

CREATING TEACHER INCENTIVES FOR SCHOOL EXCELLENCE AND EQUITY

Barnett Berry
Center for Teaching Quality

Jon Eckert
Wheaton College, Illinois

January 2012

National Education Policy Center

School of Education, University of Colorado Boulder
Boulder, CO 80309-0249
Telephone: (802) 383-0058

Email: NEPC@colorado.edu
<http://nepc.colorado.edu>

This is one of a series of briefs made possible in part by funding from
The Great Lakes Center for Education Research and Practice and the Ford Foundation.

 **GREAT LAKES
CENTER**
FOR EDUCATION RESEARCH & PRACTICE
<http://www.greatlakescenter.org>
GreatLakesCenter@greatlakescenter.org

 **FORD FOUNDATION**
*Working with Visionaries on the
Frontlines of Social Change Worldwide*

Kevin Welner

Editor

William Mathis

Managing Director

Erik Gunn

Managing Editor

Briefs published by the National Education Policy Center (NEPC) are blind peer-reviewed by members of the Editorial Review Board. Visit <http://nepc.colorado.edu> to find all of these briefs. For information on the editorial board and its members, visit: <http://nepc.colorado.edu/editorial-board>.

Publishing Director: **Alex Molnar**

Suggested Citation:

Berry, B. & Eckert, J. (2012). *Creating Teacher Incentives for School Excellence and Equity*. Boulder, CO: National Education Policy Center. Retrieved [date] from <http://nepc.colorado.edu/publication/creating-teacher-incentives>.

This material is provided free of cost to NEPC's readers, who may make non-commercial use of the material as long as NEPC and its authors are credited as the source. For inquiries about commercial use, please contact NEPC at nepc@colorado.edu.

CREATING TEACHER INCENTIVES FOR SCHOOL EXCELLENCE AND EQUITY

*Barnett Berry, Center for Teaching Quality
and Jon Eckert, Wheaton College, Illinois*

Executive Summary

Ensuring that all students in America's public schools are taught by good teachers is an educational and moral imperative. Teacher incentive proposals are rarely grounded on what high-quality research indicates are the kinds of teacher incentives that lead to school excellence and equity. Few of the current approaches to creating teacher incentives take into account how specific conditions influence whether or not effective teachers will work in high-need schools and will be able to teach effectively in them.

Large-scale studies and teacher testimonies suggest that working conditions are far more important than bonuses in persuading teachers to stay or leave their classrooms. National teacher turnover survey data show that teachers who leave because of job dissatisfaction do so for a variety of reasons that can be addressed: low salaries, poor support from school administrators, a lack of student motivation, a lack of teacher influence over decision-making, and student discipline problems. However, current policies, including the one framed by the federally sponsored Teacher Incentive Fund, rarely recognize these realities.

We must reward expertise in ways that move beyond recruitment bonuses or pay for improved student test scores. To develop incentive policies that spread teaching expertise and allow for effective teaching will require the careful development of interlocking policies across federal, state, and local agencies. To that end, it is recommended that education policymakers do the following, which are fleshed out in the report:

- 1. Use the Teacher Incentive Fund to Spread Teaching Expertise for High-Needs Schools.**
- 2. Expand Incentives in Creating Strategic Compensation.**
- 3. Create the Working Conditions that Allow Teachers to Teach Effectively.**
- 4. Elevate Best Practices and Policies that Spur School Excellence and Equity.**

CREATING TEACHER INCENTIVES FOR SCHOOL EXCELLENCE AND EQUITY

Ensuring that all students in America’s public schools are taught by good teachers is an educational and moral imperative. Over the last two decades a growing body of evidence has established that the teacher is the most important school-based influence on student achievement¹ and that poor children and those of color are less likely to be taught by well-qualified, experienced, and effective teachers than other students. Specifically, teachers **who demonstrate high “value-added” student achievement gains, as well as those who are** Nationally Board Certified, are less likely to be teaching in schools that serve economically disadvantaged and minority students.² Further, schools with large numbers of students living in poverty are much more likely to have special education and math teaching vacancies³ and to be forced to staff classrooms with out-of-field and inexperienced teachers.⁴ Moreover, qualified teachers (e.g., those fully credentialed, with experience teaching in their field, and those who score well on tests of academic and teaching ability) in high-poverty schools are more likely to leave or move than their less qualified peers in those schools.⁵

Although scholars dispute these findings, teacher incentive proposals—including those promoted by President **Obama’s Race to the Top (R2T) program**—are rarely grounded on what high-quality research indicates are the kinds of teacher incentives that lead to school excellence and equity. For example, **“Great Teachers and Great Leaders” (GTGL), a report** issued by the U.S. Department of Education in support of R2T, primarily drew on **“selective and narrow choice(s) of research,” and in fact, of “the 80 or so sources used for** the report, only approximately 10% are drawn from peer-reviewed journals.⁶

In 2010, a dozen states won approximately \$4 billion in R2T funds. The program pushed states to evaluate teachers more rigorously and offered rewards for generating higher student test scores and for opening alternative pathways into the profession as a way of filling empty classrooms in high-need schools. (Another round of R2T \$500 million in funds is being distributed to spur improvements in early childhood education, among other policy issues.⁷) While the Obama Administration, through the Teacher Incentive **Fund, is supporting “more varied and intricate” merit pay efforts than those the past, most** of its incentives are still built on the assumption that “teachers who have the chance to earn more money (even relatively small amounts of money) will adopt effective **instructional practices, work harder, and achieve better success with students.”**⁸ The **Obama administration’s approach** to creating incentives to attract qualified teachers to high-need schools thus remains rooted in the questionable assumption that, according to **Susan Moore Johnson, “teachers who are confident they can earn rewards will enter and remain in the profession, while low-performing teachers with little hope of winning rewards will leave.”**⁹

Few of the current approaches to creating teacher incentives take into account how *specific conditions* influence whether or not effective teachers will work in high-need schools and will be able to teach effectively in them. A recent report from the Center for American Progress pointed out that the large inequalities in which students are taught by qualified teachers is related to differentials in overall school funding and teacher salaries.¹⁰ Funding is important but it is not sufficient. As one National Board Certified teacher noted in a discussion of what would attract him to a high-need school, he noted:

I would move [to a low-performing school], but I would want to see social services for parents and children, accomplished leadership, adequate resources and facilities, and flexibility, freedom and time.¹¹

Sound data and tools to measure effectiveness are critical elements in a system of identifying and utilizing the best teachers—and financial inducements may be useful in more comprehensive efforts to ensure more equitable teacher distribution. They are, however, insufficient. Our review of existing evidence finds little support for a simplistic system of measuring value-added growth, evaluating teachers more “rigorously,” and granting bonuses.

