

re:VISION

PAYING FOR IMPROVEMENT: TEACHER COMPENSATION REFORM

By *Stephen Jackson, Ph.D., Policy Analyst* and *Casey Remer, Interim Director of Research and Policy Analysis*



Business leaders know that top talent demands top salaries; getting the best often comes with a high price tag. High-performing companies organize their human resource systems, including compensation, to meet their individual needs and align with their organizational goals.

Compensation drives improvement towards those goals by rewarding employee performance. High-performing companies also use compensation to attract workers with the specific skills they need to achieve organizational goals, particularly in fields where such workers are in short supply.

In education, human capital — *teachers* — are key to improving student achievement. When it comes to improving student learning, there are significant differences between the best, average, and worst teachers, but traditional teacher compensation is largely blind to this variation in performance. Instead, teacher salary is generally driven by years of experience and level of education. Few districts or states stray from this formula. For public education, **aligning teacher compensation with school, district, and state goals could mean greater rewards for teachers and principals who improve student achievement.** This opportunity could encourage more high-achieving college graduates to enter the profession.

EDUCATOR EFFECTIVENESS SERIES: SNAPSHOT

This is **part three** of a special series on improving the effectiveness of the nation's teachers and leaders. The other briefs in the series are:

- Overview
- Teacher Evaluation
- Teacher Preparation
- School Leadership

Available at www.hunt-institute.org



Created by The University of North Carolina Board of Governors in 2001 to honor and continue the legacy of former North Carolina Governor Jim Hunt, The Hunt Institute collaborates with policymakers to secure America's future through quality education. Working at the intersection of policy and politics, The Hunt Institute connects leaders with the best strategies for developing and implementing policies and programs to improve public education. To that end, The Institute convenes governors, policymakers, and legislators, as well as business, education, and civic leaders across the nation to provide them with the best information to make informed policy decisions.

Policymakers know that improving teaching in our schools requires a systemic look at many policies related to educator effectiveness. For example, teacher preparation programs need to be dramatically improved and strengthened, but without accompanying reform in compensation, even highly effective and innovative schools of education are unlikely to continue attracting top students who have more lucrative post-degree options.

Likewise, to carry out compensation reform successfully, **states need thoughtful, fair systems for measuring teacher performance.** This issue of *re:VISION*, part of a special series on teacher effectiveness, examines the role of educator compensation through this lens and offers considerations for policymakers who are examining teacher compensation in their states.

CURRENT CONTEXT

While today's classrooms are continually evolving to meet the needs of a changing student population, little has changed about teacher compensation since the late 1920s when the dominant *step-and-lane*, or single salary schedule, was introduced. This basic model sets pay based on years of experience (the *step*) and the highest degree awarded (the *lane*). Sixteen states have laws requiring teachers to be paid under this type of schedule.¹

The default step-and-lane compensation system equates more experience and education with higher levels of performance, but most research does not support this assumption.² Studies of the effects of experience on student performance and teaching practice tend to show that the largest gains for teachers occur in their first five years of teaching.³

Teachers have enrolled in master's degree programs in significantly greater numbers in the last 15 years. Recent estimates are that 90 percent of master's degrees held by teachers are from generalist K-12 education and education administration programs. Such degrees are required for most district and state administrative positions. The absence of alternative career and pay advancement possibilities for teachers who want to remain in schools and stay closely connected to teaching appear to be driving teacher enrollment in generic advanced degree programs.⁴

This enrollment trend is at odds with many studies that show teachers with generalist or administrative education master's degrees have no additional positive effect on student achievement compared to teachers

Qualifications that Matter: National Board Certification

WHILE RESEARCH HAS FOUND THAT MOST QUALIFICATIONS USED IN STEP-AND-LANE SYSTEMS ARE NOT LINKED TO INCREASED STUDENT LEARNING, THESE FINDINGS SHOULD BE DISTINGUISHED FROM THE EFFECT OF NATIONAL BOARD CERTIFICATION ON STUDENT LEARNING. IN MULTIPLE STUDIES, NATIONAL BOARD CERTIFIED TEACHERS PRODUCE GREATER LEARNING GAINS THAN NON-BOARD CERTIFIED TEACHERS. THE CERTIFICATION PROCESS IS EXTREMELY RIGOROUS AND REQUIRES SIGNIFICANT TIME AND EFFORT BY CANDIDATES TO ACQUIRE NEW SKILLS AND PROVIDE EVIDENCE OF THAT ACQUISITION. AROUND THREE PERCENT OF THE NATION'S TEACHERS ARE NATIONAL BOARD CERTIFIED. IN 2011-12, APPROXIMATELY ONE-QUARTER OF THE NATION'S SCHOOL DISTRICTS PAID A BONUS FOR NATIONAL BOARD CERTIFICATION.

without an advanced degree. There are studies, however, that show that teachers with master's degrees in some specific content areas, namely science and math, do boost test scores of high school students.⁵ Despite this body of research, 14 states require districts to pay higher salaries to teachers holding general master's degrees or other administrative or advanced degrees regardless of their direct connection—or lack thereof—to the content or grade level taught by those teachers.⁶ Facing an accountability environment that demands significant student growth each year, most districts have no mechanism to reward their top-performing teachers. The default step-and-lane system also offers little or no incentive for teachers to teach in our lowest-performing schools; additionally these systems offer no salary mechanism to recruit top STEM college graduates to math and science teaching positions.

