the academic growth of their students. Every teacher in a TAP school is evaluated at least four times each year by trained and certified evaluators, including master and mentor teachers, as well as the principal.
4. Performance-based compensation. TAP compensates teachers according to their roles and responsibilities, their performance in the classroom, and the performance of their students. Teachers receive performance pay based on the learning gains of students in their classrooms (30 percent); meeting the *TAP Skills, Knowledge and Responsibility Standards* (50 percent); and school-wide gains in student

achievement (20 percent). The system also supports districts in offering competitive salaries to those who teach in hard-to-staff subjects and schools.

While each element is a powerful reform in its own right, it is the integration of those four elements that makes TAP comprehensive, unique, and effective.

The Teacher Advancement Program was most recently evaluated in 2007. Findings show that in all six states that were analyzed, a higher percentage of TAP teachers made an average year's growth or more with their students than teachers in similar, non-TAP schools. In addition, a strong majority of TAP teachers surveyed reported that TAP's professional development is relevant and useful, and that teacher collaboration is strong in TAP schools.

For more information, visit: <http://talentedteachers.org/>

■ The South Carolina Teacher Advancement Program (SCTAP)

The South Carolina Teacher Advancement Program is based on the Teacher Advancement Program described above. The ultimate goal of the SCTAP is to develop policies, practices, and procedures to improve teacher quality that can be used in all of South Carolina's public schools.

South Carolina began implementing TAP in six schools during the 2001-2002 school year. In 2004, the state legislature passed a provision that enables South Carolina schools labeled as "needing improvement" under NCLB to select TAP as an Alternative Technical Assistance program. By 2006, 17 schools had implemented TAP, and the number of SCTAP schools is expected to grow dramatically over the next five years.

South Carolina recently received two federal Teacher Incentive Fund (TIF) grants to implement TAP in dozens of additional schools:

- The first grant is the largest TIF award to date, totaling \$34 million over five years to implement a modified version of TAP. This project will use performance-based compensation to address problems with recruitment and retention in 23 high-need schools in six districts. By the fifth year of the project, SC TIF has the potential to affect more than 60,000 children and 5,000 teachers and principals. The project will modify the basic TAP model to include higher and more varied teacher bonuses, bonuses for principals and assistant principals, more competitive pay for master and mentor teachers, a higher proportion of performance pay pegged to value-added student learning gains, use of Measurement of Academic Progress (MAP) tests to give K-3 teachers individual value-added scores, and inclusion of related arts in the individual value-added gains calculations.
- The second TIF grant, totaling \$7 million over five years, was awarded to Florence County School District Three. Three school districts—Florence School District 1, Florence School District 3, and Laurens School District 56—will partner on a system of performance pay based on the TAP model. Florence County plans to implement the TAP program in six high-need schools, modifying it slightly to provide higher and more varied teacher bonuses, principal and assistant principal bonuses, and more competitive pay for master and mentor teachers.

The South Carolina Teacher Advancement Program was evaluated as part of the national evaluation of TAP in 2007 as mentioned above.

For more information, visit: <http://www.scteachers.org/tadvance/advance.cfm>

■ Minnesota Q Comp

In July 2005, Minnesota enacted Quality Compensation for Teachers (Q Comp), an \$86 million reform package to better align teacher compensation with student achievement. Q Comp provides funding to districts and charter schools to create performance-based compensation systems.

Required Q Comp Components:

1. Multiple career paths. Give teachers who are highly skilled and have high levels of student performance opportunities to move into, for example, master and mentor teaching positions with additional responsibilities that are rewarded by additional compensation.
2. Ongoing, job-embedded professional development. Provide research-based professional development that enables teachers to improve their practice.
3. Performance or professional pay for teachers. Introduce changes to the compensation system in order to give administrators some flexibility to reward teachers for high levels of student performance, and to offer competitive salaries for teachers, particularly in hard-to-staff subject areas or high-need schools. The performance pay must untie compensation from the traditional schedule that relies on years of service and education credits and use rigorous evaluations, school achievement gains, and student achievement gains for performance bonuses.
4. Teacher evaluation system. Create a comprehensive, standards-based teacher review system that considers input from a variety of sources. Peer reviewers, such as master and mentor teachers, along with principals, will evaluate each teacher's performance several times during the school year. The evaluations must be one consideration for teacher bonuses.
5. New salary schedule for teachers. Reform the "step and lane" salary schedule and implement a new 21st century system that recognizes teachers as professionals. As stated above, the new salary schedule must untie compensation based solely on seniority and education credits and move to one that is performance-based. The design of the new salary schedule is done locally between the district and local teacher union.

