



RESEARCH CAPSULE

Research Services

Vol. 0508
March 2006

Christie Blazer, Sr. Research Analyst

PERFORMANCE PAY FOR TEACHERS

AT A GLANCE

In an effort to attract and retain high quality teachers, an increasing number of school districts are experimenting with salary schedules that reward teachers for their students' improved performance. This research capsule summarizes the characteristics of effective performance pay systems, examines why performance pay plans fail, and explores issues surrounding the design of alternative compensation systems. Performance pay plans being implemented around the country, including those in Denver, the state of Minnesota, and Houston, are summarized and studies that have been conducted on alternative compensation plans are reviewed. Finally, an overview of research on alternative compensation plans including those in Miami-Dade County Public Schools (M-DCPS) and the state's new E-Comp plan, is provided.

INTRODUCTION

The traditional salary schedule for teachers, based on years of experience and levels of education, dates back to 1921. It was originally designed to ensure that teachers were paid fairly regardless of their gender or ethnicity or the educational level of the students taught (elementary, middle, or senior high). The single salary schedule was based on the premise that the more an individual knows about a task and the longer he or she performs that task, the better he or she will be at the task. The schedule was seen by most as fair and predictable, since teachers knew in advance the objective criteria to determine salary advancement (American Federation of Teachers, 2005; Delisio, 2003a; Kelley, 2000).

Recently, the single salary schedule has been criticized for not holding teachers accountable for student learning and for failing to reward teachers for using outstanding teaching methods. The schedule has not produced teacher salaries that are competitive in the current job market and does not respond to market forces (such as shortages in particular teaching fields). Furthermore, it discourages young teachers from entering or staying in the teaching profession, since most schedules require 20 years of service and a doctoral degree to make significant salary advances (American Federation of Teachers, 2005; Plucker et al., 2005; Hinerman, 2002; Kelley, 2000).

In an effort to attract and retain high quality teachers, a growing number of school districts are experimenting with salary schedules that reward teachers who accelerate student learning and are willing to take on the most challenging assignments. Large variations exist among new salary schedules being tried across the country. Alternative compensation plans currently being implemented in states

and districts in the United States offer incentives for improved student performance, acquiring valued knowledge and skills, taking on additional professional responsibilities, and teaching in hard-to-fill content or instructional areas or at high-priority schools (Milken Family Foundation, 2005; WestEd, 2005; Hassel, 2002).

CHARACTERISTICS OF EFFECTIVE PERFORMANCE PAY SYSTEMS

No single best performance-based teacher compensation system has emerged and, since pay plans should be developed within the context of local needs, it is unlikely that any one approach will be appropriate for all schools and districts. However, a review of the literature on alternative compensation systems has identified thirteen shared characteristics of successful performance pay plans.

1. Involvement of all stakeholders in the design of the system. Developing a performance pay system should be a collaborative effort, involving all stakeholders from the beginning. Teachers, administrators, parents, policymakers, the public, and the media all have an interest in the new system. Because stakeholders have varying perspectives and goals, involving them in all phases of program design and implementation increases the likelihood that the plan will be acceptable to them and adapted to district needs (Azordegan, 2005; Milanowski, 2003; Hinerman, 2002; Odden & Kelley, 1995).

The best way to build trust between administration and teachers is to involve teachers in all phases of program development. The design team should be representative of teachers at all school levels and specialty areas. Research shows that when teachers are involved in the design of the program, it maximizes the likelihood of teacher/union approval and often improves the program's effectiveness (Azordegan et al., 2005; Hinerman, 2002; Odden et al., 2001; Wyman & Allen, 2001).

2. Communication with all stakeholders. Stakeholders must be educated on the new performance pay system. Clear and consistent communication about performance pay programs with all stakeholders helps promote

acceptance and an ongoing understanding of the program. Teachers' acceptance of the plan and their perceptions of its equity increase when the communication is on a personal level. For example, an individual visiting each school to explain the program and answer questions is more effective than distributing printed materials to teachers (West Ed, 2005; Delisio, 2003a; Odden & Kelley, 1995).