Our review of the empirical evidence supports four recommendations: use the current federal Teacher Incentive Fund to attract qualified, effective teachers to high-needs schools, expand incentives by creating strategic compensation, create working conditions that allow teachers to teach effectively, and more aggressively promote the best practices and policies that spur school excellence and equity. In crafting our recommendations we follow **the wisdom of Lee Shulman, who called for “exercising judgment under conditions of uncertainty” while avoiding the “dangers of simplicity” in improving our schools and the teaching profession.**¹²

Review of Research

The nature of what motivates a person to teach in challenging contexts is complex, often times intangible, and difficult to quantify. Decades ago, organizational psychologists Fredrick Herzberg and Victor Vroom put forth their respective theories of work motivation and expectancy. Herzberg found that professionals find satisfaction in the nature of the work performed—e.g., opportunities to achieve as well as reach personal goals—while dissatisfaction typically surfaces due to job-related factors such as policies that get in their way, inept supervision, salary, or working conditions.¹³ That is, what satisfies these knowledge workers may not be the same as what dissatisfies them. **Vroom’s theory** suggested that individuals behave in certain ways when they believe those behaviors **advance an organization’s goals as well as when they believe they will be rewarded.**¹⁴

Theories such as these are important to consider when designing incentives aimed at professionals. Existing pay-for-performance programs for educators vary widely in their design and structure, but they rarely take into account the sorts of non-monetary motivations described by Herzberg and Vroom.

Edward Lawler, for example, argues that, because teaching often requires non-routine work, teacher pay systems should “encourage and reward individuals who develop and use capabilities effectively” and “help build competencies of coworkers.”¹⁵

Incentive policies need to attend to the qualifications of individual teachers and the requisite mix of knowledge, skills, and dispositions they bring to classroom teaching. However, these policies must also take into account how teachers, students, schools, and community-based organizations interact in ways that allow learning to occur. Supporting both the individual and the system is not a simple task. While recruiting quality teachers may require mandates and incentives, ensuring teaching quality also calls for an intricate mix of capacity-building and system-changing policies.

Our review addresses the following areas: (1) rewarding performance, (2) attracting and retaining teachers for high-need schools, and (3) the working conditions that matter most.

Rewarding Performance

Scholars have documented failed incentive pay plans from years past—including those in the 1920s, 1950s, and 1980s.¹⁶ These compensation reform initiatives, focused primarily on narrow outcome measures, floundered in large part due to unresolved technical and political issues. In some cases, student scores from standardized tests could not validly and reliably measure individual teacher effectiveness—a problem that still besets these programs today.¹⁷ Researchers have shown that teachers do not participate in incentive programs if they believe they are not fairly administered or if the goals are not appropriate.¹⁸ These difficulties help to explain why only about 13 percent of the nation’s school districts have some form of a teacher incentive program.¹⁹

Despite this history, a growing number of school districts and states have recently implemented teacher pay-for-performance systems. For example, as of 2009, Florida, Minnesota, and Texas together allocated more than \$550 million to some sort of pay-for-performance scheme.²⁰ In 2010, the Obama Administration expanded the federal Teacher Incentive Fund (TIF) initiative, with \$442 million allocated (up from \$200 million in 2009) to specifically reward teachers and principals for increases in student achievement. **The program’s purpose includes “increasing the number of effective teachers teaching poor, minority, and disadvantaged students in hard-to-staff subjects (and school systems).”**²¹ Tennessee a leader in using Value Added Models (VAMs) to assess teacher performance was, for example, awarded a \$36 million TIF grant in 2010 to implement a performance pay system.

Unfortunately, the evidence from these more recent efforts, while limited, suggests that current efforts to pay teachers for performance does not yield higher student achievement gains for students. Several recent studies, briefly described below, are instructive.

Evidence from the Texas Educator Excellence Award Grant (TEEG) program, launched in 2006, indicates that in cases where teachers determined how the school bonuses should be

distributed, they tended to design egalitarian plans with small rewards. However, the researchers also found that the size of teacher bonuses *did not* moderate the effects. Correspondingly, researchers found little negative impact on staff collegiality. Teachers who received bonuses, as well as those who did not, held this view. The study did find, however, that inexperienced teachers were more supportive of performance rewards than their more experienced colleagues.²²

A study of the Nashville Project on Incentives in Teaching (POINT), conducted by the National Center on Performance Incentives, found that middle school math teachers who were eligible for bonuses of \$5,000-\$15,000, produced few or no student achievement

Teacher incentive proposals are rarely grounded on what high-quality research indicates are the kinds of teacher incentives that lead to school excellence and equity.

gains, as compared with their counterparts in the control group. Nearly 300 teachers, approximately 70 percent of all middle-school math teachers in Nashville's public schools, volunteered to participate. The teachers were assessed on the basis of standardized test scores using Tennessee's value-added rating system. Approximately one-third of the participants received bonuses, with an average of about \$10,000. Over three years and four different possible middle school grades (6th through 9th), the average effect of the incentives was .04 standard deviations on the state assessment, which was not statistically significant or meaningful for policy considerations. Importantly, teacher attrition may have played a role in the outcomes, with approximately half of the 300 teachers who initially volunteered leaving their classrooms over course of the 3-year study.²³

In 2011 a **RAND study of New York City's** \$56 million bonus pay system also yielded no **positive effect on either student performance or teachers' attitudes toward their jobs. The NYC program primarily awarded the bonuses to the schools, with principals and teachers then determining how to divvy up rewards, which averaged approximately \$3,000 for each teacher. Even schools where individual teachers were rewarded did not demonstrate higher student achievement. Survey results indicated that teachers were motivated less by a financial incentive and more by helping their students learn. At best, teachers reported that the bonus was "a reward for their usual efforts, not as an incentive for changing their behavior."**²⁴ Eighty-two percent of the teachers believed the rating system was unfair **because of its overreliance on standardized test scores, which did not "relate" to the work done by them.** The case study evidence suggested that many teachers did not understand how the payouts were determined. In addition, schools that participated in the program did not have marked differences in levels of teacher collaboration.²⁵