Source: Adapted from "Frequently Asked Questions" at http://education.state.mn.us/MDE/Teacher_Support/QComp/Frequently_Asked_Questions/index.html

Currently, 35 Minnesota school districts and 14 charter schools have been approved for Q Comp and have received funding for implementation. More than 130 additional districts have

contacted the Minnesota Department of Education to indicate they plan to submit applications for funding.

Q Comp has not yet been formally evaluated; however, those schools that use Q Comp funds to operate TAP are included in the national evaluation of TAP mentioned above.

For more information, visit:

http://education.state.mn.us/MDE/Teacher_Support/QComp/index.html

■ Denver ProComp

ProComp was designed by the Denver Public Schools (DPS) and Denver Classroom Teachers Association (DCTA) Joint Task Force on Teacher Compensation. The task force included five teachers, five administrators, and two citizens appointed by DCTA and DPS. ProComp grew out of a four-year performance-pay program piloted in 16 schools beginning in 1999. In November 2005, Denver voters approved a \$25 million mill levy increase to fund ProComp district-wide. Teachers hired in or after 2006 are automatically enrolled in the program, while veteran teachers have the option to participate. According to the *Denver Post*, approximately 1,800 out of Denver's roughly 4,000 teachers have enrolled.⁶⁶

ProComp replaces the district's uniform salary schedule with a menu of possibilities for earning additional compensation over base pay. The system includes pay incentives for student growth (including gains on the Colorado Student Assessment Program); working in hard-to-staff schools and positions; acquiring and demonstrating knowledge and skills; and earning satisfactory ratings on an annual evaluation.

The table below outlines the performance awards teachers in the ProComp system can earn in one year.

| Knowledge & Skills | | | Evaluation | | Market Incentives | | Student Growth | | |
|-------------------------------------|-----------------------------|--------------------------|--|--|------------------------|----------------------|---|--|----------------------|
| Professional Development Unit (PDU) | Advanced Degree/NBPTS | Tuition Reimbursement | Probationary | Non-Probationary | Hard to Staff Position | Hard to Staff School | Student Growth Objectives | C SAP Expectations (value added) | Distinguished School |
| 2% of Index Salary Increase | 9% of Index Salary Increase | \$1,000 Lifetime Account | 1% of Index Salary when rated satisfactory | 3% of Index Salary when rated satisfactory | 3% of Index Bonus | 3% of Index Bonus | 1% Index Salary if both objectives met 1% Index Bonus if 1 objective met | 3% of Index sustainable increase for exceeding expectations; 3% Index sustainable decrease for falling below expectations | 2% of Index Bonus |
| \$684 | \$3,078 | \$1,000 | \$342 | \$1,026 | \$1,026 | \$1,026 | \$342 | \$1,026 | \$684 |

Source: <http://denverprocomp.org>

The pilot version of this program, called the Pay for Performance Pilot, was evaluated from 1999 to 2003. Findings show that students whose teachers set more rigorous student growth objectives achieved higher mean scores on standardized tests. Results also show that students' achievement rose as the length of teacher participation in the program increased. Principals with hard-to-staff positions saw a nearly 10 percent increase in applicants for teaching jobs for the 2006-2007 school year. One elementary school had more than 100 applicants for three positions.⁶⁷

For more information, visit: <http://denverprocomp.org>

■ **Benwood Initiative (Hamilton County Schools, Tennessee)**

Launched during the 2001-2002 school year in nine urban elementary schools in Hamilton County, Tennessee, the Benwood Initiative is an intensive effort to improve student achievement by improving teacher quality and instruction.