3. Development of performance pay systems within the local context. Looking at the experiences of other districts and states that have implemented alternative teacher pay systems can be helpful, but the exact design of the compensation program must be developed in the local context. It is important to recognize that the unique characteristics of each state and district make it impossible to exactly replicate a system that has been implemented successfully elsewhere. Alignment of performance pay plans with the district's structure and culture is critical. Other factors that must be considered are the district's fiscal policies, data gathering and dissemination capacity, and the availability of a professional evaluation system and high-quality professional development (Hassel, 2002; Wyman & Allen, 2001; Odden & Kelley, 1995).
4. Adequate funding of the new system. Adequate and stable funding must be assured to the extent possible. Lack of a long-term funding commitment has been a key reason for the failure of many compensation reform efforts in education. States and districts are finding that sustainable programs are not cost neutral. The best approach is to fund a program with the expectation that all participants will reach their goals and earn the maximum reward. Funding that is integrated within the district's financial structure is less likely to be vulnerable to cuts than a separate funding pool (West Ed, 2005; Odden & Kelley, 1995).

Performance pay systems are likely to require additional investments, including higher salaries, the cost of increased professional development, additional administrative overhead (including human resources and payroll staff, as well as those who monitor student achievement data), and a technology system to track student progress and support

program implementation. Although alternative compensation plans can lead to increases in productivity and greater flexibility in staff utilization, their success typically will not allow for reductions in staff or savings in materials or equipment (West Ed, 2005; Milanowski, 2003).

5. Long-term commitment to the new system. Districts must continually review and revise the pay program to ensure its long-term success. Even the most well-designed plans will initially have unexpected challenges that require ongoing attention. Organizations need persistence to continue implementation, revise the plan when problems are identified, and encourage full participation to see how the plan works when fully implemented (Wyman & Allen, 2001; Odden & Kelley, 1995).

Stakeholders must exhibit patience with new compensation programs, as transitions will be challenging and improvements in teacher quality and student achievement may not be immediate. Districts must ensure that teachers receive the right amount of money in a timely fashion. Delays in receiving payment after working hard to achieve goals can cause teachers to lose confidence in the system (Azordegan et al., 2005; West Ed, 2005; Reichardt & Van Buhler, 2003; Odden et al., 2001).

6. No quotas. Experts agree that incentives should be available to all eligible teachers. Quotas, whether minimum or maximum, should be avoided and all teachers meeting targets should be rewarded. Competing for a limited number of awards discourages cooperation and collaboration among teachers (Milken Family Foundation, 2005; Plucker et al., 2005; American Federation of Teachers, 2002; Solmon & Podgursky, 2000; Odden & Kelley, 1995).
7. Implementation of a multi-pronged system. The most promising compensation systems use multiple factors to measure teacher performance. These systems incorporate measurable criteria of assessment, including gains in student achievement, increased teacher skills and knowledge, and expanded roles and responsibilities. A University of

Southern California Policy Institute (2005) roundtable concluded that effective compensation systems use student achievement data as one component of a series of measures to determine teacher quality. Hess (2004) reported that, in their rush to embrace performance-based compensation, some reformers reduce the definition of teaching excellence by relying only on assessments of student performance to gauge teacher quality. Tests are imperfect and incomplete measures of learning and teachers contribute to student learning in many ways that may not be evident on a given assessment (for example, mentoring other teachers or helping to improve the effectiveness of colleagues in other ways; counseling troubled students; helping maintain school discipline; or remediating students on materials that will not be tested). Solmon and Podgursky (2000) believe teacher compensation should depend on teacher functions (tasks done and how well), teacher achievement (awards, relevant degrees), teacher performance (as judged by experts), and student achievement (as defined by multiple measures, including test scores, portfolio assessments, and attendance).

8. Identification of clear performance criteria. When incentive pay plans are well-designed, there is agreement on the desired results and how they will be measured. The plans are based on credible standards and measures of professional practice and the evidence upon which these standards are based is easily understood and apparent to all. Studies have found that when pay systems are seen as unfair, it is usually because they are based on criteria that are vague and subjective (Azordegan et al., 2005; Feldman, 2004; American Federation of Teachers, 2002; Lashway, 2001).
9. Use of valid and reliable assessments and measurement of student gains. To ensure that student achievement is fairly and accurately measured, districts should use valid and reliable assessment instruments. Assessments should be aligned to student learning standards and carefully tied to the instructional materials used in the classroom. When designing performance pay plans, policy-makers have struggled with the lack of well-

designed assessments available for measuring student progress in subjects beyond the common core of reading and math, such as social studies, art, and foreign languages (Milken Family Foundation, 2005; West Ed, 2005).