On the other hand, a recent review of TIF sites revealed how performance pay systems can be successfully implemented. In a series of case studies, researchers found that financial incentives are effective under the following four conditions:

1. They are integrated with teacher evaluation that emphasizes improved teaching and learning and professional development that encourages collaboration;

2. Teacher leaders are identified and utilized to provide school-based support, evaluation, and oversight for instructional improvement;
3. The incentives reward additional work and success, but are also valued as a component of a broader emphasis on improving teaching and learning; and
4. Wide stakeholder involvement is part of the design, implementation, and effectiveness of broader compensation reform efforts.²⁶

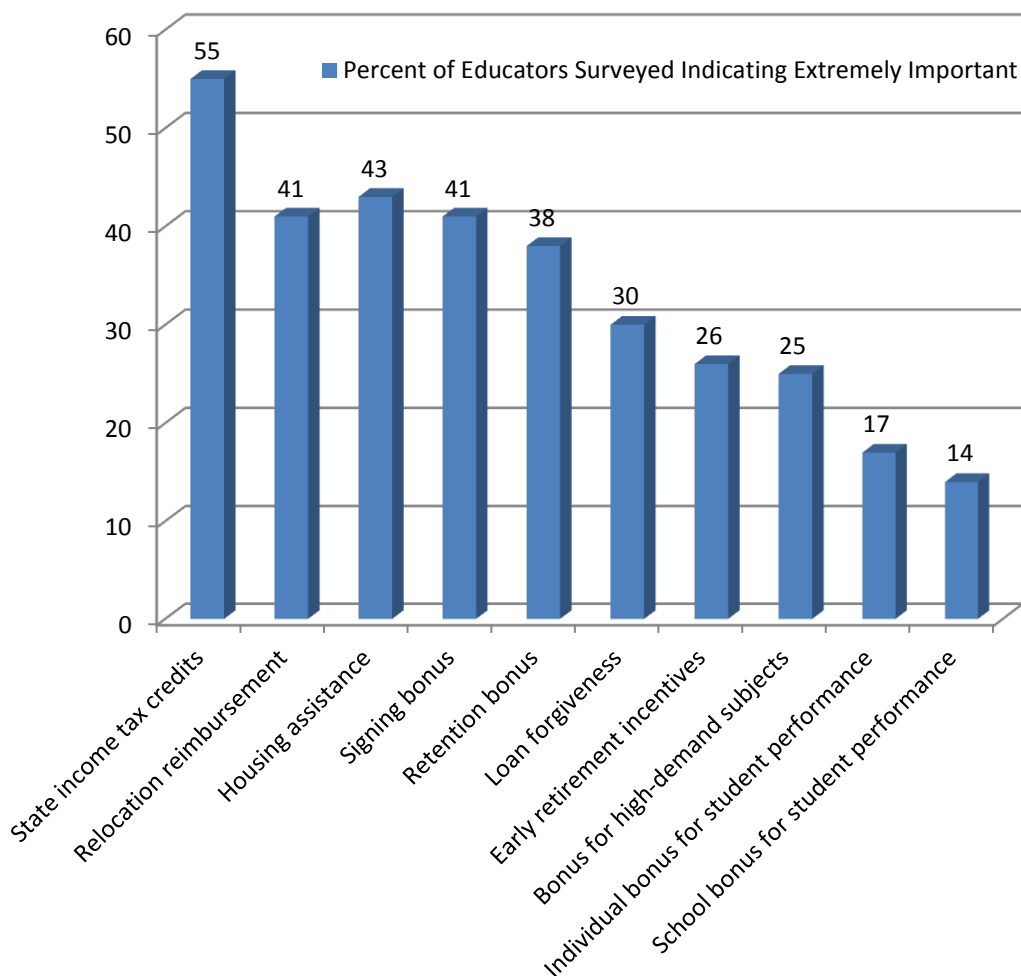
The TIF study suggested, as did several earlier studies, that pay alone is insufficient to motivate teachers to teach differently and improve student achievement. Other evidence, focused on the factors necessary to attract teachers to high-need schools, is described next.

Attracting and Retaining Teachers for High-Need Schools

Many analysts have examined other fields where financial incentives are offered to those who take on hard-to-staff jobs and perform them well²⁷ and many proposals have called for additional pay for those who teach in high-needs schools. At least 30 states offer financial incentives for those who teach in schools or subject areas that are hard to staff. More than 30 percent of **the nation's 50 largest school districts also offer bonuses for teachers in these subjects and/or schools.** The bonuses are typically in the \$1,000 to \$5,000 range, but about 30 percent of these systems offer teachers between \$5,000 and \$10,000.²⁸

Over a decade ago, South Carolina implemented a policy of recruiting “teacher specialists” to work in the state’s lowest performing schools. The program’s \$18,000 bonus attracted only 20 percent of the 500 teachers needed in the program’s first year and only 40 percent after three years. Deterrents included location, lack of administrative support, poor working conditions, and a need for better preparation.²⁹ In Massachusetts, a mid-career alternative certification program offering a \$20,000 signing bonus attracted only a fraction of the teachers needed, and most recruits either **avoided or fled the state’s most challenging schools.**³⁰

While it remains unclear what level of financial incentive might be enough to help recruit and retain effective teachers for high-need schools, researchers have found that such financial incentives alone do not yield increased student achievement. A 2006 study by the Center for Teaching Quality, found that only 36 percent of Alabama teachers surveyed indicated they would move to a high-need school (and 43 percent were unwilling or not likely). The respondents suggested that if signing bonuses are to be offered, they should be in the \$5,000 to \$10,000 range to entice teachers to move. State income tax credits as well as relocation and housing assistance were viewed as more important than signing or retention bonuses. The least important incentives were bonuses for individual or school performance.³¹



Source: Center for Teaching Quality (2006). Recruiting and Retaining Teachers in Alabama: Educators on What it Will Take to Staff All Classrooms with Quality Teachers. Carrboro NC: Author

Figure 1. Importance of Select Financial Incentives on Decisions to Teach in a High-Need School.