With these concerns in mind, some states are reconsidering traditional compensation systems; however, absent a viable alternative, eliminating the possibility of professional growth through advanced degrees leading to salary increases is likely to lead some teachers to exit the profession and discourage top-performing students from considering teaching as a career choice. As in any profession, employees need to see their potential growth trajectories and understand what they can do to improve them. As states examine their systems, it is also important to ensure that current teachers already pursuing advanced study are not retroactively affected by changes in policy. In states that have recently revised their pay structures, such as **Indiana**, **Louisiana**, and **Tennessee**, policymakers ensured that no teachers would make less than they were currently making, ensuring that those teachers who had earned a salary increase due to additional degrees would not be penalized.

A NEW APPROACH: INCENTIVE PAY FOR TEACHERS

Frustration over the dominant step-and-lane system has caused state leaders to look to the use of bonuses to motivate better teaching and persuade teachers to move to schools where there are shortages and to take on extra duties.

Pay-for-Performance

Performance compensation rewards employees who meet organizational goals. In education, this typically manifests as an individual bonus on top of a teacher's base pay—which is usually still determined by a single salary schedule. School-wide bonuses that are distributed among staff are also relatively common. Pay-for-performance can also include the use of teacher performance criteria to restructure base pay determinations, though this is less common (*See box: Distinguishing Performance Bonuses from Performance-Based Pay*).

Distinguishing Performance Bonuses from Performance-Based Pay

IN HARRISON COUNTY, COLORADO, BASE PAY INCREASES NOW DEPEND ON PERFORMANCE EVALUATIONS. A TEACHER'S BASE PAY IS DETERMINED USING STUDENT TEST ACHIEVEMENT AND GROWTH AND MULTIPLE CLASSROOM OBSERVATIONS. SCORES PLACE TEACHERS INTO ONE OF SEVEN EVALUATION LEVELS, FROM UNSATISFACTORY TO EXEMPLARY. THE SALARY SCHEDULE HAS THE SAME SEVEN LEVELS, PLUS TWO FOR DISTINGUISHED AND MASTER TEACHERS. A TEACHER WHO RECEIVES A HIGHER EVALUATION RATING THAN THE PREVIOUS YEAR ADVANCES ONE LEVEL. A TEACHER WHO RECEIVES A LOWER EVALUATION TWO YEARS IN A ROW DROPS ONE LEVEL. ACCESS TO THE EIGHTH AND NINTH LEVELS OF SALARY REQUIRES SATISFYING ADDITIONAL CRITERIA, INCLUDING ASSESSMENT BY ADMINISTRATORS AND/OR EARNING NATIONAL BOARD CERTIFICATION.

Source: District Two Harrison Schools (2013) "Teacher Evaluation," <http://www.hsd2.org/sites/www.hsd2.org/files/u50/teacherevaluation100213.pdf>

Individual pay-for-performance is most often based on student performance measures—usually scores from or growth on state assessments—and evidence of a teacher’s practice. Evidence of teaching practice is typically based on classroom observations and analysis of teaching materials prepared by the teacher. In **Louisiana**, starting in 2014-15, teachers will receive performance bonuses based on their evaluation ratings, which include scores from teacher observations and a statistical analysis of a teacher’s contribution to student test score growth. In **Denver**, the *ProComp* model combines performance incentives for meeting student growth objectives with school-wide performance incentives and individual market-based incentives for teachers who meet certain criteria (*See box: A Comprehensive Approach to Compensation Reform*). Recent evaluations of the program have identified significant learning growth across grades and subjects and improved teacher retention since *ProComp*’s implementation. **This highlights the effectiveness of a multi-strategy approach to improving teacher quality.** Teacher attitudes towards the multi-faceted bonus program are positive.⁷

States and districts are far more likely to use these types of performance-based compensation now than 10 years ago, but still trail the private sector in their use by some margin. While direct comparison is complicated by data limitations, a recent credible study estimates that in 2010, 42 percent of the hours worked by American private sector employees were in jobs with some kind of performance-pay component.⁸

In contrast to the private sector, approximately 12.5 percent of public school districts provided some kind of performance incentive for teachers in 2011-12, up from 5.5 percent in 1999-2000.⁹ Despite this uptick, in 2011-12, approximately five percent of teachers nationwide received a performance bonus.¹⁰ Still, interest is growing: **Florida, Hawaii, Indiana, Louisiana, Michigan, Nevada, and Utah** have all recently passed legislation to include performance measures in the calculation of teacher pay.¹¹ The growing interest in performance pay for teachers generally contrasts with that for public sector workers. While several states use it relatively widely, substantial increases in base pay or bonuses that are triggered by performance evaluations tend to be reserved only for some managerial employees or those in positions where the private sector pays significantly more.¹²

As more states and districts look towards performance incentives for teachers, they must contend with a limited

research base around what works. Existing studies show that individual teacher and school-based **incentives have little effect on teacher motivation, reported practices, or student learning outcomes when they are not supported by other strategies to enhance teacher quality.**¹³ For instance, a recent study of the attitudes and behaviors of teachers participating in performance-pay programs in **Nashville, TN, Round Rock, TX, and New York City** found that the three programs failed to alter teachers’ instruction or increased their hours of work.¹⁴ Separate studies of the three programs have shown that they did not increase student achievement.¹⁵

However, results such as those mentioned above are less definitive than they appear. The short time frames of most programs, and the fact that most are done in isolation of other reforms, has limited their impact and the usefulness of their evaluations. Further study and pilots are necessary to acquire evidence of success for this area of compensation reform.