Another area of concern is that performance pay systems hold teachers accountable for the achievement of their students, even though student learning is affected by multiple factors over which the teacher has no control. These factors include students' home and community experiences, the effectiveness of prior teachers, student motivation, class size, and the availability of instructional resources. In the past, some performance pay systems relied on absolute measures of performance, without considering the student's achievement level prior to coming into a teacher's classroom.

It is important to recognize and account for factors outside a teacher's control and to fairly measure and attribute teacher performance to student achievement. One way to accomplish this is through the use of value-added assessment, or holding teachers accountable for the achievement gains of students rather than for their absolute achievement. The value-added approach shows how each student performs on a year-to-year basis, compared to his or her expected score, which is calculated on the basis of the student's results on prior tests. At the same time, a student's performance is tracked against the performance of his or her peers. Both sets of results can be used to gauge an individual teacher's effect on student learning and minimize outside influences by controlling for factors such as students' past educational deficits, family background, ethnicity, and socioeconomic status (The American Legislative Exchange Council, 2005; University of Southern California, 2005; West Ed, 2005; Lashway, 2001; Solmon & Podgursky, 2000). The Teaching Commission (2004) has concluded that value-added methodology is not perfect but, at the present time, it is the most promising technique available.

10. Use of fair and valid teacher evaluation systems. Effective performance pay plans utilize a professional evaluation system that is tied to a knowledge and skills component of the

compensation system. The evaluation system must be fair and measure areas for which teachers can legitimately be held accountable. The criteria for the evaluation must be made clear and the process must be uniform. Teacher evaluations should offer diagnostic feedback and align with teacher performance standards and intended outcomes. They should incorporate a variety of measures, including teacher portfolios, demonstrations of teaching skills and knowledge, student test score gains, and teacher and student attendance. Evaluations should be based on multiple, independent observations of teacher performance throughout the school year and they should be conducted impartially by trained personnel. Studies suggest that when evaluations are conducted by a combination of internal and external educators (for example, the principal, a master teacher, and an external evaluator), perceptions of bias and favoritism are reduced (University of Southern California, 2005; Milanowski, 2003; Wyman & Allen, 2001; Solmon & Podgursky, 2000).

System designers caution against setting evaluation standards too low. High performance standards should not be defined as those things that everyone does. Less rigorous standards lead to over identification of teachers as excellent, resulting in systems that do not accurately measure performance and districts that then pay more than expected (University of Southern California, 2005).

11. Teachers receive rewards for assuming additional responsibilities. In addition to rewarding teachers who are most effective in helping students learn, school districts should create advancement opportunities for successful teachers who want to stay in the classroom. For the most part, teachers view moving out of the classroom as the only way to improve their earnings and assume leadership roles. Teachers must be given incentives to remain in the classroom. The differential staffing or "master teacher" component of alternative pay plans typically uses an organizational hierarchy or career ladder to compensate teachers on the basis of experience and qualifications. Teachers are assigned additional professional responsibilities at each level of advancement and salaries are augmented

accordingly. Additional responsibilities may include supervising beginning teachers, serving as mentors to younger peers, conducting teacher evaluations, and participating in curriculum development (University of Southern California, 2005; The Teaching Commission, 2004).

12. Market incentives are made available.

Performance pay systems must be flexible enough to pay teachers more in high-demand subjects and to recognize those willing to teach in hard-to-staff schools. One criticism of performance-based pay plans is that they discourage teachers from taking assignments in more challenging schools. Alternative pay systems should build in inducements to take on difficult assignments and should be designed so they don't inadvertently create more reasons for teachers to avoid hard-to-staff schools. Districts might also consider offering additional compensation to those teaching in other fields to become certified in a subject area for which there is a shortage of teachers or to non-teachers with expertise in the shortage area to consider teaching as a profession (The American Legislative Exchange Council, 2005; University of Southern California, 2005; West Ed, 2005; Delisio, 2003a; Hassel, 2002).