More recently, in Denver (as part of its ProComp system), market incentives are paid to teachers for moving to staying at hard-to-staff schools for a number of years. Hard-to-staff positions pay a 3% bonus of the teacher salary index, which averages approximately \$2,500. There is no evidence that the bonus is making a difference. As a recent evaluation report revealed, “retention trends at hard-to-serve schools lag behind those of schools that are not designated ‘hard-to-serve.’” Phil Gonring, one of the ProComp architects, claimed that while the union made the case that only “distinguished teachers should get the market incentive to move to high need schools,” district administrators resisted because they did not have measurement tools necessary to make the distinction among teachers so “everyone would simply get the incentive—a fact that remains in force today.”

These examples illuminate **Richard Ingersoll’s analysis of national teacher turnover survey** data. Ingersoll found that teachers who leave because of job dissatisfaction do so not only because of low salaries but also as a result of poor support from school administrators, the lack of student motivation, the lack of teacher influence over decision-making, and student discipline problems.³² In fact, a six-state survey of Nationally Board Certified Teachers found that factors such as strong principal leadership, a collegial staff with a shared teaching philosophy, access to adequate resources, and a supportive and active parent community prove to be far more powerful determinants than salary in enticing them to move to high-need schools.³³

In another investigation, researchers pointed to the following conditions that would attract and retain National Board Certification for high-need schools:

Conditions that Attract Accomplished Teachers to High-Need Schools

- School led by strong principal
- Opportunities to adapt curriculum (and not have to teach scripted lessons)
- Access to resources for effective teaching (e.g., classroom libraries, science equipment current technology)
- Opportunities to work with similarly skilled teachers who hold like-kind values about students, teaching, and learning
- Appropriate and meaningful financial incentives

Conditions that Retain Accomplished Teachers in High-Need Schools

- Principals who embrace teacher leadership
- Smaller class sizes and load
- Additional preparation time for teaching high-need students
- Training for leading change efforts (e.g., collaboration, team building, and cultural competence)
- Opportunities to develop the next generation of teachers for high-need schools.³⁴

Bill Ferriter, a National Board Certified teacher with almost 20 years of experience, described the conditions under which he would accept a position in a high-needs school:

I would move [to a high-needs school], but I would want to see social services for parents and children; accomplished leadership; adequate resources and facilities; **and flexibility, freedom, and time.... One of the single greatest factors** in school success is principal leadership. Effective administrators are magnets for accomplished teachers.³⁵

In a widely read *Washington Post* article, Teach For America alumna Sara Fine explained that she resigned from teaching after administrators “steadily expand[ed] the workload and workday” while “more and more major decisions were made behind closed doors, and more and more teachers felt micromanaged rather than supported.”³⁶

The evidence is clear. Financial incentives alone are insufficient for improving school excellence and attracting qualified teachers to low-performing schools. Empirical evidence, including large-scale studies and an increasing number of teacher testimonies, suggest that working conditions are far more important than bonuses. Next we focus on the teacher working conditions that appear to matter most for improving student learning.

Focusing on Working Conditions that Matter Most

Many factors and circumstances determine whether qualified teachers can teach effectively. Effective teaching is not just about a teacher's knowledge, skills, and dispositions. It is also about the conditions under which he or she works. Motivation to teach is complex, often times intangible, and difficult to quantify. Susan Moore Johnson and others summarize the intrinsic and extrinsic rewards that affect teachers. Intrinsic rewards include the pleasure of being with children, the exhilaration of contributing to the learning of others, the chance to develop new skills, and the enjoyment of subject matter. Extrinsic rewards include salary, benefits, bonuses, public recognition, or selection for special responsibilities. These two types of awards are not mutually exclusive and, in fact, interact to influence esteem and efficacy.³⁷

Researchers at the Project on the Next Generation of Teachers, an initiative housed at Harvard University, point to the specific working conditions that clearly matter to teachers. **These conditions include the school culture, the principal's leadership, and the relationship among colleagues.** Additionally, and perhaps most important to policymakers, students who attend schools with better working conditions also achieve greater academic growth.³⁸

Likewise, the research of Tony Bryk and colleagues concludes that “good schools” are built upon five “essential supports,” which they liken to a recipe for baking a cake. Without each of the ingredients, the whole enterprise falls flat. The conditions for effective teaching they have identified include: (1) strong leadership, that embraces principals who are “strategic, focused on instruction, and inclusive of others in their work”; (2) a welcoming attitude toward parents, and formation of connections with the community; (3) a learning climate that is safe, welcoming, stimulating, and nurturing to all students; (4) robust instructional guidance and curricular materials, and (5) the development of professional capacity among teachers, especially in teams.³⁹

One essential support—collaboration—seems to matter most for effective teaching. For example, students achieve more in mathematics and reading when they attend schools characterized by higher levels of teacher collaboration for school improvement.⁴⁰

Similarly, Susan Rosenholtz's landmark study of two decades ago concluded that “learning-enriched schools” were characterized by “collective commitments to student learning in collaborative settings ... where it is assumed improvement of teaching is a collective rather than individual enterprise, and that analysis, evaluation, and experimentation in concert with colleagues are conditions under which teachers improve.”⁴¹ Other scholars have found that teachers are more likely to have greater value-added student achievement gains when they are in schools with others who generate

higher gain scores as well.⁴² While these studies do not directly attribute the increased test score achievement to collaboration, teacher “peer effects” and collaboration appear to breed better results for students.