Strategic Staffing

In recent years, many districts have begun offering incentives to attract high-performing teachers to under-performing, hard-to-staff schools and to combat ongoing, widespread teacher shortages in areas including math, science, and special education. This practice, often referred to as “market pay,” has long been common in the private sector; industry-based employer surveys show that anywhere from around 33 to almost 90 percent of employers use market-based staffing incentives.¹⁶

Moving Towards Market-Based Pay

The percentage of teachers employed in districts that offer staffing incentives has grown:

- **In 2007-08, 16.1 Percent of teachers were employed in districts that gave incentives to teach in hard-to-staff schools, up from 11.2 Percent in 1999-2000.**
- **In 2007-08, 32.2 Percent of teachers were employed by districts that offered incentives to teach in shortage areas, up from 23.6 Percent in 1999-2000.**

Source: Podgursky & Springer [2011] “Teacher Compensation Systems in the United States K-12 Public School System,” *National Tax Journal* (March) 64.1, 165-192.

The need is just as great in public education. Research has found that there is a tendency for high-achieving teachers to move to schools with higher achieving students and with smaller shares of poor and minority students than the one they were in previously.¹⁷ There are also widespread shortages of teachers in world languages, math, and science that have existed for decades.¹⁸ These shortages are most acute in high-poverty schools. Combined, these trends contribute to the achievement gap between poor and non-poor students.

While state efforts around this type of incentive are nascent, districts have been leading the way.¹⁹ Responding to the challenges above, and enabled by the federal *Race to the*

Top, *Teacher Incentive Fund* (TIF), and *School Improvement Grant* programs, urban school districts have been more likely to encourage transfers from one school to another or offer bonuses for teachers in hard-to-staff subjects.²⁰ A recent study of the federal *Talent Transfer Initiative* in seven large districts suggests that this strategy can be successful. **The study found that six percent of the greatest performing teachers in high-performing schools transferred to low-performing schools as a result of \$20,000 incentives paid over two years to transferring teachers.**²¹

Combining the need to motivate high-performing teachers to teach at low-performing schools and fill subject shortages,

A Comprehensive Approach to Compensation Reform: Denver and Minnesota

A feature of the comprehensive reform approaches adopted by **Denver, CO**, and **Minnesota** is the wide support they have received from the educator workforce, policymakers, and the community. The success and longevity of these reforms owes much to this support. These reformed alternative compensation systems combine performance, strategic staffing, and extra duties incentives to form innovative and complete compensation packages.

The **Denver ProComp** system was developed by the Denver Public Schools (DPS) in cooperation with the Denver Classroom Teachers' Association (DCTA). It started as a four-year, 12-school pilot in 1999, before being implemented district-wide in 2006. A major impetus for the implementation was the passage of a \$25 million ballot initiative for *ProComp* by Denver voters in 2005.

When teachers become part of *ProComp*, they receive their base salaries and are eligible for up to nine bonuses. Incentives are paid based on individual and school-wide indicators. Individuals can receive incentives for advanced licenses, tuition and student loan reimbursement, completed professional development, reaching student growth objectives, and high student achievement. School-based bonuses are paid to high-performing schools, as well as schools with high student achievement growth. Finally, staffing incentives are available for teachers transferring to hard-to-staff schools or to teach hard-to-staff subjects.

In **Minnesota** in 2004, Governor Tim Pawlenty, the Minnesota Federation of Teachers, and the Milken Family Foundation put together a three-school compensation pilot in Minneapolis. Based on the pilot results, the *Quality Compensation for Teachers* (Q Comp) program was expanded by the legislature in 2005. *QComp* is a competitive grant program for school districts. Recurring budget funding has since been made available for grants to districts and charter schools. These grants fund school-based bonuses based on student achievement, incentives for teachers to mentor and take on instructional leadership roles, and on-the-job professional development. Local collective bargaining agreements ensured that teachers played a significant role in designing the specifics of each scheme.

In 2012-13, 60 school districts and 62 charter schools implemented programs or were approved to implement *Q Comp*. These programs serve more than 280,689 students. Many additional districts have indicated plans to submit applications for future years. As district plans have evolved, a greater emphasis on compensation for teacher development has surfaced at the expense of strictly performance-based compensation. Evaluations of *Q Comp* have been few; the most recent in 2009 was inconclusive about the effect of the program on student achievement.

the **Los Angeles Unified School District** is currently using a Cohort 4 (2012) TIF grant to pay \$20,000 recruitment bonuses to effective or highly effective science, technology, engineering, and math (STEM) teachers to teach at high-need schools in the district. The **Houston Independent School District** is also using Cohort 4 TIF dollars in 24 high-need schools to increase the number of effective teachers teaching in hard-to-staff subjects. These recent programs have not yet been evaluated for their effectiveness.

Pay for Extra Duties

Teachers may receive additional pay for taking on increased workloads and/or serving as teacher-leaders. Compensation for performing these extra duties is typically a low budget priority for districts. However, more fundamental reforms

around restructuring teacher job descriptions to produce new career ladders have appeared in the last decade. Under these plans, teachers typically take on mentoring and instructional leadership roles to improve teaching in their schools.