13. Teachers have access to opportunities for improvement. Teachers need to perceive that opportunities to acquire the rewarded skills are available in order to believe that their efforts will be successful. Professional development should be provided that is linked to the knowledge and skills the district's pay system rewards. The availability of professional development opportunities, when aligned with the goals of the performance pay program, will provide teachers with a clear understanding of their strengths and weaknesses and opportunities to remedy their shortcomings. The professional development must address gaps in teachers' knowledge and skills, as well as new or emerging types of knowledge and skills that are needed (Milanowski, 2003; Wyman & Allen, 2001; Odden & Kelley, 1995).

WHY PERFORMANCE PAY SYSTEMS FAIL

Research and experience suggest that performance pay systems failed in the past for the following reasons (University of Southern California, 2005; Hess, 2004; Delisio, 2003b; American Federation of Teachers, 2002):

- Ambiguous or inconsistent standards that did not improve student performance and were unconnected to outcomes.
- Remote or authoritarian planning.
- Use of quotas to determine the distribution of rewards. Quotas created teacher morale problems stemming from unfair competition in a profession that values cooperation and collaboration.
- Inadequate funding.
- Teachers' fears that the district did not have sufficient resources to fund the system and that, in difficult economic times, performance pay monies would be diverted to balance the district budget.
- Use of questionable or difficult to understand procedures for evaluating teachers that resulted in perceptions of favoritism.
- Distribution of rewards to teachers in the wealthiest schools more often than to teachers in the neediest schools.
- Teachers' lack of confidence that the program was being implemented objectively.
- Imposition of the system on teachers, rather than asking them to voluntarily accept the system.
- Lack of opportunities for poorly performing teachers to improve.

ISSUES TO CONSIDER WHEN DESIGNING A PERFORMANCE PAY SYSTEM

When designing a performance pay system, policymakers must ask the following questions:

On what criteria will awards be based? The central design question in any performance pay system is how to define performance. Performance pay plans are only as good as the mechanisms they use to measure performance. System designers must understand that some important job functions are not measurable. Deciding the factors on which to

base rewards is complicated by the fact that schools have goals other than increasing students' cognitive achievement that are difficult to measure (such as promoting citizenship, fostering individual development, and reducing drug use and violence) (Dee & Keys, 2004; Hinerman, 2002; Ramirez, 2001).

System designers must decide if performance awards will be based on students' scores on standardized tests or if other indicators of student performance will be part of the calculation. They must also decide if student performance will be the only basis for reward or if teachers will be rated on additional factors (Hassel, 2002).

Who will be included in the performance pay system? Issues to consider include:

- How will teachers outside the core academic areas be treated, especially if student test scores in core academic subjects are the basis for rewards? Teachers often regard performance pay systems as unfair because they exclude teachers of art, music, and other areas that don't use standardized test scores to measure success (Hassel, 2002).
- How will secondary teachers, who often teach larger numbers of students in a more limited subject area, be treated? Middle and senior high school students have multiple teachers. Not providing rewards to all of the teachers that helped a student succeed can send the message that all teachers are not equally important to a student's success (Hinerman, 2002).
- Will incentives be provided exclusively or more heavily to teachers in hard-to-staff schools or to teachers in subjects for which there are teacher shortages? (Hassel, 2002).
- How will the responsibility for a student's success be determined when that student transfers in or out of the district, his or her teacher takes a medical or family leave, or when teachers team-teach? (Solmon & Podgursky, 2000).

Will the names of performance pay award recipients be published? The dangers of publicizing names include embarrassment for those who didn't earn

an award, resentment between teachers, and lopsided class enrollments or possible legal action by parents demanding equal access to "superior" teachers for their children. On the other hand, strict confidentiality can lead to rumors of favoritism (Solmon & Podgursky, 2000).

What amount of incentive pay will be offered? The amount of reward money paid to teachers must provide a real incentive to improve performance. To motivate the acquisition of new, possibly hard to master skills needed to improve instruction, the incentives must be large enough to be perceived as commensurate with the effort needed to acquire the skills. The greater the ratio of performance-based pay to the total teacher salary, the more impact the performance pay will have on how teachers prioritize their responsibilities. Although many districts reward just under 5 percent of an average salary, researchers suggest that rewards of less than 7 or 8 percent are not perceived by teachers as worth the effort expended to acquire the specified skills (Hess, 2004; Milanowski, 2003; Hassel, 2002; Wyman & Allen, 2001).