Researchers have found that school characteristics such as smaller size and common planning time are key to supporting professional collaboration and encouraging effective innovation.⁴³ They have also found that teachers who participate in structured dialogues to

What most teachers desire is the know-how to teach their subjects as well as the autonomy and supports to best meet the needs of their students.

analyze student work and collectively solve problems in their schools are more likely to change their teaching practices and improve student achievement.⁴⁴ Recently, Darling-Hammond and colleagues found that professional development using “scientifically rigorous methodologies” and of certain depth and duration (30 to 100 hours of time over six months to a year) was found to positively impact student achievement.⁴⁵ Despite this research, high-intensity, job-embedded collaborative learning is not very common among teachers in American schools.⁴⁶ In top performing nations such as Singapore, teachers spend about 15 hours per week working with colleagues, involved in joint planning, action research, lesson study, and observations in one another’s classrooms.⁴⁷

Teaching in a high-need school is often a frenetic and challenging experience. While the challenge and the pace is appealing for many idealistic, committed educators, these conditions must be acknowledged as many teachers must manage multiple interventions, meet the social and emotional needs of their students, mediate conflicts when out-of-school turmoil spills over into the classroom, cope with the complexity of teaching highly mobile students, and deal with the constant pressure to prepare for high-stakes tests that are often not tightly aligned to the standards to which they are expected to teach or the very real needs of the students. Moreover, many teachers in high-need schools, because of a host of factors, are forced to teach out-of-field.⁴⁸

What most teachers desire is the know-how to teach their subjects as well as the autonomy and supports to best meet the needs of their students. One teacher expressed this sentiment when responding to an open-ended item regarding accountability and teaching in high-need schools:

A good teacher is experienced in teaching their subjects and creative and uses a multitude of materials to teach the variety of learners in a classroom. When teaching becomes confining it also becomes stifling. I have been very lucky not to have been given such a curriculum or I would already be gone.⁴⁹

In fact, some researchers have found that high-stakes accountability systems have narrowed the curriculum, especially for high-need students,⁵⁰ while creating perverse incentives for experienced and effective teachers to not teach in schools that serve such students.⁵¹ For example, researchers have shown how negative school labels keep qualified

and experienced teachers away from underperforming schools,⁵² and that "more qualified teachers seize opportunities to leave difficult working conditions and move to more appealing environments."⁵³ As **Shannon C'de Baca, a member of the CTQ TeacherSolutions 2030 team**, recently noted:

We have not often valued in federal or state policy the creativity in teachers or how we can best spread their expertise. Instead we have swung to *uniformity* as a way to control teachers, and in misusing standardized tests, we have reinstated the lockstep curricula of bygone eras. It was as though we expected Wally and Beaver Cleaver to return to every classroom.⁵⁴

Granted, there is evidence that **"standards-based reforms can provide opportunities for schools to focus on student learning" and that high-stakes testing alone does not lead to teacher turnover.**⁵⁵ However, policymakers should also take seriously the research suggesting that high-stakes accountability works against school excellence and equity by **"emotionally exhausting" teachers.**⁵⁶

Discussion and Analysis

The growing body of literature on teacher incentives, both financial and otherwise, indicates that there are no simple solutions. The complexity of teaching and learning, particularly in high-needs schools, demands nuanced solutions that are context-specific and are built upon a wide range of empirical research evidence as well as the wisdom of practitioners themselves. Often the kinds of accountability measures and incentive systems in vogue today push educators to focus on teaching strategies that focus narrowly on tested **material and that consequently may create an "inflated picture" of what students actually know with respect to the full range of content standards and valued knowledge and skills.**⁵⁷

In this brief we have tried to move the discussion of incentives beyond the usual policy tools, often built on faulty assumptions about teaching and learning, to a broader conception of what it takes to recruit, retain, and support effective teachers for 21st century schools.

We must reward expertise in ways that move beyond recruitment bonuses or pay for improved student test scores. The evidence suggests that teacher bonuses in isolation will not increase student learning. In addition, not all incentives matter the same for all teachers. And those incentives that matter for recruiting teachers to high-need schools may not be the same ones needed to retain them. If anything, we can extrapolate that if teacher incentives will make a difference for student learning it will because they fuel the spread of teaching expertise.

Effective teaching rarely occurs in isolation and is significantly more prevalent in schools where certain conditions exist. Strong principal leadership that supports effective teaching is essential. A safe environment where learning can occur increases autonomy and risk-taking for teachers, likely increasing a teacher's sense of efficacy. **Teachers need access to**

the resources and supports (including inclusive principal leaders focused on instruction as well as other educators from inside and outside the school and opportunities for teachers to learn from each other) to effectively teach the diverse learners in their classrooms.

Across the United States few current incentive policies systematically spread teaching expertise in ways that “de-silo” teachers from each other by identifying and sharing best practices. Doing so will require the careful development of interlocking policies across federal, state, and local agencies. We must be wary of the trap once described by H.L.

Mencken: “For every complex problem there is a solution that is simple, neat, and wrong.”⁵⁸ The following section includes our recommendations, which quite deliberately are neither “simple” nor “neat.” We believe, however, based upon empirical evidence and best practices, that they can help create the policy environment and incentives necessary to spur school excellence and equity.

Recommendations

How do we better utilize resources to support effective teaching and learning and the spread of teacher expertise, particularly in high-needs schools? How do specific school contexts impact the use of these resources? How are administrators and policymakers as well as union leaders held accountable for creating the conditions that allow teachers to teach effectively? How can we increase the effectiveness and sense of efficacy of quality teachers that we need to recruit and retain? We believe these queries best frame incentive policies for school excellence and equity. While it is important to design a model evaluation system for measuring teacher effectiveness or for analyzing and reporting on the distribution of effective teachers, much more needs to be done.

1. Use the Teacher Incentive Fund to Spread Teaching Expertise for High-Needs Schools

The Teacher Incentive Fund has funded some promising programs, but most fall short in promoting the need to spread teaching expertise to schools that serve children living in poverty. The federal government could place a much higher priority on funding programs that place a higher value on rewarding teachers who not just produce student learning gains, but those who help their colleagues improve their practice and the academic achievement of those who they collectively teach. Federal policies must place a higher premium on teachers demonstrating their impact on student learning and school improvement in a variety of ways—including assessment data, portfolios, observations, and service to the community. To spur the spread of teaching expertise, incentive policies could promote increased autonomy and opportunities for teachers who demonstrate effectiveness and assist their colleagues in improving their performance.

2. Expand Incentives in Creating Strategic Compensation

To ensure excellence and equity for all students, our public schools need to employ a broader package of incentives—and move to the concept of strategic compensation where teachers are rewarded for contributing to organizational priorities. These incentives can

support hybrid roles for teachers, peer evaluation, increased autonomy, extended time for meaningful collaboration, and needs-based professional development. Federal, state, and district policy should not just encourage, but stimulate compensation systems that draw on a menu of options that includes alternative financial incentives such as tax credits, housing assistance, and loan forgiveness.

