

## Reforming Teacher Pay: The Search for a Workable Goal-Driven Compensation System

*How teachers are paid is once again a hot policy topic, with governors from both parties, a number of legislators, and diverse states and districts calling for a shift away from what has been primarily a seniority-based system. Instead, many would like to see a system tied more closely to desired results, whether student outcomes or a more equitable distribution of qualified teachers. This Policy Trends examines the growing interest in differentiated compensation, identifying the various purposes for which it is used and explaining why, among its different purposes, rewarding educators for improving student performance remains the most challenging. Finally, drawing on the literature and recent interviews with districts across the country that are implementing some form of differentiated compensation,<sup>1</sup> it outlines some key considerations for developing a system.*

### Why reform and why now

Since the middle of the 20<sup>th</sup> century, the great majority of U.S. school districts have based teacher pay on a single salary schedule that rewards years of experience in conjunction with degrees earned or training courses taken. The arrangement, an artifact of early civil service pay systems, was originally established to foster salary equity regardless of a teacher's gender and race or the grade level taught. Over time, teacher unions have defended a "standard single salary schedule in the name of employee equity and fairness."<sup>2</sup> The 1970s and 80s brought experiments with "merit" pay, by which teachers were awarded pay increases based on their administrator's subjective judgment of their prior year's performance.<sup>3</sup> But poor system design tended to undermine teacher morale and stymie teamwork, while underfunding meant that some teachers ended up with only psychic rewards for their efforts.<sup>4</sup>

Despite this rocky start, the idea of results-focused compensation is gaining traction, due partly to the standards-based

accountability movement, begun in the 1990s. As accountability-oriented policy-makers and practitioners work to ensure alignment of curriculum, assessment, and instruction with standards, they confront the reality that, alignment's critical role notwithstanding, student performance pivots on effective teaching. No Child Left Behind recognizes this reality in its requirement for a qualified teacher in every classroom.

Since its initial call to action in 1996,<sup>5</sup> the National Commission on Teaching and America's Future has tracked the nation's progress toward having a qualified teacher in every classroom, and its recent summary report has identified teacher retention as the number one problem for schools today.<sup>6</sup> Noting that raising salaries alone isn't sufficient to address this problem, the commission proposes adding "pay for knowledge and skills that contribute to improved student achievement."

At the same time, there is a growing chorus calling for greater professionalization of teaching as a career. For the nation's

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governors and some members of the business community, this means running schools more like businesses, with pay-for-performance incentive systems.<sup>7</sup> For advocates of union reform and progressive union leaders, such as those in Minneapolis, Denver, and Columbus, Ohio, this means a salary schedule that gives teachers more choices, opportunities, and options.

On a different, but parallel track are arguments that teacher compensation in general must increase in order to elevate overall teacher quality and attract more individuals to the profession.<sup>8</sup> Yet, while it may well be that in many places teacher compensation remains relatively low given the skills and knowledge required for success, research from the 1980s showed that across-the-board raises are ineffective in addressing quality and shortage problems.<sup>9</sup> In other words, rewarding all teachers similarly without regard to difficulty of assignment, type of professional role, or quality of performance creates no incentives to fill systems gaps that impede student performance. It is to provide just this kind of incentive that some districts are turning to differentiated compensation.

### Today's broader vision for differentiated compensation

Ronald Ferguson and Allan Odden<sup>10</sup> point to the strong positive impact of teacher skills on student performance — skills such as using class time efficiently, administering relevant lessons, and fostering a respectful classroom environment. But they and others point to the dearth of compensation structures for attracting and keeping such skilled teachers. In fact, while virtually all teachers are evaluated annually,

few systems offer any significant monetary rewards for a positive evaluation. Instead, the traditional bases for pay raises in K-12 education are certifications and advanced degrees, neither of which in and of itself has a statistically significant impact on student improvement. Differentiated compensation is intended as a way of rewarding skilled teachers. But it also is being used to attract them and make sure they are working where they are most needed.

Because there is no broadly used definition of differentiated compensation and because districts and states that might be interested in trying out new approaches to pay are at varying stages of reform, from early exploration to full implementation, it is impossible to precisely quantify this trend. Drawing on a review of the research literature and secondary sources, including the popular press, and on word-of-mouth within the education community, the authors of this *Policy Trends* have identified 20-some district-initiated compensation reform efforts across the country and 8 state-initiated efforts. Additional states and districts have issued public statements of intent to pursue some form of compensation reform.