Policymakers must also decide if they will reward teachers with one-time bonuses or performance-based raises. One-time bonuses have no effect on teachers' base salaries. Performance-based raises are more valuable to teachers since the increase becomes part of the base pay (Hassel, 2002).

Have the unintended consequences of the new performance pay system been explored? Ramirez (2001) cautions that organizational leaders must be careful about what is rewarded in a performance pay system because whatever is rewarded is more likely to occur in the future. They must also consider what won't get done because it doesn't count toward incentive pay. Unintended consequences of performance pay systems include teacher inclination to focus instructional efforts only on their highest performing students and a districtwide tendency to narrow the focus of the curriculum to include subjects that can be easily taught by drill and practice and are easily measured (West Ed, 2005; Solmon & Podgursky, 2000).

One of the most frequently observed unintended consequences of performance pay systems is diminished teacher collaboration. Performance-based compensation programs often encourage

competition instead of collaboration among teachers. Teachers resent other teachers who get pay increases if they do not, creating an atmosphere of conflict and dissension. Teachers may no longer be willing to share their hard work if they are worried that someone else will take credit and get the extra pay. A possible solution is to make collaboration one aspect of performance that gets rewarded (Solmon & Podgursky, 2000).

PERFORMANCE PAY PLANS BEING IMPLEMENTED IN THE UNITED STATES

The programs described below are a sample of the most progressive efforts in performance pay currently being implemented across the United States. Other states, districts, and schools, such as South Carolina; Douglas County, Colorado; and the Vaughn Next Century Learning Center, a charter school in Los Angeles, California, implement performance pay plans that provide incentives on a schoolwide, not individual, basis. Charlotte-Mecklenburg Schools in North Carolina offers a variety of bonus and incentive programs, including bonuses paid to teachers in high need schools and subjects, higher salaries paid to teachers certified by the National Board for Professional Teaching Standards, a retention incentive for master teachers, and schoolwide growth incentives. Core subject teachers at high need schools are also eligible to receive extra pay as part of the Successful Teacher Administrator Reward (STAR) program that recognizes student achievement at the individual level (Charlotte-Mecklenburg Schools, 2006; Azordegan et al., 2005).

Teacher Advancement Program

The Teacher Advancement Program (TAP) was created by the Milken Family Foundation to attract, retain, and motivate high quality educators (Teacher Advancement Program Foundation, 2006). TAP schools are supported by a variety of funding sources, including private foundation grants, legislative appropriations, property tax levies, sales tax increases, general revenues from state budgets, district funds, and federal dollars available through *No Child Left Behind*. Schools are invited by their district superintendent or state department of education to apply to become a TAP school. TAP schools are selected based on their

ability to implement the program effectively and to fund and sustain the program, as well as the level of faculty interest in participating in the program. TAP requires a faculty approval vote of at least 60 to 75 percent. TAP is currently being implemented in over 100 schools in 10 states and the District of Columbia, impacting over 45,000 students and 3,100 teachers nationwide. TAP recommends teacher award amounts, but schools are given flexibility in determining the amount of incentives they will offer, based on local economic circumstances.

TAP is based on the following four key principles:

- Multiple career paths. TAP allows teachers to pursue a variety of positions throughout their careers without leaving the classroom, depending on their interests, abilities, and accomplishments. Salary augmentations are given to master and mentor teachers for their increased roles and responsibilities.
- Instructionally focused accountability. TAP performance awards are based on a combination of multiple classroom observations and individual classroom and schoolwide gains measured by a value-added model. Each teacher is observed four to six times a year by multiple trained evaluators. All teachers in the school are evaluated collectively based on the learning growth of all students in the school. Each teacher is also evaluated individually based on how much learning growth the students in his or her classroom have achieved during the school year.
- Ongoing applied professional growth. TAP restructures the school schedule to provide time during the regular school day for teachers to meet, learn, plan, mentor, and share with other teachers so they can improve the quality of their instruction. Professional development is aligned to the standards for which teachers are held accountable and focuses on instructional issues, using data to identify areas of need.
- Performance-based compensation. Teachers are compensated differently, based on the increased responsibilities of the positions they hold, how well they perform in those positions, the quality of their instructional performance,

and their students' academic growth. Districts are also encouraged to offer competitive salaries to those who teach in hard-to-staff subjects and schools.