In **Hillsborough County, FL**, teachers receiving a highly effective rating and passing a rigorous screening process are eligible for annual bonuses if they take on a teacher-leader role that involves mentoring other teachers, delivering professional development, and supporting teacher teams. In **Washington, D.C.**, teachers who receive highly effective ratings **advance through a career ladder that opens up new leadership roles and base salary advances, as well as stipends and performance bonuses.** *These types of reforms will be discussed in greater detail in the series brief focused on school leadership.*

CONSIDERATIONS FOR POLICYMAKERS

As state policymakers examine teacher compensation and explore incentive pay, the following issues should be taken into account:

Align teacher compensation with supporting policies.

The most successful incentive pay initiatives are always a part of larger systemic improvement efforts: a comprehensive and integrated data system, a teacher evaluation system that includes multiple measures that are objective and transparent, opportunities for educators to develop skills and expertise, support from leadership, and a school environment centered on achievement and collaboration.²²

Compensation reform is one tool in a suite of policies to improve teaching.

For example, when considering strategic staffing incentives, it is important to recognize that even a recurring bonus may not be

enough to motivate teachers to teach in a struggling school for the long term: working conditions and school leadership play a large role in motivating a teacher's decision to leave or stay at a high-poverty school.²³

The System for Teacher and Student Advancement (TAP) is a systemic human resource reform system developed and funded by the Milken Family Foundation. In effect since 2000-01, this system has been adopted by 80 districts and reached 200,000 students in 2011-12. The TAP approach integrates new career paths

For more on multiple teacher evaluation measures, see the reports from the *Measures of Effective Teaching (MET)* project study at www.metproject.org and the accompanying Hunt Institute brief on *teacher evaluation*.

for high-performing teachers, ongoing professional development, new teacher evaluation systems, and performance bonuses of up to \$20,000. **Evaluations of TAP have found consistently high rates of student achievement growth, improvements in teaching practice, improved retention of the most effective teachers, and a high degree of support among staff.**²⁴

Ensure teacher buy-in.

Stakeholder support is critical to compensation reforms. The best way to build support among teachers is to include them in the development and design, as in **Denver** and **Minnesota** (*See box: A Comprehensive Approach to Compensation Reform*). It should be noted that teacher attitudes regarding compensation are changing. Surveys show that younger teachers view incentives and variable pay favorably, suggesting new opportunities for compensation reform.²⁵

Teacher input prior to reform has led to fundamental changes in compensation systems. One approach is to address compensation reforms through traditional collective bargaining. In 2012, in **St. Clair County, Michigan**, negotiations between teacher unions and the district led to the scrapping of the step-and-lane salary system in favor of a performance-based base pay system.²⁶ In **Denver** and **Austin**, task forces and steering committees jointly led by teachers and administrators were initiated early in the reform process and were instrumental in the design and early implementation of their incentive programs. At the state level, **New Mexico** has developed a new licensure system that requires teachers to demonstrate increases in knowledge and skills to advance their base pay. This reform was legislated after wide stakeholder input and endorsement from the state affiliate of the National Education Association (NEA).

Teacher input can also be built into legislation. In **Iowa**, major legislation that included new teacher-leader roles and compensation for high-performing teachers was signed into law in June 2013. It called for the formation of the *Commission on Educator Leadership and Compensation*

to plan and implement those changes and includes nine teachers among its members. A union representative also sits on the 17-member *Council on Educator Development* that is tasked with making new teacher evaluation system recommendations by 2016.

Ensure that the measures used are objective and transparent.

Objective and transparent measures of teacher performance are imperative if compensation initiatives are to sustain teacher buy-in. As discussed in the *re:VISION* on teacher evaluation, **the use of multiple measures in evaluation to accurately and fairly assess a teacher's practice and effectiveness is essential.** This approach is substantiated by research and has drawn support from educators across the country and by teacher unions.

Classroom observations are an integral component of teacher evaluation systems and can be contentious. Doubts over the objectivity of principals when conducting evaluations in **Cincinnati**, for instance, caused the loss of teacher support for its groundbreaking compensation

Providing Data Infrastructure

INCENTIVE COMPENSATION AND THE EVALUATION SYSTEM THAT SUPPORTS IT REQUIRE: A LONGITUDINAL STATE DATA SYSTEM, A REPOSITORY THAT LINKS STUDENTS TO THEIR ACHIEVEMENT RESULTS AND TO THEIR TEACHERS-OF-RECORD OVER THE COURSE OF STUDENTS' SCHOOL CAREERS, AND SAFEGUARDS THAT PROTECT THE SECURITY AND DATA PRIVACY OF BOTH TEACHERS AND STUDENTS. STATES SHOULD TAKE ADVANTAGE OF THEIR ECONOMIES OF SCALE TO ESTABLISH THE DATA INFRASTRUCTURE NECESSARY FOR DISTRICTS TO IMPLEMENT EVALUATION AND INCENTIVE COMPENSATION POLICIES FAIRLY. THESE DATA SHOULD BE READILY ACCESSIBLE TO TEACHERS IN ORDER FOR THEM TO BE USEFUL IN MAKING APPROPRIATE INSTRUCTIONAL DECISIONS. (To read more about essential elements of adequate longitudinal data systems, see the guidelines suggested by the *Data Quality Campaign*. These, and related issues, are considered in the series brief on *teacher evaluation*.)