The primary focus of the Benwood Initiative is to attract quality teachers to the city's nine most troubled schools. Market incentives to attract these teachers included a \$5,000 annual bonus, free tuition toward a master's degree, a \$10,000 loan toward a down payment on a house near one of the schools (forgivable if teachers stay at the school for at least five years), and \$2,000 per teacher in schools that significantly improve overall test scores. This bonus plan was accompanied by changes in school leadership, additional training for teachers, and more sophisticated use of data to measure student progress.

Although the initiative has not been formally evaluated, there have been dramatic improvements in the Benwood schools. The percentage of third graders scoring proficient or advanced in reading rose from 53 percent in 2003 to 73 percent in 2006. All Benwood schools made dramatic gains in every subject—some of the highest in the state—and five of the schools received straight A's on Tennessee's 2006 value-added (TVAAS) report card. Moreover, teacher retention has improved dramatically, with new teacher hires dropping from 68 in 2002 to 28 in 2006.⁶⁸

For more information, visit: <http://www.pefchattanooga.org/tabid/64/Default.aspx>

■ **Mission Possible, Guilford County Schools (Greensboro, North Carolina)**

“Mission Possible” is a district-based comprehensive teacher incentive program that was launched during the 2006-2007 school year in the Guilford County Schools in Greensboro, North Carolina. The program is funded by an \$8 million grant from the U.S. Department of Education's Teacher Incentive Fund as well as a \$2 million grant from the University of North Carolina system and Action Greensboro, a coalition of local foundations.

The program attracts and retains highly effective teachers in high-poverty, low-performing schools in the district through multiple mechanisms, including financial incentives to recruit teachers and additional incentives to reward performance. Recruitment incentives are available to K-2 teachers; grade 3-8 teachers of math, language arts, or reading; and high school math and English teachers. Performance incentives are based on value-added gains in student test scores.

District administrators initially selected for participation 20 schools that were not meeting the educational needs of their students. The selection was based on multiple criteria, including the percentage of students on free- or reduced-price lunch, the school's Adequate Yearly Progress (AYP), the state accountability status, and the rate of teacher turnover.

For more information, visit: http://www.qcsnc.com/mission_possible/index.htm

■ **Lead Teacher Project, Brooklyn, New York**

The Lead Teacher Project (LTP) was established by a coalition including the Community Collaborative to Improve District 9 Schools (CC9), the New York City Department of Education,

and the United Federation of Teachers (UFT). The campaign for Lead Teachers began during the 2003-2004 school year. Armed with thousands of signatures from a petition drive, letters of support from elected officials, and more than a quarter of a million dollars in pledges from foundations, CC9 leaders and their partners met with New York City Schools Chancellor Joel Klein, who embraced the idea of Lead Teachers. After negotiating the details of teachers' salaries, the NYC Department of Education pledged \$1.6 million to support the program. In September 2004, the coalition launched the LTP in ten low-performing schools in the South Bronx's District 9.

The LTP is designed to attract and retain experienced teachers. The purpose is to upgrade the capacity of the teaching force by:

- providing peer support to strengthen and stabilize the teaching force;
- attracting highly skilled teachers from other parts of New York City; and
- providing opportunities to highly qualified teachers for professional advancement within the teaching profession.

The initial LTP design calls for two lead teachers to share a classroom. Each lead teacher spends half of his or her time in the classroom, which serves as a laboratory for other teachers to visit and learn. The other half of each lead teacher's time is spent leading professional development activities to support other teachers.

The Academy for Educational Development conducted a two year review of the program and reported that after the second year, nearly 100 percent of lead and supported teachers found the program helpful in their schools and with their teaching. The turnover among supported teachers fell by more than 50 percent. Third grade reading scores for students of supported teachers outpaced gains made by students in all New York City schools. Finally, the majority of other teachers in the schools wanted to be part of the program in the future; when asked to name one thing that should be changed, the most common response was a desire to expand the program's availability.