Additional information on TAP can be found online by accessing www.tapschools.org.

Denver Professional Compensation System for Teachers (ProComp)

Designed in partnership between the Denver Classroom Teachers Association and Denver Public Schools, ProComp rewards teachers for their professional accomplishments while linking pay to student achievement (Denver Public Schools, 2006). ProComp rewards teachers for meeting and exceeding expectations, links compensation more closely with student instructional outcomes, and encourages talented teachers to work in schools and subjects with the greatest needs. Teachers can opt into ProComp or may stay in their traditional salary system. Newly hired teachers are automatically enrolled in ProComp. The system has no quotas; all teachers who fulfill the criteria for payment will have complete access to compensation. In November 2005, Denver voters approved a \$25 million levy to pay for the program. Elements of the system are being implemented during the 2005-06 school year, with full implementation scheduled for the 2006-07 school year. Performance bonuses are given as a percent of a salary index, a fixed amount negotiated by the Denver Public Schools and Denver Classroom Teachers Association. The current index is \$33,301.

ProComp has four components that allow teachers to increase their earnings.

- Knowledge and skills. Teachers earn compensation for acquiring and demonstrating knowledge and skills by completing annual professional development units and by earning additional graduate degrees and national certificates. All teachers are eligible for salary increases as follows: two percent of the index (\$666) for completion of one professional development unit in the teacher's area of assignment; nine percent of the index (\$2,997) for obtaining a graduate degree or national board certification; up to \$1,000 toward tuition reimbursement.

- Professional evaluation. Teachers are recognized for their classroom skills by receiving salary increases every three years for satisfactory evaluations. Evaluations are conducted by the school principal. All teachers who receive a satisfactory evaluation are eligible for a salary increase of three percent of the index (\$999).
- Student growth. Teachers are rewarded for the academic growth of their students. They earn additional compensation for meeting annual student growth objectives, exceeding Colorado Student Assessment Program (CSAP) expectations, and working in a distinguished school.
 - Annual student growth objectives. Teachers earn salary increases by meeting their student growth objectives. All teachers set two student growth objectives annually in collaboration with their principal or supervisor. The objectives are based on the teacher's current assignment and cannot include CSAP scores. All teachers who meet their objectives are eligible for a salary increase of one percent of the salary index (\$333).
 - CSAP expectations. Teachers who exceed expectations for student growth, as measured by the CSAP, receive a salary increase of three percent of the index (\$999). Calculations are based on individual student gains on two test scores, using a value-added model. Only teachers who directly teach math or language arts are eligible to receive compensation for exceeding student growth expectations.
 - Distinguished schools. Teachers receive a salary increase for serving in a distinguished school, based on multiple measures of student performance. Student performance is based on two consecutive years of growth and includes data from sources other than the CSAP. Other data include school satisfaction surveys and student attendance. All teachers are eligible for a salary increase of two percent of the index (\$666).

- Market incentives. Teachers who serve in hard-to-staff schools (those facing academic challenges) earn annual bonuses of three percent of the index (\$999). Bonuses are also available to teachers filling hard to staff positions (assignments that have shortages of qualified applicants).

For more information, visit Denver Public Schools' ProComp Web site at <http://www.denverprocomp.org>.

Minnesota Quality Compensation for Teachers (Q Comp)

Minnesota's governor signed into law a state education budget that includes \$86 million for Q Comp (Minnesota Department of Education, 2005). The program is modeled after TAP and brings together career advancement, professional development, and compensation linked to academic achievement. Participation in the program is voluntary. Districts may apply to the Minnesota Department of Education for state funding, which will provide an additional \$260 per student to districts and schools that choose to implement the program. There are specific goals in Q Comp, but the way districts reach those goals and distribute performance awards will be determined on the local level, allowing each district to tailor the program to fit the needs of its students and teachers.

Applications to the Minnesota Department of Education must meet the following criteria:

- Multiple career paths. The program must provide new opportunities for teachers to develop and use their skills within the teaching profession. Those who are highly skilled, with demonstrated talents in teaching, and have high levels of student performance will advance into master or mentor teaching positions to share their skills with others. The additional responsibilities will be rewarded with additional compensation.
- Ongoing job-embedded professional development. The program must utilize best practice research to create professional development activities for teachers that are directly aligned to school and student needs. The professional

development must also be integrated and collaborative and provide for regular site-based and teacher-led professional growth activities.