From performance to career: Recent grant programs in Texas

The *Texas Governor Educator Excellence Grant* (GEEG), *Texas Educator Excellence Grant* (TEEG), and *District Awards for Teacher Excellence* program (DATE) were state and federally funded performance bonus programs that allowed schools (GEEG, TEEG) or districts (DATE) flexibility in final program design. GEEG (2005-08) and TEEG (2006-09) targeted high-performing, high-poverty schools. There was no solid evidence of any student achievement growth attributable to TEEG or GEEG, but bonus recipients showed better retention. TEEG was discontinued in 2009, and a portion of state funds for the program were allocated to the new DATE program.

At its height in 2011, DATE funded performance bonuses for almost half of Texas' teachers. Evaluation of DATE showed increased performance in districts that used school-wide bonuses versus districts that awarded individual teachers. Retention was improved in bonus schools and among teachers receiving awards. In 2011, budget decisions led to a 90 percent funding cut, and the program was zeroed out in 2013.

A small percentage of DATE budget funds are being re-allocated to the *Educator Excellence Innovation* program—a mixed strategic staffing, induction, and mentoring program aimed at increasing career opportunities for teachers.

Sources: Springer, Lewis, Ehler, Podgursky, Crader, Taylor, Granberg, Jansen, Lopez, & Stuit (2010) "District Awards for Teacher Excellence [D.A.T.E.] Program: Final Evaluation Report;" Springer, Lewis, Podgursky, Ehler, Granberg, Hamilton, Jansen, Stecher, Taylor, Lopez, & Peng. (2009) "Texas Educator Excellence Grant (TEEG Program: Year Three Evaluation Report);" Springer, Lewis, Podgursky, Ehler, Taylor, Lopez, & Peng. (2009) "Governor's Educator Excellence Grant (GEEG) Program: Year Three Evaluation Report," Stutz, T. (2013) "Texas merit pay plan for teachers quietly disappears."

reforms in the early 2000s.²⁷ **Researchers on the Measures of Effective Teaching Project** found that principals need to be trained to understand the difference between bias, interpretation, and evidence, and that probably as much as a full week of training is necessary to ensure that evaluators generate objective, reliable, and valid scoring when they conduct observations.²⁸

A second challenge regarding objectivity is how to assess teachers who teach in non-tested subjects. **Rhode Island** has developed guidelines for the development of *Student Learning Objectives* by teachers and principals that are used to assess student learning growth in non-tested subjects as opposed to using value-added scores.

Transparency around the measures is also critical, and value-added measures present a particular challenge for teacher understanding (*See box: Value-Added: The Basics*). For instance, communication issues initially contributed to confusion among teachers in the **Houston Independent School District** over the value-added measure used in their new performance bonus program in 2005-06. To address teacher concerns, the district formed an advisory panel of teachers to improve the model, ensure transparency, and facilitate understanding. The district then utilized external partners, identified a new value-added vendor, and implemented an extensive education program for teachers on value-added measures. Together, these improved knowledge and acceptance among educators.²⁹

Ensure adequate and stable funding.

Whether designed by the state or districts, **ensuring adequate and stable funding** is critical to sustaining stakeholder buy-in. Some programs have quickly lost teacher and school district support because of poor budget management—too many winners, not enough dollars. Using historical data can assist with the determination of incentive eligibility guidelines and the likely cost to states and districts.

Some states have left decisions up to the districts, with mixed results. In **Michigan**, the state did not fund performance compensation after adopting a law in early 2010 that directed districts to “implement and maintain a method of compensation for its teachers and school administrators that includes job performance and job accomplishments as a *significant* factor in determining compensation and additional compensation.”³⁰ School districts responded to this mandate in a variety of ways. Eighty-one of the 104 districts appeared to have ignored the law. Three districts awarded \$1 to \$3 to teachers for high-performance ratings on their evaluation. Some districts awarded modest average payouts of \$50 to \$500 per high-performing teacher. At the more reform-minded end of the spectrum was the previously noted performance-driven base pay reform in St. Clair County, Michigan.³¹

Other states have taken a “tournament” approach, allotting bonuses to a proportion of the highest performers, rather than to any teacher who meets a certain threshold. In **Florida**, the *Special Teachers are Rewarded* (STAR) program was a tournament that rewarded the top 25 percent of teachers. STAR was replaced by another performance-pay

program because of opposition from teachers and some districts stemming from a concern, among others, that the teacher performance measures in effect were insufficient to correctly identify the top 25 percent of teachers.³²

A growing strategy to spark innovation and allow small-scale experimentation with different compensation designs is grant competition. *Race to the Top*, the *Teacher Incentive Fund* (TIF), and *School Improvement Grants* are all competitive grant programs and have been major drivers of compensation reform in individual schools and districts. **Indiana** and **Louisiana** both received TIF grants to implement the TAP program in 45 and 70 schools, respectively. Recent experimentation with three performance bonus grant programs in **Texas** illustrated that while grant programs enable budget certainty, their sustainability and evolution is ultimately a function of cost/benefit calculations (*See box: From performance to career: Recent grant programs in Texas*). **Minnesota’s Q Comp** is an example of a state-level grant program that uses multiple compensation strategies in concert with other quality-enhancing efforts (*See box: A Comprehensive Approach to Compensation Reform: Denver and Minnesota*).³³