Sources:

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Dingerson, L. & Levner, A. (2005). *A true Bronx tale*. Washington, DC: Center for Community Change.

For more information, visit:

<http://www.annenberginstitute.org/CIP/nyco.html>

Effective Teachers in Every Classroom Research on Performance-Based Compensation

Over the past 25 years, there have been dozens of performance-based compensation programs attempted in school districts across the country. These programs have varied in rigor and design, some lasting longer than others. Although the research on the effectiveness of these programs is limited, the overall results are promising; most show that monetary incentives lead to increased student achievement and positive changes in teacher behavior. Additionally, the research shows that when the programs are designed and implemented well, the results are even more positive.

Below are brief summaries of twelve evaluations of incentive programs in the U.S. and other countries.

1. Figlio, D.N. & Kenny, L.W. (2007). Individual teacher incentives and student performance. *Journal of Public Economics*, 91(5-6), 901-914.

This report describes the first attempt to evaluate the effects of performance pay on a national scale. Figlio and Kenny analyzed national data from a federal survey of schools, supplemented by a survey of their own, to assess the effects of performance pay on student test scores. The study did not examine the features or quality of performance pay programs; it considered only whether schools had one in place.

The analysis showed that offering salary incentives of any kind is associated with a small but statistically significant increase in student test scores (1.3 to 2.1 points) in both public and private schools. The authors report: "We find that test scores are higher in schools that offer individual financial incentives for good performance. Moreover, the estimated relationship [...] is strongest in schools that may have the least parental oversight."

2. Lavy, V. (2004). *Performance pay and teachers' effort, productivity and grading ethics*. NBER Working Paper No. 10622.

This report provides an evaluation of an Israeli incentive program that rewarded teachers in grades 10-12 with cash bonuses for "improvements in their students' performance on the high school matriculation exams in English, Hebrew, and math." Individual bonuses were based on each teacher's rank relative to other teachers in each subject, and the bonuses ranged from \$1,750 to \$7,500. These amounts were considered substantial given that the average annual income of a high school teacher in Israel was \$30,000.

Using data from the 1999-2000 and 2000-2001 school years, Lavy's results suggest that performance incentives have a significant and positive effect on student achievement. The results also show that the incentive program modified teaching methods and led to a major increase in teachers' efforts (e.g., overtime and added after-school instruction). Additionally, Lavy found that the incentive program was more cost effective in raising student achievement than other programs, such as group-incentive programs or "added resource" programs.

3. Solmon, L.C., White, J.T., Cohen, D., & Woo, D. (2007). *The effectiveness of the Teacher Advancement Program*. Santa Monica, CA: The National Institute for Excellence in Teaching.

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This report evaluates the effectiveness of the Teacher Advancement Program (TAP), “a comprehensive school reform aimed at restructuring and revitalizing the teaching profession while attaining measurable gains in student achievement.” The program provides four key elements: 1) multiple career paths, 2) ongoing, applied professional development, 3) instructionally focused accountability, and 4) performance-based compensation. TAP uses multiple measures to determine the performance awards. Half of each teacher’s bonus is based on his or her classroom evaluations. The other half is determined by student achievement growth (30 percent from student learning gains in the teachers’ own classroom and 20 percent from school-wide gains). Performance bonuses range from \$450 to \$5,000 per year. The program also includes compensation for taking on extra responsibilities: \$2,000 to \$7,000 for mentor teachers and \$4,500 to \$11,000 for master teachers.

The evaluation examined the effects of TAP on student achievement and on teacher attitudes. Using a rigorous form of value-added analysis conducted by researchers William Sanders and June Rivers of the SAS Institute, Solmon et al. found that in all six states analyzed, a higher percentage of TAP teachers made an average year’s growth or more with their students than similar, non-TAP teachers. Additionally, a strong majority of survey respondents found TAP’s professional development to be useful and reported experiencing strong teacher collaboration.