In addition, policies should advance strategic compensation systems that offer enticements for effective teachers, as teams, to move to and remain in high-need schools for at least five years. Given the need to ensure that high-need schools have a stable teaching faculty to pursue complex, long-term improvement strategies, we should discourage programs that promote the recruitment of itinerant teachers.

3. Create the Working Conditions that Allow Teachers to Teach Effectively

Additional pay for teaching in high-needs schools will always only be a partial solution. Other incentives tied to working conditions and professional opportunities will be equally important—possibly more so. Creating school environments that support this kind of **effective teaching go well beyond the traditional “working conditions” issues of time, class size, and the length of the workday.** Based upon a wide range of evidence, these **“opportunities to teach effectively” standards would include: (1) principals who cultivate and embrace teacher leadership; (2) time and tools for teachers to learn from each other; (3) specialized preparation and resources for the highest needs schools, subjects, and students; (4) no out-of-field teaching assignments; (5) teaching loads that are differentiated based on the diversity and mobility of students taught; (6) opportunities to take risks; (7) integration of academic, social, and health support services for students, and (8) safe and well-maintained school buildings.**

4. Elevate Best Practices and Policies that Spur School Excellence and Equity

Federal, state, and local policies must allow for nuanced implementation of practices and policies that spur school excellence and equity. These policies must account for different contexts requiring different approaches. Policymakers should certainly learn from places where high-need schools recruit well-prepared teachers, use incentives to spread teaching expertise, and create the conditions that promote high-quality learning for all students. However, too many of these examples are represented by isolated boutique programs, led by extraordinary administrators and teachers as well as community leaders, who work **“around the clock” to ensure excellence and equity for all students.**

Reliance on extraordinary educators is neither sustainable nor scale-able, particularly given the growing **diversity of America’s 55 million students who will require even more well-prepared teachers and interlocking support systems in the future.** The current hodge-podge approach to teacher incentives must give way to what Linda Darling-Hammond has called a ***Marshall Plan for Teaching***.⁵⁹ Policymakers, practitioners, and the public need ***much better images*** of what this system looks like as well as the tools needed to develop

both the technical know-how and political will for forging ahead. More detailed guides need to be produced to show practitioners how to make the necessary changes. More multimedia stories need to be told to help policymakers and the public learn why these changes need to be made. The federal government can play a catalytic role in elevating these best practices and policies for the American people—who according to recent polling data have confidence in the current teaching workforce⁶⁰—and helping state and local decision-makers overcome technical and political barriers to implementing difficult changes in our teacher development system.

As a nation, we know far more about how to create school quality, equity, and incentives for teachers and students in high-need schools than one would surmise based only on the limited and often ill-advised actions of policymakers and practitioners. It is time to jettison faulty assumptions and be honest about the half-measures policymakers take in the name of expediency. It is time to do the right thing for students and the teachers who serve them.

Notes and References

1 Hanushek, E. (1992). The trade-off between child quantity and quality. *Journal of Political Economy*, 100(1), 84–117.

Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417–458.

Sanders, W. L. & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future student academic achievement*. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.

2 Sanders, W. L. & Rivers, J. C. (1996). *Cumulative and residual effects of teachers on future student academic achievement*. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.

Cavalluzzo, L. (2004). *Is National Board Certification an effective signal of teacher quality?* Alexandria, VA: CNA Corporation.

Goldhaber, D. & Anthony, E. (2004). *Can teacher quality be effectively assessed?* Seattle, WA: Center on Reinventing Public Education, University of Washington.

Humphrey, D.C., Koppich, J.E. & Hough, H.J. (2005, March 3). Sharing the wealth: National Board Certified Teachers and the students who need them most. *Education Policy Analysis Archives*, 13 (18). Retrieved August 14, 2011, from <http://epaa.asu.edu/epaa/v13n18/>.

3 Strizek, G.A., Pittsonberger, J.L., Riordan, K.E., Lyter, D.M., & Orlofsky, G.F. (2006). *Characteristics of schools, districts, teachers, principals, and school libraries in the United States: 2003-04 schools and staffing survey*. Washington, DC: U.S. Department of Education, National Center for Education Statistics.

4 Ingersoll, R.M. (1999). The problem of underqualified teachers in American secondary schools. *Educational Researcher*, 28(2), 26-37.

Mayer, D.P., Mullens, J.E., & Moore, M.T. (2002). *Monitoring school quality: An indicators report*. Washington, DC: National Center for Education Statistics. Retrieved December 1, 2011, from <http://nces.ed.gov/pubs2001/2001030.pdf>.

5 Boyd, D. J., Lankford, H., Loeb, S., & Wyckoff, J.H. (2008). *The narrowing gap in New York City teacher qualifications and its implications for student achievement in high-poverty schools*. NBER Working Paper No. 14021. Cambridge: National Bureau of Economic Research.

6 Shaker, P. (2010). *Research Summary “Great Teachers and Great Leaders*. In Mathis, W. J. & Welner, K. G. (Eds.) (2010). *The Obama Education Blueprint: Researchers Examine the Evidence* (pp. 23-32). Charlotte, NC: Information Age Publishing.

7 McNeil, M. (2011, Aug. 9). 36 states to apply for Race to Top. *Education Week*. Retrieved December 1, 2011, from <http://www.edweek.org/ew/articles/2011/08/10/37brief-6.h30.html> (subscription required).