Value-Added: The Basics

A METHOD BECOMING INCREASINGLY POPULAR WAS FIRST DEVELOPED AND USED IN TENNESSEE IN THE 1980s AND 1990s AND IS KNOWN AS VALUE-ADDED MODELING, OR VAM. VAM IS A GROUP OF STATISTICAL APPROACHES THAT ISOLATES A TEACHER’S CONTRIBUTION TO STUDENT TEST SCORE GROWTH ABOVE OR BELOW WHAT IS EXPECTED BASED ON THE STUDENT’S PRIOR ACHIEVEMENT AND/OR SCHOOL, CLASS, AND PERSONAL DEMOGRAPHICS. THAT GROWTH, ONCE OTHER FACTORS ARE CONTROLLED FOR, IS A TEACHER’S “VALUE-ADD” — WHAT THEY DO INDEPENDENT OF OTHER FACTORS — TO IMPROVE OR DEPRESS STUDENT ACHIEVEMENT.

[More information on VAM is available in the accompanying brief on *teacher evaluation*.]

| References |

- 1 NATIONAL COUNCIL ON TEACHER QUALITY. (2012). *Cultivating an Effective Teacher Workforce. NCTQ State Teacher Policy Yearbook Brief, Area 4: Retaining Effective Teachers*. Washington, DC: Author.
- 2 NATIONAL BOARD CERTIFICATION IS ONE EXCEPTION. SEE, FOR INSTANCE: CAVALLUZZO, L.C. (2004). *Is National Board Certification an effective signal of teacher quality?* Alexandria, VA: The CNA Corporation; Goldhaber, D. and E. Anthony. (2007). Can teacher quality be effectively assessed? *The Review of Economics and Statistics* 89 (1): 134-150.
- 3 CLOTFELTER, CHARLES, HELEN LADD, AND JACOB VIGDOR. (2006). *Teacher-student matching and the assessment of teacher effectiveness*. Cambridge, MA: National Bureau of Economic Research; Rivkin, Steven, Eric Hanushek, and John Kain. (2005). Teachers, schools, and academic achievement. *Econometrica* 73 (2): 417-458; Gordon, Robert, Thomas Kane, and Douglas Staiger. (2006). *The Hamilton Project, Discussion Paper 2006-01: Identifying effective teachers using performance on the job*. Washington, DC: The Brookings Institution. Available at: http://www3.brookings.edu/views/papers/200604hamilton_1.pdf
- 4 FOR INSTANCE, SEE: LANGDON, CAROL, AND NICK VESPER. (2006). The Sixth Phi Delta Kappa Poll of Teachers' Attitudes toward the Public Schools. *The Phi Delta Kappan* 81 (8): 607-611. Available at: <http://www.jstor.org/stable/20439737?seq=2>
- 5 SEE: MILLER, RAEGEN, AND MARGUERITE ROZA. (2012). *The Sheepskin Effect and Student Achievement: De-emphasizing the Role of Master's Degrees in Teacher Compensation*. Washington, DC: Center for American Progress. Available at: http://www.americanprogress.org/wp-content/uploads/issues/2012/07/pdf/miller_masters.pdf; Harris, Douglas, and Tim Sass. (2011). Teacher Training, Teacher Quality and Student Achievement. *Journal of Public Economics* 95 (7-8): 798-812; Goldhaber, Dan & Dominic Brewer. (1998). When should we reward degrees for teachers? *The Phi Delta Kappan* 80 (2): 134-138.
- 6 STUDENTS FIRST. (2013). *State of Education: State Policy Report Card*. Sacramento, CA: Author. Available at: http://edref.3cdn.net/9e8505b2c4ad5ec0e8_u6m6ikky8.pdf; Sandi Jacobs, personal communication, October 2013.
- 7 GOLDBERGER, DAN, AND JOE WALCH. (2011). *Strategic Pay Reform: A Student Outcomes – Based Evaluation of Denver's ProComp Teacher Pay Initiative*. Bothell, WA: Center for Education Data and Research. Available at: <http://www.cedr.us/papers/working/WP%202011-3%20Procomp%20Strategic%20Compensation%20%289-28%29.pdf>; Wiley, Edward, Eleanor Spindler, and Amy Subert. (2010). *Denver ProComp: An Outcomes Evaluation of Denver's Alternative Teacher Compensation System: 2010 Report*. Boulder, CO: University of Colorado at Boulder, School of Education. Available at: <http://static.dpsk12.org/gems/newprocomp/ProCompOutcomesEvaluationApril2010final.pdf>