4. Dee, T.S. & Keys, B.J. (2004). Does merit pay reward good teachers? Evidence from a randomized experiment. *Journal of Policy Analysis and Management*, 23(3), 471-488.

This report used data from a randomized experiment (leveraging Tennessee’s class size reduction experiment called STAR) to evaluate the effects of Tennessee’s Career Ladder Evaluation System (CLES), a program first implemented in 1984 and no longer in operation. CLES offered teachers the option to participate in a career step system organized into five levels, from probation to level III, and provided salary supplements for teachers willing to take on additional responsibilities (levels I-III). The supplements ranged from \$1,000 to \$7,000 and were based on qualitative evaluations conducted by a three-member team of peers.

The results show that students with career ladder teachers had higher test scores (three percentile points in math, two percentile points in reading). According to Dee and Keys, these gains are relatively large.

5. Ladd, H.F. (1999). The Dallas school accountability and incentive program: An evaluation of its impacts on student outcomes. *Economics of Education Review*, 18, 1-16.

This report evaluates the incentive program implemented in Dallas Independent School District (DISD) from 1991 through 1995. The bonuses were provided on a school-wide basis to “winning” schools, using multiple outcome measures (two standardized test scores, other end-of-course tests, student attendance, and dropout rates). Winning principals and teachers received \$1,000 and other staff received \$500.

Compared to other reform programs and to five similar school districts in Texas that did not implement incentive programs, the Dallas program had positive impacts on the pass rates of seventh grade students in some subgroups (white and Hispanics, but not African-

Americans). Depending on the model used to measure the difference, seventh grade pass rates in Dallas were 2.5 to 20 percentage points higher than the state average over the course of four years. In addition, the results show that dropout rates consistently declined more in Dallas than other cities during all three years, and attendance at elementary schools consistently increased.

6. Community Training and Assistance Center. (2004, January). *Catalyst for change: Pay for performance in Denver, final report*. Boston, MA: Author.

This report provides a comprehensive review of Denver's Pay for Performance (PFP) Pilot between 1999 and 2003 (a version of this pilot later became the district-wide ProComp system). An effort by the Denver Classroom Teachers Association and Denver Public Schools, the PFP program provided performance bonuses to participating teachers based on two self-determined objectives. Each teacher was required to provide his or her principal with evidence that they had met their objectives. Principals then evaluated the evidence and determined which teachers should receive an award. Teachers were offered \$500 for each objective met during the first year and \$750 per objective the second year.

According to CTAC, "at all three academic levels (elementary, middle, and high school) higher mean student achievement in pilot schools is positively associated with the highest quality objectives." In other words, students whose teachers had better objectives achieved higher scores on the standardized tests. Additionally, CTAC found that student achievement rose as the length of teacher participation in the program increased.

7. Gallagher, H.A. (2004). *Vaughn Elementary's innovative teacher evaluation system: Are teacher evaluation scores related to growth in student achievement?* *Peabody Journal of Education*, 79(4), 79-107.

This report examines the impact on student achievement of Vaughn Elementary's teacher evaluation system. Vaughn Elementary is a charter school in the Los Angeles Unified School District that, since its inception in 1993, has used an evaluation system that links teachers' knowledge and skills to their pay. Teachers are evaluated against extensive rubrics and are awarded up to \$13,000 per year for high performance.

The results show a strong, positive, and statistically significant relationship between teacher evaluation scores and student achievement in reading. In math, the results were positive, but not statistically significant.

8. Winters, M.A., Ritter, G.W., Barnett, J.H., & Greene, J.P. (2007). *An evaluation of teacher performance pay in Arkansas*. (Working paper submitted to the *Journal of Public Economics*)

This report describes an evaluation of the Achievement Challenge Pilot Project (ACPP) in Little Rock, Arkansas. The program was created in 2004 and is still in operation. ACPP provides teachers in its five pilot elementary schools with per-student bonuses based on the average academic growth of the entire class on a set of standardized tests. The larger the average gains, the larger the per-student bonus, up to \$11,200 per year.