No longer just about merit pay, the compensation debate today frames teacher and even administrator compensation (See “What About Administrators?”) as a strategy for overcoming identified barriers to student learning. Thus, in today’s differentiated pay systems, teachers may get bonuses, start higher on the salary scale, or move more quickly up the scale if they:

- *Teach in hard-to-fill content or instructional areas or high-priority schools.* In recent years, teacher shortages have existed in several subject or instructional areas (math, science, technology,

## WHAT ABOUT ADMINISTRATORS?

Most districts that include site administrators in their differentiated compensation program do so through a schoolwide award component. For example, in Aldine (Texas) Independent School District, awards to schools typically range from \$80,000 to \$120,000, depending on the size of the school. Although each case is different, a recognized elementary school principal may receive an award of \$7,000; an assistant principal, \$4,500; and teachers, from \$500 to \$1,000. A principal of a large, recognized high school may receive \$18,000; assistant principals, \$9,000; and teachers, \$1,500. Aldine has taken the additional step of implementing a goal-setting differentiated compensation process for central office staff. For example, the Information Technology division must turn around work orders within two days and maintain a 90 percent customer satisfaction rating in order to qualify for additional compensation; similarly, the district’s human resources staff are charged with adding three university partnerships each year and maintaining an employee vacancy of less than 1 percent.

special education, English learner instruction). Some rural districts and urban districts serving high-poverty students have had difficulty finding enough qualified teachers in general to fill their teaching slots. (See “Pay for Position.”)

- *Take on additional professional responsibilities.* Some districts offer additional compensation for teachers who mentor novice teachers or serve as an evaluator in a peer review system.
- *Acquire valued knowledge and skills.* Historically, teachers in many states and districts have been able to take a step or two up the salary ladder by earning an advanced degree in almost any subject area. The difference today is that many districts or states are trying to use this approach more strategically. (See “Rewarding National Board Certification,” page 4.) For example, a district experiencing a shortage of bilingual teachers may offer incentive pay to teachers who earn certification in that area.
- *Improve student performance.* Some states and districts have focused on how incentive pay might be used to

reward — and therefore encourage — work leading to higher student performance. States (e.g., Florida and Texas) and districts (e.g., Aldine, Texas and Columbus, Ohio) are offering schoolwide and/or individual bonuses for student achievement results.

Even the most seemingly straightforward use of incentive pay, like offering a signing bonus to attract qualified teachers to hard-to-staff positions, can be controversial. After all, how to allocate limited resources is always a value judgment: Do you pay more for science teachers or those skilled in working with English learners? Should a hard-working general education teacher get paid less than one who teaches special needs students? But it’s in tying compensation to student performance — what this paper refers to as pay for performance — that things really get complicated.

### *Performance pay: The greatest challenge*

Virtually no rigorous and up-to-date education research studies exist on the relationship of teacher compensation to student achievement.<sup>11</sup> One that does — Dee

## PAY FOR POSITION

Pay-for-position programs typically use bonuses or supplemental pay as enticement to recruit teachers for positions in hard-to-staff teaching specialties such as science and special education or in high-needs schools that have significant teacher turnover and a need for experienced teachers. The extra pay may be permanent, or teachers may just start at a higher-than-normal step on the salary schedule. In other cases, teachers may receive a one-time signing or hiring bonus or, even, in some districts, a housing allowance. Teachers may also be offered monetary incentives to take on additional responsibilities such as mentoring novices and/or evaluating colleagues in a system of peer review.