- 8 Johnson, S.M. & Papay, J. (2010). *Redesigning Teacher Pay: A System for the Next Generation of Educators*. Economic Policy Institute. Retrieved July 25, 2011, from http://www.epi.org/publications/entry/book-redesigning_teacher_pay/.
- 9 Johnson, S.M. and Papay, J. (2010). *Redesigning Teacher Pay: A System for the Next Generation of Educators*. Economic Policy Institute. Retrieved on July 25, 2011, from http://www.epi.org/publications/entry/book-redesigning_teacher_pay/.
- 10 Adamson, F. and Darling-Hammond, L. (2011). *Addressing the inequitable distribution of teachers: What it will take to get qualified, effective teachers in all communities*. Washington, DC: Center for American Progress.
- 11 Berry, B. (2009). *Children of poverty deserve great teachers: One union's commitment to change the status quo*. Washington DC: National Education Association.
- 12 Shulman, L. (2004). Seek Simplicity . . . and Distrust It. *Education Week*, *24*,(39), 36, 48. Retrieved December 1, 2011, from <http://www.edweek.org/ew/articles/2005/06/08/39shulman.h24.html> (subscription required).
- 13 Herzberg, F., Mausner, B. & Snyderman, B.B. (1959). *The Motivation to Work*. New York: John Wiley.
- 14 Vroom, V. H. (1964). *Work and Motivation*. New York: Wiley.
- 15 Lawler, E. E. (2008, May). *Strategic talent management: Lessons from the corporate world*. Madison, WI: Consortium for Policy Research in Education. Retrieved December 12, 2011, from <http://www.smhc-cpre.org/download/33/>.
- 16 Murnane, R. and Cohen, D. (1986, February). Merit pay and the evaluation problem: Why most merit pay plans fail and a few survive. *Harvard Educational Review*, *56*, 1-17.
- Cuban, L. and Tyack, D. (2000, Summer). Merit pay: Lessons from history. *Rethinking schools*, *14*(3). Retrieved August 14, 2011, from http://www.rethinkingschools.org/restrict.asp?path=archive/14_03/hist143.shtml (subscription required).
- 17 Braun, H. (2005). *Using student progress to evaluate teachers: A primer on value-added models*. Princeton, NJ: Education Testing Service.
- McCaffrey, D.M., Lockwood, J.R., Mariano, L. & C. Setodji (2005). Challenges for value-added assessment of teacher effects. In R. Lissitz (Ed.) *Value added models in education: Theory and applications*. Maple Grove, MN: JAM Press, 111–144.
- 18 Heneman H. G., and Milanowski, A.T. (1999). Teachers attitudes about teacher bonuses under school-based performance award programs. *Journal of Personnel Evaluation in Education*, *12*(4), 327–341.
- 19 Springer, M. G. (ed.) (2009) *Performance Incentives: Their Growing Impact on American K–12 Education*. Washington, DC: Brookings Institution Press.
- Johnson, S.M. and Papay, J. (2010). *Redesigning Teacher Pay: A System for the Next Generation of Educators*. Economic Policy Institute. Retrieved July 25, 2011, from <http://www.brookings.edu/press/Books/2009/performanceincentives.aspx> (purchase required).
- 20 Springer, M. G., and Winters, M. (2009). “*New York City’s School-Wide Bonus Pay Program: Early Evidence from a Randomized Trial.*” Working paper. National Center on Performance Incentives, Vanderbilt University.

- 21 U.S. Department of Education. (2010, July 1). *Teacher Incentive Fund program description*. Retrieved July 25, 2011, from <http://www2.ed.gov/programs/teacherincentive/index.html>.
- 22 Springer, M.G., Lewis, J.L., Podgursky, M.J., Ehlert, M.W., Gronberg, T.J., Hamilton, L.S., Jansen, D.W., Stecher, B.M., Taylor, L.L., Lopez, O.S., & Peng, A. (2009). *Texas Educator Excellence Grant (TEEG) Program: Year Three Evaluation Report*. Nashville, TN: National Center on Performance Incentives.
- 23 Springer, M.G., Ballou, D., Hamilton, L., Le, V., Lockwood, J.R., McCaffrey, D., Pepper, M., and Stecher, B. (2010). *Teacher pay for performance: Experimental evidence from the project on incentives in teaching*. Nashville, TN: National Center on Performance Incentives at Vanderbilt University. Retrieved July 25, 2011, from http://www.performanceincentives.org/data/files/gallery/ContentGallery/POINT_REPORT_9.21.10.pdf.
- 24 Marsh, J., Springer, M.G., McCaffrey, D.F., Yuan, K., Epstein, S., Koppich, J., Kalra, N., DiMartino, C., and Peng X. (2011). *A Big Apple for Educators New York City's Experiment with Schoolwide Performance Bonuses*. Santa Monica: RAND Corp., xxv.
- 25 Marsh, J., Springer, M.G., McCaffrey, D.F., Yuan, K., Epstein, S., Koppich, J., Kalra, N., DiMartino, C., and Peng X. (2011). *A Big Apple for Educators New York City's Experiment with Schoolwide Performance Bonuses*. Santa Monica: RAND.
- 26 Eckert, J. (2010). *Performance-based compensation: Design and implementation at six teacher incentive fund sites*. Seattle, WA: Bill & Melinda Gates Foundation. Retrieved July 25, 2011, from http://www.tapsystem.org/resources/resources.taf?page=ffo_rpts_eckert.
- 27 Kowal, J., Hassel, E., and Hassel, B. (2008). *Financial incentives for hard-to-staff positions*. Washington DC: Center for American Progress.
- 28 National Council on Teacher Quality (2007). [Searchable database of collective bargaining information in more than 100 school districts]. *Teacher roles, rules and rights*. Retrieved July 25, 2011, from <http://www.nctq.org/tr3/>.
- 29 Berry, B. (2009). *Children of poverty deserve great teachers: One union's commitment to change the status quo*. Washington DC: National Education Association.
- 30 Berry, B. (2009). *Children of poverty deserve great teachers: One union's commitment to change the status quo*. Washington DC: National Education Association.
- 31 Center for Teaching Quality. (2006). *Recruiting and retaining teachers in Alabama: Educators on what it will take to staff all classrooms with quality teachers*. Carrboro, NC: Author.
- 32 Berry, B. (2009). *Children of poverty deserve great teachers: One union's commitment to change the status quo*. Washington DC: National Education Association.
- 33 Humphrey, D.C., Koppich, J.E., & Hough, H.J. (2005, March 3). Sharing the wealth: National Board Certified Teachers and the students who need them most. *Education Policy Analysis Archives*, 13(18). Retrieved June 1, 2005, from <http://epaa.asu.edu/epaa/v13n18/>.
- 34 Berry, B. (2005). Recruiting and retaining board certified teachers for hard-to-staff schools: Creating policies that will work. *Phi Delta Kappan*, 87(4), 290-297.