Winters et al. found that, in comparison to similar non-participating schools, "providing teachers with bonuses based on test score improvements increased student math

proficiency by approximately seven percentile points.” They note: “This gain in achievement after one year’s time is roughly equal to one-sixth of the nationwide average test score gap between black and white students. If the observed benefit of the merit pay program were to compound for six years, it would close the black-white test score gap.” Moreover, ACP teachers were twice as likely to view low-performing students as an opportunity to demonstrate teaching prowess rather than as a burden.

9. Eberts, R., Hollenbeck, K., & Stone, J. (2002). Teacher performance incentives and student outcomes. *The Journal of Human Resources*, 37(4), 913-927.

This report evaluates a performance pay system implemented in 1999 at Community High School, an alternative high school in Michigan. Given the context of the school, this performance pay system provided incentives to teachers based on student retention and student evaluations. Teachers at the school were given a bonus if 80 percent of enrolled students were still attending at the end of each quarter and if they received an average score of at least 4.65 out of five from their student evaluations. The maximum award a teacher could earn in one year was \$27,412.

In comparison to a similar alternative high school in the same county, the increase in course completion percentages was much larger at Community High School (20 percentage points).

10. Atkinson, A., Burgess, S., Croxson, B., Gregg, P., Propper, C., Slater, H., & Wilson, D. (2004). *Evaluating the impact of performance-related pay for teachers in England*. CMPO Working Paper Series No. 04/113.

This report evaluates the performance pay system in England. Launched during the 1999-2000 school year, this program was offered to teachers who had at least nine years of experience and were thus eligible for the Upper Pay Scale (UPS). Teachers had to apply to participate in the plan. They were then given the opportunity to earn additional pay for demonstrating “sustained and substantial performance,” based on qualitative reviews conducted by head teachers.

According to the value-added analysis, the incentive program added, on average, almost half a grade of learning growth per child for eligible teachers (though there were no improvements for math teachers).

11. Glewwe, P., Illias, N., & Kremer, M. (2004). *Teacher incentives*. NBER Working Paper No. 9671.

This paper evaluates an incentive program implemented in two school districts in Kenya by a Dutch NGO during the 1998 and 1999 school years. Teachers in grades four to eight were offered school-wide bonuses depending on how well their students ranked on the national primary school exam (the KCPE), which “determines what secondary schools, if any, will accept graduating primary school students.” Depending on how their school ranked, teachers could receive bonuses from 21 percent to 43 percent of a typical teacher’s monthly salary.

Using data from the KCPE and another exam, Glewwe et al. found that students in schools with the incentive programs had higher test scores than similar students in schools that do

not have incentive programs. But test scores were no longer significantly different in 2000 after the incentive program had been discontinued.

In addition, there is some research showing that even small market-based incentives can help with the recruitment and retention of teachers in high-need schools and shortage subjects:

12. Clotfelter, C., Glennie, E., Ladd, H., & Vigdor, J. (2006). *Would higher salaries keep teachers in high-poverty schools? Evidence from a policy intervention in North Carolina*. NBER Working Paper 12285.

This report analyzes the effect of an incentive program in North Carolina aimed at attracting and retaining certified math, science, and special education teachers to high-poverty or low-performing secondary schools. Administered from 2001 to 2004, the program awarded eligible teachers annual bonuses of up to \$1,800. Part-time teachers in relevant subjects were eligible for prorated awards. Uncertified teachers in math, science, or special education were not eligible. Teachers who stayed at their schools maintained eligibility even if the school was no longer eligible for the program. This provision was implemented to “eliminate both uncertainty and any perverse incentives for teachers to keep test scores low so that the school would remain eligible.”

Clotfelter et al. found that “the sum of \$1,800 per year was sufficient to reduce turnover rates of the targeted teachers by roughly 12%.” However, they also found that there were failures to communicate about the program, and many teachers were not provided with accurate information about their eligibility and the award. The researchers estimate that better communication could have doubled the program’s effect.

Effective Teachers in Every Classroom

Additional Resources

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