Districts are currently offering anywhere from \$1,500 to \$4,000 annually to fill hard-to-staff positions. As part of its “Transformed Schools” initiative, Mobile County (Alabama) Public Schools recently began offering a recruiting bonus of \$4,000 for teachers to work in one of the district’s five lowest performing schools. In a recent interview,<sup>12</sup> one Mobile principal said it was this signing bonus “that allowed me to attract top teachers.” Likewise, human resource professionals in Aldine Independent School District have said they would not be able to meet their ongoing need for bilingual teachers without being able to offer a \$2,500 recruiting incentive.

and Keys’s 2005 randomized study of the effect of Tennessee’s former merit pay plan, the Career Ladder Evaluation System — shows mixed results. The researchers found that assignment to a career-ladder teacher significantly increased students’ mathematics scores by roughly 3 percentile points. But it also found that career-ladder teachers were not significantly more effective at promoting reading achievement. Moreover, assignment to a teacher who had advanced further up the career ladder was not uniformly associated with significantly higher achievement.<sup>13</sup>

Some research about individual employee motivation suggests that individuals perform well in a system where they believe their efforts will produce results, their performance will lead to rewards, and the rewards they will receive are valuable.<sup>14</sup> But examination of the impact of incentive systems on organizational effectiveness also shows mixed results. Such impacts are difficult to measure given the combination of incentives used by various organizations.<sup>15</sup>

A lack of empirical evidence supporting the value of pay-for-performance systems in education has not dampened enthusiasm for it. Many states and districts are continuing to examine how compensation reform might help them get better results out of the critical 40-60 percent of their education budget dedicated to teacher salaries. In doing so, they must be prepared to address several worries that have been associated with differentiated compensation since its inception in the form of merit pay. Chief among them is the question of how to equitably hold an individual teacher accountable for the achievement of his or her students when student learning is affected, for better or worse, by multiple factors over which that teacher has no control, including students’ home and community experiences and the effectiveness of prior teachers. Other concerns include the possible unintended consequences of a pay-for-performance system, such as diminishment of valued teacher collaboration and teacher inclination to focus instructional efforts only on their highest performing students.<sup>16</sup>

## *Program variation yields some common threads*

At this stage, huge variation exists among new pay structures being tried across the country. No single “best” performance-based teacher compensation system has emerged and, given diverse state and district contexts, it’s unlikely that any particular approach would be appropriate across the board anyway. But as states and districts continue to experiment, lessons are being learned and the knowledge base is growing. Given the lack of research and the newness of many programs, it’s impossible to even identify best practices. What has become clear, however, is that a number of design and implementation issues are best considered prior to initiating a differentiated compensation program. These issues are outlined below, with some examples of how different compensation programs have opted to deal with them.

### *Identify program design components.*

Those developing pay-for-performance compensation systems will need to consider two major design decisions: whether to reward individual or group performance or both and what kind of performance to reward. These decisions should be driven by the goals of the program, that is, the kinds of teacher or administrator behaviors and the student outcomes the system is intended to encourage. Choices will also be influenced by contextual factors such as the relationship between the district and its teachers, the availability of appropriate student achievement assessments, and the capacity to track data and report results.

### *Who gets the reward?*

States and districts must decide whether to offer incentives for individual performance

or team performance. Each approach has advantages and disadvantages. Implementing team awards, whether school-wide or for grade-level or content-area teams, is intended to support collaboration. One concern, however, is that one or two “non-contributors” can end up unfairly penalizing all other participants no matter how collaborative and effective they might be.

On the other hand, there is concern that rewarding individual teachers can undermine collaboration and, especially if funding is limited, can spur unhealthy competition. This unintended consequence could diminish a school’s capacity to reach school performance targets.

Some districts are attempting to capitalize on the best of both approaches, offering incentives for individual teachers to improve their performance even as group or school-wide rewards are also offered. For example, in Mobile County Public School Systems’ Transformed Schools program, teachers can earn up to \$4,000 in an end-of-year bonus. They can earn 50 percent of the award if the school meets its state performance goals, an additional 40 percent if they meet their individual performance goals, and 10 percent if their grade- or content-cluster team meets its goals.

Although it has not been documented, the trend seems to be that highly unionized districts and states focus on individual teacher awards. This may be in response to union efforts to increase overall teacher pay and provide all teachers with individualized skill improvement opportunities. In addition, highly unionized districts, such as Denver and Minneapolis, tend to use salary increases as the teacher reward rather than offering a bonus that can be earned annually

## REWARDING NATIONAL BOARD CERTIFICATION

All 50 states, including the District of Columbia, and approximately 544 school districts across the country reward teachers for gaining certification from the National Board for Professional Teaching Standards (NBPTS). States and districts that offer such incentives have seen significant increases in the number of participants. In Denver, for example, the number of district teachers who are NBPTS-certified has grown from 16 to 50 over the past decade. Financial awards for NBPTS certification are typically about \$2,500 and are sometimes funded jointly by the state and district. An analysis of knowledge- and skills-based pay systems suggests that using this existing model of teacher standards with its established evaluation rubrics may be the most efficient way to get a new performance pay program going.<sup>17</sup>

but does not increase an individual’s salary or, in turn, his or her pension.