- 35 Berry, B. (2005). Recruiting and retaining board certified teachers for hard-to-staff schools: Creating policies that will work. *Phi Delta Kappan*, 87(4), 290-297.
- 36 Fine, S. (2009, August 9). Why I left teaching behind (Originally published as: Schools need teachers like me. I just can't stay). *Washington Post*. Retrieved July 25, 2011, from <http://www.washingtonpost.com/wp-dyn/content/article/2009/08/07/AR2009080702046.html>.
- 37 Moore Johnson, S., Harrison Berg, J., Donaldson, M. (2005). *Who stays in teaching and why: A review of the literature on teacher retention*. Cambridge, MA: The Project on the Next Generation of Teachers. Retrieved July 25, 2011, from http://assets.aarp.org/www.aarp.org_/articles/NRTA/Harvard_report.pdf.
- 38 Moore Johnson, S., Kraft, M., & Papay, J. P. (2011). *How context matters in high-need schools: The effects of teachers' working conditions on their professional satisfaction and their students' achievement*. Cambridge, MA: The Project on the Next Generation of Teachers.
- 39 Bryk, A.S., Sebring, P., Allensworth, E., Luppescu, S., & Easton, J. (2009). *Organizing Schools for Improvement: Lessons from Chicago*. Chicago: University of Chicago Press.
- 40 Goddard, Y. & Goddard, R. D. (2007, April). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. *Teachers College Record*, 109(4), 877–896.
- 41 Rosenholtz, S. (1989). *Teacher's Workplace: The Social Organization of Schools*. New York: Longman.
- 42 Jackson, C. K. & Bruegmann, E. (2009). *Teaching students and teaching each other: The importance of peer learning for teachers*. NBER Working Paper 15202. Washington DC: National Bureau of Economic Research.
- 43 Louis, K. S., Kruse, S. & Marks, H. (1996). Schoolwide professional community. In F. Newmann and Associates. *Authentic Achievement: Restructuring Schools for Intellectual Quality* (179-203). San Francisco: Jossey-Bass.
- Adamson, F. and Darling-Hammond, L. (2011). *Addressing the Inequitable Distribution of Teachers What It Will Take to Get Qualified, Effective Teachers in All Communities*. Washington DC: Center for American Progress.
- 44 Cohen, D. K. & Hill, H. C. (2001). *Learning policy*. New Haven, CT: Yale University Press.
- 45 Wei, R., Darling-Hammond, L, Andree, A., Richardson, N., and Orphanos, S. (2009). *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the U.S. and Abroad*. Dallas, TX: National Staff Development Council.
- 46 Wei, R., Darling-Hammond, L., Andree, A., Richardson, N., and Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the U.S. and abroad*. Dallas, TX: National Staff Development Council.
- 47 Kang, N. & Hong, M. (2008). Achieving excellence in teacher workforce and equity in learning opportunities in South Korea. *Educational Researcher*, 37(4), 200-207.
- Darling-Hammond, L. (2010). *Education and the flat world*. New York. Teachers College Press.
- 48 Ingersoll, R.M. (1999). The problem of underqualified teachers in American secondary schools. *Educational Researcher*, 28(2), 26-37.

- 49 Center for Teaching Quality (2006). *Recruiting and Retaining Teachers in Alabama: Educators on What it Will Take to Staff All Classrooms with Quality Teachers*. Carrboro NC: Author.
- 50 McMurrer, J. (2007, December). *Choices, changes and challenges: Curriculum and instruction in the NCLB era*. Washington, DC: Center for Education Policy. Retrieved July 25, 2011, from <http://hub.mspnet.org/index.cfm/15374>.
- 51 Clotfelter, C. & Ladd, H. (1996). Recognizing and rewarding success in public schools. In H. Ladd (Ed.), *Holding schools accountable: Performance-based reform in education* (23–64). Washington, DC: The Brookings Institution.
- Clotfelter, C., Ladd, H., Vigdor, J., & Aliaga, R. (2004), Do school accountability systems make it more difficult for low performing schools to attract and retain high quality teachers? *Journal of Policy Analysis and Management* 23(2), 251-271.
- 52 Clotfelter, C., Ladd, H., Vigdor, J., & Aliaga, R. (2004), Do school accountability systems make it more difficult for low performing schools to attract and retain high quality teachers? *Journal of Policy Analysis and Management* 23(2), 251-271.
- 53 Lankford, H., Loeb, S., & Wyckoff, J. (2002). Teacher sorting and the plight of urban teachers: A descriptive analysis. *Educational Evaluation and Policy Analysis*, 24(1), 37-62.
- 54 Berry, B. (2011). *Teaching 2030: What we must do for our students and our public schools -- now and in the future*. New York. Teachers College Press.
- 55 Boyd, D. Lankford, H., Loeb, S., & Wykoff, J. (2005, February). *The impact of assessment and accountability on teacher recruitment and retention: Are there unintended consequences?* Albany, NY: Teacher Policy Research. Retrieved July 25, 2011, from http://www.teacherpolicyresearch.org/portals/1/pdfs/Impact_of_Assessment_and_Accountability_on_Teacher_Recruitment_and_Retention.pdf.
- 56 Ginsberg, R. & Berry, B. (1990). Experiencing school reform: The view from South Carolina. *Phi Delta Kappan*, 71(7), 549-552.
- Ginsberg, R., & Berry, B. (1998). The capability for enhancing accountability. *Educational Policy*, 12(2), 48-66.
- 57 Hout, M. and Elliott, S.W. (2011). *Incentives and Test-Based Accountability in Education*. Washington DC: National Research Council.
- 58 McLeod, B. (n.d.) *Quotes from H. L. Menken*. Retrieved July 25, 2011, from <http://www.watchfuleye.com/mencken.html>.
- 59 Darling-Hammond, L. (2007, January 9). A Marshall Plan for teaching: What it will really take to leave no child behind. *Education Week*, 26(18). Retrieved July 25, 2011, from <http://www.edweek.org/ew/articles/2007/01/10/18hammond.h26.html> (subscription required).
- 60 Phi Delta Kappa (2011). Highlights of the 2011 PDK/Gallup Poll: *What Americans said about the public schools*. Retrieved August 14, 2011, from <http://www.pdkintl.org/poll/media/PDK-Poll-Report-2011.pdf>.