- 8 GITTLEMAN, MAURY, AND BROOKS PIERCE. (2013). *Pay-for-Performance and Compensation Inequality: Evidence from the ECEC*. Washington, DC: U.S. Bureau of Labor Statistics. Table 1.
- 9 LIANG, GUODONG, AND MOTOKO AKIBA. (2011). Performance-Related Pay: District and Teacher Characteristics, *Journal of School Leadership* 21 (6): pp 845-870; Gray, Lucinda, Amy Bitterman, Rebecca Goldring, and Steven Broughman. (2013). *Characteristics of Public School Districts in the US: Results from the 2011-12 Schools and Staffing Survey: First Look*. Washington, DC: Institute for Education Statistics, U.S. Department of Education. Table 5.
- 10 GRAY ET AL. (2013).
- 11 STUDENTS FIRST. (2013). p. 40.
- 12 SEE, FOR INSTANCE, GENERAL ACCOUNTING OFFICE. (1990). *Pay-for-Performance: State and International Public Sector Pay-For Performance Systems*. Washington, DC: Author. Available at: <http://www.gao.gov/assets/150/149835.pdf>; National Governors Association & National Association of State Budget Officers. (2006-2012). *The Fiscal Survey of the States*, Fall editions. Available at: <http://www.nasbo.org/publications-data/fiscal-survey-of-the-states/archives>.
- 13 FOR INSTANCE, SEE THE SUMMARIES IN: EDUCATION COMMISSION OF THE STATES. (2010). Teacher Merit Pay: What Do We Know? *The Progress of Education Reform* 10(3). Available at: www.esc.org/clearinghouse/86/40/8640.pdf; and Education Commission of the States. (2011). More on Pay-for-Performance: New Developments in the Field Provide Insights for Policymaking, *The Progress of Education Reform* 12(5). Available at: www.esc.org/clearinghouse/97/02/9702.pdf
- 14 YUAN, KUN, VI-NHUAN LE, JULIE MARSH, LAURA HAMILTON, BRIAN STECHER, AND MATTHEW SPRINGER. (2013). Incentive Programs Do Not Affect Teacher Motivation or Reported Practices: Results from Three Randomized Studies, *Educational Evaluation and Policy Analysis* 35 (1): 3-22.
- 15 MARSH, JULIE, MATTHEW SPRINGER, DANIEL MCCAFFREY, KUN YUAN, SCOTT EPSTEIN, JULIA KOPPICH, NIDHI KALRA, CATHERINE DIMARTINO, AND XIAO PENG. (2011). *A Big Apple for Educators, New York City's Experiment with Schoolwide Performance Bonuses: Final Evaluation report*. Santa Monica, CA: Rand Corporation. Available at: <http://www.rand.org/pubs/monographs/MG1114.html>; Springer, Matthew, Dale Ballou, Laura Hamilton, Vi-Nhuan Le, J.R. Lockwood, Daniel McCaffrey, Matthew Pepper, and Brian Stecher. (2010). *Teacher Pay-for-Performance: Experimental Evidence from the Project on Incentives in Teaching*. Vanderbilt, TN: Vanderbilt Peabody College. Available at: http://www.rand.org/content/dam/rand/pubs/reprints/2010/RAND_RP1416.pdf; Springer, Matthew, John Pane, Vi-Nhuan Le, Daniel McCaffrey, Susan Burns, Laura Hamilton, and Brian Stecher. (2012). Team Pay-for-Performance: Experimental Evidence From the Round Rock Pilot Project on Team Incentives, *Education Evaluation and Policy Analysis* 34 (4): 367-390.