### *What’s the basis of the reward?*

A critical consideration is whether to offer rewards based on students meeting a specific achievement level (e.g., X number of students will pass all grade-level assessment) or based on students making agreed-upon academic progress (e.g., all students will gain X points on the state achievement test). Standards-based awards are most typically seen in programs that reward schools for meeting state performance goals, such as making adequate yearly progress (AYP). Though they are similar to awards for meeting state performance targets, *progress*-based awards differ in that they tend to recognize – and attempt to reconcile – the fact that in many schools a large portion of students enters performing far below grade level. These awards are intended to reward teachers for improving student learning even if their students or schools don’t reach standard. In Florida’s system, for example, schools can receive a bonus if they raise their “grade” level from a “C” to a “B” or maintain an “A” grade. North Carolina has implemented a similar system, which rewards schools based on student progress on end-of-grade and end-of-course assessments.

Individual rewards are more typically based on student progress, awarded to teachers whose students demonstrate academic progress as measured by a particular assessment. Several districts, including Denver and Columbus, have programs in which central office staff or school principals confer with teachers to set student-growth goals appropriate for the given grade level and subject area. The key to implementing this type of system is ensuring that teachers have access to valid and reliable assessment instruments. This is not always the case when it comes to measuring performance in subjects beyond the common core of reading and mathematics, such as social studies, art, and foreign languages. One advantage of this approach is that it allows teachers to apply their professional judgment in setting progress goals based on current student performance. One challenge is to ensure that the goals of an individual teacher align with schoolwide goals. For example, little is gained if a teacher chooses to work on student vocabulary when state assessments show that students have already mastered vocabulary and need more work on reading comprehension. Many districts address this challenge by requiring teachers to document their plans and, in the process, show that their goals align with school and district improvement plans.

## GAUGING THE TEACHER'S ROLE IN STUDENT PERFORMANCE

Recent research by William Sanders has made it more feasible to equitably hold teachers accountable for how much their students progress during the time they are in a particular teacher's charge. Sanders' "value-added" approach attempts to separate student effects (ethnicity, family background, socioeconomic status) from school effects (teachers, administrators, programs). It then projects a test score for each student based on previous academic achievement. The difference between the student's actual score and his projected score is the value added by the teacher.<sup>18</sup>

Value-added assessment is promising but controversial. Disagreement surrounds the methodology and the choice of background characteristics that should be controlled. In any case, implementing a comprehensive value-added data system is far from easy. It requires notable capacity for individual student tracking as well as content and performance standards that are well articulated (across grades and subjects) and tightly aligned with state tests that are consistent from year to year.<sup>19</sup> Despite these concerns, Ohio and Pennsylvania are now working to incorporate value-added models into their accountability systems, joining existing efforts in Tennessee, North Carolina, Arizona, and Florida. Several other states are also considering the step.<sup>20</sup>

No matter who sets the goals and chooses the assessment, whenever a teacher or school is evaluated on student performance, the issue of fairness comes up: should educators be held accountable for factors that affect student performance but are outside the control of the school? To address this concern, researchers have been working on a means of isolating and, therefore, better gauging a teacher's contribution to student performance. A "value added" measurement approach is being developed and used in several states and districts. (See "Gauging the Teacher's Role in Student Performance.")

### *Support teachers to reach their professional goals.*

To serve most effectively and equitably as a means of improving overall teacher quality and, thereby, raising student achievement, a pay-for-performance system must do more than merely reward success. It must offer teachers both the incentive and the opportunity to improve, to further develop their knowledge and skills.

Mobile County's Transformed Schools program was designed to help the district's lowest performing schools meet AYP targets. Teachers are recruited specifically for the low-performing school and they receive a year-end bonus for reaching student achievement goals. To help them do so, the district provides extra support, including, for example, on-site literacy and math coaches and professional development related to using student achievement data to target instructional interventions.