- Performance or professional pay for teachers. Performance or professional pay for teachers must introduce changes to the compensation system to allow administrators some flexibility to reward teachers for high levels of student performance and to offer competitive salaries for teachers, particularly in hard-to-staff schools and subject areas. The plan must use rigorous evaluations, school achievement gains, and student achievement gains as the basis for performance bonuses.
- Teacher evaluation system. The performance pay system must include a rigorous evaluation and review system that is based on principles of sound education research. Peer reviewers should include principals and master and mentor teachers. Each teacher's performance should be evaluated at several points in time during the school year. The evaluations must be one consideration for teacher bonuses.
- New salary schedule for teachers. The district must implement a performance-based compensation system. Salary schedules will be designed by individual districts and local teacher unions.

To date, approximately one-third of Minnesota's school districts have expressed an interest in Q Comp. Many districts are waiting to see how the program works in other districts before they try it. Several districts have opted to implement TAP. Minneapolis Public Schools is currently implementing TAP at eight sites, with plans to expand in 2006-07 (Klein, 2006; Star Tribune, 2006; Azordegan et al., 2005).

For additional information on Q Comp, visit the Minnesota Department of Education's Web site at http://children.state.mn.us/mde/Teacher_Support/QComp/index.html.

Houston Independent School District

In January 2006, the Houston Independent School District unanimously approved a teacher performance pay program, making it the largest school district in the nation to adopt a compensation

system based on how well students learn (Houston Independent School District, 2006). Teachers of core subjects can earn a total of \$3,000 a year if their students demonstrate improvement on state and national tests. The district hopes the annual bonuses will grow to \$10,000 over the next five years. Teachers of special education, prekindergarten, and kindergarten, as well as teachers whose subjects are not assessed by standardized tests, can earn a total of \$1,500 a year.

Houston's performance plan contains three different strands of incentive pay:

- Strand I: Campus-level performance. This strand considers the schools' state accountability rating and improvement on the Texas Assessment of Knowledge and Skills (TAKS) reading and mathematics subtests and rewards teachers on how much the school has improved, compared to 40 other schools around the state with similar demographics. All teaching faculty and non-instructional staff at the school will be eligible for this component of performance pay.
- Strand II: Individual teacher performance. This component will pay individual teachers based on student progress on the Stanford 10 and its Spanish language equivalent, the Aprenda 3, when compared to teachers in similar classrooms in the school district. Elementary core teachers will be measured by progress on the complete battery of tests. Secondary core teachers will be measured using their subject area tests. Teachers who do not teach students in the core subjects will earn smaller bonuses if students at the school make more progress on the Stanford and Aprenda than students in schools across the district with similar demographics.
- Strand III: Individual teacher performance. This strand will pay individual teachers based on student progress on the TAKS, compared to teachers in similar classrooms across the district. Elementary core teachers will be measured by progress (by grade level) in reading and mathematics scale scores. Secondary core teachers will be measured using improvement in subject area scale scores, including reading, English language

arts, mathematics, social studies, and science. Core teachers who work with students who did not take the TAKS in previous years will earn the performance pay if their students make more progress on the TAKS than students schoolwide made the previous year.

As an additional bonus, teachers with perfect attendance will have their earned performance pay increased by 10 percent and teachers who missed no more than two days will have their earned performance pay increased by five percent.

For additional information, access Houston Independent School District's Web site at [http://www.houstonisd.org/HISDPortal/departments/article_collection_front/0,3147,31059228,147355259,00.html.mailto:?news@hisd.?](http://www.houstonisd.org/HISDPortal/departments/article_collection_front/0,3147,31059228,147355259,00.html.mailto:?news@hisd.)

RESEARCH ON ALTERNATIVE COMPENSATION SYSTEMS

A review of studies that have been conducted on the effectiveness of alternative compensation systems is provided below. Because most performance pay systems are so new, very few rigorous research studies have been conducted on the relationship between teacher compensation and student achievement (West Ed, 2005; Dee & Keys, 2004; Lashway, 2001).