| References |

- 16 KOWAL, JULIE, BRYAN HASSEL, AND EMILY HASSEL. (2008). *Financial Incentives for Hard-To-Staff Positions: Cross-Sector Lessons for Public Education*. Washington, DC: Center for American Progress. Available at: http://www.americanprogress.org/issues/2008/11/pdf/hard_to_staff.pdf
- 17 FOR INSTANCE, SEE: GUARINO, CASSANDRA, ABIGAIL BROWN, AND ADAM WYSE. (2011). Can Districts Keep Good Teachers in the Schools that Need Them Most? *Economics of Education Review* 30 (5): 962-979; Goldhaber, Dan, Bethany Gross, and Daniel Player. (2011). Teacher career paths, teacher quality, and persistence in the classroom: Are public schools keeping their best? *Journal of Policy Analysis and Management* 30 (1): 57–87; Winter; Lankford, Hamilton, Susanna Loeb, and James Wyckoff. (2002). Teacher Sorting and the Plight of Urban Schools: A Descriptive Analysis. *Educational Evaluation and Policy Analysis* 24(1): 37-62.
- 18 OFFICE OF POSTSECONDARY EDUCATION. (2013). *Teacher Shortage Areas: Nationwide Listings, 1990-1991 through 2013-2014*. Washington, DC: U.S. Department of Education. Available at: <http://www2.ed.gov/about/offices/list/ope/pol/tsa.pdf>
- 19 ON THE GROWTH AMONG DISTRICTS, SEE: PODGURSKY, MICHAEL, AND MATTHEW SPRINGER. (2011). Teacher Compensation Systems in the United States K-12 Public School System. *National Tax Journal* 64 (1): 165-192.
- 20 GRAY ET AL. (2013). Table 5.
- 21 GLAZERMAN, STEVEN, ALI PROTIK, BING-RU TEH, JULIE BRUCH, NEIL SEFTOR, AND ELIZABETH WARNER. (2012). *Moving High-Performing Teachers: Implementation of Transfer Incentives in Seven Districts*. Washington DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Available at: http://www.mathematica-mpr.com/publications/pdfs/education/TTI_fnlrpt.pdf
- 22 FOR INSTANCE, SEE HENEMAN, HERBERT, ANTHONY MILANOWSKI, AND STEVEN KIMBALL. (2007). *Teacher Performance Pay: Synthesis of Plans, Research, and Guidelines for Practice*. Philadelphia, PA: Consortium for Policy Research in Education, University of Pennsylvania, Graduate School of Education; Kowal et al. (2008).
- 23 HORNG, EILEEN. (2009). Teacher Trade-offs: Disentangling Teachers' Preferences for Working Conditions and Student Demographics. *American Educational Research Journal* 46 (3): 690-717; Almey, Sarah, and Melissa Tooley. (2012). *Building and Sustaining Talent: Creating Conditions in High Poverty Schools That Support Effective Teaching and Learning*. Washington, DC: Education Trust. Available at: http://www.edtrust.org/sites/edtrust.org/files/Building_and_Sustaining_Talent.pdf
- 24 NATIONAL INSTITUTE FOR EXCELLENCE IN TEACHING. (2012). *TAP Research Summary*. Santa Monica, CA: Author. Available at: http://www.tapsystem.org/publications/tap_research_summary_0210.pdf
- 25 SEE: COGGSHALL, OTT, BEHRSTOC., & LASAGNA. (2009). *Retaining teacher talent: the view from Generation Y*. Naperville, IL: Learning Point Associates and New York: Public Agenda. Available at: <http://www.learningpt.org/expertise/educatorquality/genY/SupportingTeacherEffectiveness/index.php>; Milanowski, Anthony. (2007). Performance pay system preferences of students preparing to be teachers, *Education Finance and Policy* 2 (2): 111–132; Goldhaber, Dan, Michael DeArmond, and Scott DeBurgomaster. (2007). *Teacher Attitudes About Compensation Reform: Implications for Reform Implementation*. Seattle, WA: University of Washington, center for Reinventing Public Education, School Finance Redesign Project.
- 26 SEE: HIGGINS, LORI. (2012). New system in St. Clair County bases teachers' pay on merit. *Detroit Free Press*, Jun 25, 2012. Available at: <http://www.freep.com/article/20120625/NEWS05/206250327/New-system-in-St-Clair-County-bases-teachers-pay-on-merit?odyssey=tabffftopnewsffftextfflFRO NTPAGE>
- 27 MAX, JEFFREY, AND JULIE KOPPICH. (2009). *Engaging Stakeholders in Teacher Pay Reform*. Washington, DC: Center for Educator Compensation Reform, U.S. Department of Education, Office of Elementary and Secondary Education. Available at: <http://www.cecr.ed.gov/pdfs/EmergingIssuesReport1.pdf>
- 28 MCCLELLAN, CATHERINE, MARK ATKINSON, AND CHARLOTTE DANIELSON. (2012). *Teacher Evaluator Training & Certification*. San Francisco, CA: Teachscape. Available at: <http://www.teachscape.com/resources/teacher-effectiveness-research/2012/02/teacher-evaluator-training-and-certification.html>
- 29 BEHRSTOCK, ELLEN AND JENELLE AKERSTORM. (2008). *Performance Pay in Houston*. Center for Educator Compensation Reform, U.S. Department of Education. Available at: <http://www.cecr.ed.gov/guides/summaries/HoustonCaseSummary.pdf>
- 30 THE REVISED SCHOOL CODE ACT 451 OF 1976. Sect. 380.1250. Available at: <http://www.legislature.mi.gov/{S{0yaj043dx3jsfgz4uraakfa5}}/mileg.aspx?page=GetObject&objectname=mcl-380-1250>
- 31 VAN BEEK, MICHAEL. (2012). *Merit Pay Survey Results*. Midland, Michigan: Mackinac Center for Public Policy. Available at: http://www.mackinac.org/archives/2012/MeritPay2012-10_15.pdf
- 32 MAX, JEFFREY. (2007). *The Evolution of Performance Pay in Florida*. Washington, DC: Center for Educator Compensation Reform, U.S. Department of Education. Available at: <http://www.cecr.ed.gov/guides/summaries/FloridaCaseSummary.pdf>
- 33 FOR AN EVALUATION OF Q COMP SEE: OFFICE OF THE LEGISLATIVE AUDITOR. (2009). *Q Comp: Quality Compensation for Teachers. Evaluation Report*. St. Paul, MN: State of Minnesota, Author. Available at: <http://www.auditor.leg.state.mn.us/Ped/pedrep/qcomp.pdf>

This is a special series on improving the effectiveness of the nation's teachers and leaders. The briefs in the series are:

PART ONE | IMPROVING THE QUALITY OF TEACHERS AND PRINCIPALS

PART TWO | EVALUATING TEACHERS: OPPORTUNITIES AND BEST PRACTICES

PART THREE | PAYING FOR IMPROVEMENT: TEACHER COMPENSATION REFORM

PART FOUR | GETTING TEACHERS LEARNER-READY: REFORMING TEACHER PREPARATION

PART FIVE | BUILDING LEADERSHIP IN SCHOOLS

An affiliate of The University of North Carolina at Chapel Hill, The Hunt Institute is a non-partisan, nonprofit service entity that does not lobby for, or take positions on, state and federal legislation.

JAMES B. HUNT, JR.
Foundation Board Chairman
Governor of NC (1977-1985 | 1993-2001)

JUDITH A. RIZZO, Ed.D.
Executive Director and CEO

© 2014 The Hunt Institute. All rights reserved.

APRIL D. WHITE
Publisher



| www.hunt-institute.org



| [Twitter.com/HuntInstitute](https://twitter.com/HuntInstitute)



| facebook.com/thehuntinstitute



| YouTube.com/TheHuntInstitute

For additional copies of *re:VISION*, or to receive a copy via e-mail, please call 919-425-4160 or email awhite@hunt-institute.org.