The Mobile program is similar to the Milken Teacher Advancement Program (TAP) now being implemented in over 100 schools in 11 states. Teacher development is an essential component of TAP, with participating schools restructuring the school day to give teachers more time to work with each other: mentoring, planning, and learning. (See "Supporting Teachers to Improve Student Achievement.") Data is systematically used to identify the professional development needs of individual teachers to help them become more successful with their students.

A differentiated compensation program must also ensure that teachers have the tools they need (e.g., standards-based materials) and a supportive environment (e.g., an effective site administrator, safe working conditions).<sup>21</sup>

### *Ensure adequate program funding.*

Determining how to pay for a differentiated compensation system is a critical early step because, although some believe that current budget money can be reallocated to support the program, states and districts are finding that sustainable programs are not cost neutral. Several states, North Carolina and Florida, for example, have had to supplement their original budget projections with additional funding in order to fulfill promised bonuses.<sup>22</sup> While those states were able to find additional funding, that's not always the case. California and Columbus, for example, have had to renege on promised school-based bonuses because of irreversible budget shortages, a frustrating setback for participants and program managers alike. In a recent interview, leaders in Columbus suggested identifying a funding source other than the district's general fund, one that is not subject to changes made by state legislatures.<sup>23</sup>

The best approach is to fund a program with the expectation that all participants will reach their goals and earn the maximum reward. For example, Aldine calculates an annual set-aside — \$4.5 million for the 2005-06 school year — based on what it would need to pay if all teachers, principals, and central office staff were to achieve their goals and earn the highest allowable performance bonus. The funding comes primarily from the district's general fund, but the district also uses some Title I money to pay bonuses earned by teachers working in

schools that receive Title I funds. In developing its new compensation program, Denver engaged a financial modeler. Based on its projections for necessary program funding, the district asked for and received (in November 2005) voter approval for an increase in property tax; the new revenue will be used to create a trust that will provide full funding for the program.

### *Manage a performance-based system.*

Once a state or district has determined the measures for evaluating teacher performance and has identified funding sources for the awards, it must assign the personnel and make sure it has an adequate technology infrastructure to support implementation.

To lead and monitor implementation, many districts appoint a leadership team comprising both a district and a union leader. Such leadership is critical, but so too are dedicated line staff. Districts and states now operating differentiated compensation systems note that human resource and payroll staff, as well as those who monitor student achievement data, must be well coordinated and equipped with a robust technology system to track student progress and administer performance pay systems. Once a teacher reaches his or her goals for increasing student achievement, the central office staff must verify the award and be sure that the right amount gets to the right person on time. Snags in receiving payment after having worked hard to achieve their goals can cause participants to lose confidence in the system. To ease the burden on schools and the district's payroll staff, Aldine's human resources department has created a simple form each school can use in verifying teacher records and attendance prior to the award payment each year. Instead of having each school submit its teacher roster, frequently

## SUPPORTING TEACHERS TO IMPROVE STUDENT ACHIEVEMENT

The Teacher Advancement Program (TAP), developed by the Milken Family Foundation, is intended to offer teachers differentiated pay for taking on master- or mentor-teacher responsibilities, demonstrating successful classroom performance, and generating student achievement gains. The program has four key elements: offering multiple career paths for teachers (not limited to taking on administrative roles); facilitating professional development during the school day; establishing accountability measures for teacher and student performance; and implementing market-driven compensation based on responsibilities and achieving performance targets. The TAP Foundation works closely with state and district leaders to create the program and provides technical assistance for school implementation and program evaluation.

In recent interviews,<sup>24</sup> several Minneapolis teachers and principals commented that the job-embedded professional development was a key strength of the TAP program. The program requires that each school create teams or "clusters" of teachers led by mentors and master teachers. The mentor and master teachers conduct classroom observations, offer model lesson demonstrations, and facilitate weekly cluster meetings during the school day to introduce successful instructional practices. Teachers in Minneapolis observed that the weekly team meetings have increased the professionalism and collegiality of their school culture, have helped them to plan further ahead for instruction, have helped them more routinely use data to inform their instruction.

in different formats from school to school, the district template allows principals to quickly make updates right on the form and provide the edited report to payroll. This effort has reduced payment errors since the beginning of this 10-year-old program.

### *Engender buy-in through effective communication.*

Because pay is a sensitive issue for most people, clear and consistent communication about a pay-for-performance program is essential for building participants' trust. Teachers interviewed recently in Denver said that in deciding whether to sign up for the district's new ProComp program, they did not want to get their information from the district by email or newsletter. Rather, they wanted a trusted individual to visit their school, explain the program, and answer their questions. While anecdotal, this response is worth noting. When dealing with something as important as people's

pay, the more personal the communication the better.

Labels also matter. For example, many recent newspaper articles and case studies refer to "hard-to-staff schools" or talk about awarding "combat pay."<sup>25</sup> Such references can offend educators and parents alike at a time when programs are seeking broad support. Recent proposals for performance pay in Minnesota, Denver, and Mobile County have referred to "professional" or "quality" compensation and instead of referring to schools as "hard to staff" have used labels like "priority schools" or "transformed schools." The point is to send positive messages about a program to local stakeholders and the media.

### *Evaluate for continuous improvement.*

The success of a differentiated compensation program should be judged by how well it contributes to meeting state and

## INDIVIDUAL INCENTIVES TO IMPLEMENT RESEARCH-BASED STRATEGIES

Since 2000-01 Columbus Public Schools' Performance Advancement System (PAS) has rewarded individual teachers for improving student performance. PAS is a voluntary pay-for-performance program through which individual teachers can gain recognition and a monetary award by documenting the use of research-based instructional strategies with resulting growth in student achievement. Any member of the Columbus Education Association (CEA) bargaining unit can participate.

The program operates on a two-year cycle. During the first year a participating teacher selects from a menu of research-based instructional strategies,<sup>26</sup> choosing a strategy to use with his or her students. Each participant also identifies one or more assessment instruments that will be used to measure student progress at multiple points during the year. Guided by the resulting data, teachers adjust, adapt, or change their instructional strategy to meet student needs.

Participants must complete a final report that includes both their reflections on using the strategy and organized data on student performance results. A committee comprising CEA and district leaders reviews the reports and either accepts or rejects them based on established criteria. The formative assessment data from the reports that are accepted are then sent to an independent agency for evaluation. Participants whose average-student-score increases are greater than the district's average gains on the same assessments receive a \$2,500 stipend. In year two, teachers can earn an additional \$2,500 stipend for documenting replication of the strategy in their classroom and/or sharing their successful practices school- and districtwide.

district goals for student achievement. Districts like Aldine, Charlotte-Mecklenburg (NC), Columbus, Douglas County (CO), and Mobile County are closely monitoring student achievement gains, examining instructional practices that are working for teachers at the school levels, and sharing those practices with others in the district. In fact, Columbus has recently created a website for sharing practices that teachers have used successfully while participating in the district's Performance Advancement System.<sup>26</sup> (See "Individual Incentives to Implement Research-based Strategies.") Florida asks schools that have received a recognition award to share practices that have contributed to their improved rating.

### *The need to know more*

Growing pressure to improve student achievement, NCLB's requirements for

highly qualified teachers, the growing interest in "value-added" measurement, teachers' interest in having more professional growth options — all these factors signal support from a variety of constituencies for states and districts to take on the challenge of reforming teacher compensation. But in doing so, planners need better evidence about what works, about what *program* components and practices contribute to improving teacher performance and, therefore, student learning. Programs must be rigorously studied. Districts and states now experimenting, as well as those about to undertake reform, should extensively document program variables and results to enable detailed research and analysis.

Equally valuable is identifying and recording the practices of teachers and schools that are achieving success under differentiated compensation programs. Districts and states must find ways of harvesting the successes and using that knowledge to seed success

more broadly. To that end, districts must give teachers and school administrators the time to reflect on and document their work and the opportunity to share what they learn from that effort.

## INFORMATION RESOURCES

The following websites offer more information about teacher compensation reform efforts:

Education Commission of the States' website provides information for policymakers related to redesigning teacher compensation systems. <http://www.ecs.org/html/issue.asp?issueid=129&subissueID=78>

Consortium for Policy Research in Education's site features research articles and descriptions of state and district practices related to teacher compensation. <http://www.wcer.wisc.edu/cpre/tcomp/>

Minnesota's Quality Compensation is modeled after the Milken Family Foundation's Teacher Advancement Program and the state's districts and schools can apply to participate. [http://education.state.mn.us/mde/Teacher\\_Support/QComp/](http://education.state.mn.us/mde/Teacher_Support/QComp/)

Denver Public Schools operates a new pay-for-performance program that was approved for funding by local voters in November 2005. <http://denverprocomp.org/>

Charlotte-Mecklenburg (North Carolina) Schools offers various incentive programs related to teacher recruitment, retention, differentiated staffing, and pay for student performance increases. <http://www.cms.k12.nc.us/departments/HR/recruitment.asp>

## ENDNOTES

- 1 Edvance. (2005). [Unpublished interviews with staff from five diverse district compensation programs.] Austin, TX: Author.
- 2 Koppich, J. (2005, Winter). All teachers are not the same: A multiple approach to teacher compensation. *Education Next*, p. 13. Stanford, CA: The Hoover Institution, Stanford University.
- 3 Milanowski, A. (2003, January 29). The varieties of knowledge and skill-based pay design: A comparison of seven new pay systems for K-12 teachers. *Education Policy Analysis Archives*, 11(4). Retrieved April 11, 2003 from <http://epaa.asu.edu/epaa/v11n4/>.
- 4 Koppich.
- 5 National Commission on Teaching and America's Future. (1996). *What matters most: Teaching for America's future*. New York: Author.
- 6 National Commission on Teaching and America's Future. (2003). *No dream denied: A pledge to America's children*, (p. 29). New York: Author.
- 7 National Education Summit. (1999). *1999 Action statement*. Retrieved October 1, 2005 from [http://www.achievethe.org/achieve.nsf/1999Summit\\_ActionStatement](http://www.achievethe.org/achieve.nsf/1999Summit_ActionStatement).
- 8 National Commission on Teaching and America's Future. (1996).
- 9 Ballou, D., & Podgursky, M. (1997). *Teacher pay and teacher quality*. Kalamazoo, MI: Upjohn Institute.
- 10 Odden, A., & Wallace, M. *Teacher performance pay – The next steps*; and Ferguson, R. *The impact of teacher (and teaching) quality on student performance*. CPRE. Conference keynote presentations 1 and 4; November 11-12, 2004.
- 11 Edvance.
- 12 Shavelson, R.J., & Towne, L. (Eds.). (2002). *Scientific research in education*. Washington, DC: National Academies Press; Loeb, S., & Page, M.E. (2000). Examining the link between teacher wages and student outcomes: The importance of alternative labor market opportunities and non-pecuniary variation. *Review of Economics & Statistics*, 82(3), 393-408.
- 13 Dee, T.S., & Keys, B.J. (2005, Winter). Does merit pay reward good teachers? Evidence from a randomized experiment. *Education Next*. Stanford, CA: The Hoover Institution, Stanford University.
- 14 Milanowski.
- 15 Katz, N. (2000, June). *Incentives and performance management in the public sector*. Presented at the Public Sector Performance Management 4th Executive Session at the John F. Kennedy School of Government, Cambridge, MA.
- 16 Hassle, B.C. (2002, May). *Better pay for better teaching*. Washington, DC: Progressive Policy Institute.
- 17 Milanowski.
- 18 Wright, S., Horn, S., & Sanders, W. (1997). Teacher and classroom context effects on student achievement: Implications for teacher evaluation. *Journal of Personnel Evaluation*, 11, 57-67.
- 19 Olson, L. (2004, November). Researchers debate merits of "value added" measures. *Education Week*, 24 (12), 15.
- 20 Olson, L. (2004, November). "Value added" models gain in popularity: Growth yardstick appeals to states. *Education Week*, 24 (12), 14.
- 21 Koppich.
- 22 National Governors Association. (2001, October 18). *Rewarding teacher quality: A tool for developing and implementing effective incentive pay programs*. Washington, DC: Author. Retrieved August 17, 2005 from <http://www.subnet.nga.org/incentivepay/>.
- 23 Edvance.
- 24 Edvance.
- 25 Martin, M. (2005, April 26). Governor proposes teacher "combat pay." *San Francisco Chronicle*. Retrieved from <http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2005/04/26/BAG82CF5K41.DTL>. Last accessed November 21, 2005.
- 26 Marzano, R., Pickering, D.J., & Pollock, J.E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.

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