Teacher Advancement Program (TAP)

TAP schools in Arizona were compared to a group of non-TAP Arizona schools, matched on characteristics such as student achievement, percent of minority students enrolled, and school size, configuration, and location. Analyses found that, between 2000 and 2003, the majority of TAP schools outperformed control schools in the reading, language, and mathematics portions of the Stanford Achievement Test (three out of four in 2001 and 2002 and three out of five in 2003) (Schacter et al., 2004).

TAP schools in South Carolina were compared to a group of non-TAP South Carolina schools, matched on reading and mathematics performance on the Palmetto Achievement Challenge Test. In mathematics, four of the six TAP schools outperformed control schools. In reading/language arts, three of the six TAP schools outperformed control schools (Schacter et al., 2004).

Schacter et al. (2004) concluded that, while the results of their Arizona and South Carolina studies were relatively positive, more TAP schools, more years of student achievement data, and additional research are needed to conclusively demonstrate that TAP schools have a significant, positive impact on student achievement.

Denver Pro Comp

The Community Training and Assistance Center (2004) conducted an analysis of Denver's pilot performance pay program to determine its impact on student achievement. The pilot program included 16 elementary, middle, and senior high schools. Students at participating pilot schools were compared with control schools on the Iowa Test of Basic Skills (ITBS) and the Colorado Student Assessment Program (CSAP). Control schools were selected from the Denver Public Schools and were matched to pilot schools based on the percent of free and reduced price lunch students, the percent of English language learners, and school size. It should be noted that previous student achievement was not considered in the selection of control schools, making it more difficult to detect the pilot program's impact on student achievement. Results of the analyses of students' test scores, by elementary, middle, and senior high school levels, were mixed (Community Training and Assistance Center, 2004).

- Elementary pilot school students' performance was lower than control school students' performance on all ITBS and CSAP subtests except the ITBS Reading. No significant difference was found between pilot and control students' ITBS Reading scores.
- Middle school results were more promising. Both pilot and control students achieved more than a year's growth on all CSAP subtests, with pilot students outperforming control students on the CSAP Writing, CSAP Math, and ITBS Reading subtests.
- Students at the two pilot high schools posted significantly higher increases than control schools on several ITBS and CSAP subtests: one school had significantly higher scores on the ITBS Language and Math subtests and higher (but not statistically significant) scores

on the ITBS Reading and all three CSAP subtests. The other pilot high school had significantly higher scores on the ITBS Language, ITBS Math, and CSAP Reading subtests. Students' average score on the ITBS Reading, however, was significantly lower than the control group's average score. No significant differences were found between the pilot and control group's scores on the CSAP Writing and Math subtests.

Findings of this study do not provide a clear picture as to the impact of the program on students' test scores; however, analyses of the relationship of teacher performance to student achievement found:

- Students of teachers who met two student growth objectives had significantly higher test scores than students of teachers who met one or no objectives.
- Students whose teachers' growth objectives were ranked "excellent" on a four-level rubric achieved higher mean test scores than students whose teachers' objectives were ranked lower.
- The percentage of teachers whose objectives were ranked "excellent" increased over the course of the pilot.
- Teachers' ability to meet objectives increased significantly as they gained more experience in the pilot.

Tennessee's Career Ladder Evaluation System

Tennessee's Career Ladder Evaluation System is a form of differentiated staffing that combines a hierarchy of professional development (i.e., a career ladder) with financial and other professional rewards. Teachers advance up a career ladder and receive increasing state salary supplements based on years of experience and evaluations indicating superior performance. A study of the career ladder system concluded that assignment to a career ladder teacher led to increased student Stanford Achievement Test scores. Specifically, results indicated that students with career ladder teachers had mathematics scores that were nearly three percentile points higher and reading scores that were nearly two percentile points higher than those

of students with other teachers. The difference in mathematics scores was significant; the difference in reading scores was not (Dee & Keys, 2004).

With regard to mathematics, the career ladder was not effective at distinguishing good, superior, and outstanding teachers. Percentile score increases in mathematics were the greatest for students with probationary and apprentice teachers (those with less than one year to four years of teaching experience), while students with higher level teachers (those who generally had five or more years of experience) posted lower gains. In reading, however, students with more experienced teachers showed the greatest percentile score increases (Dee & Keys, 2004).

The implications of this study are mixed. The finding that students with teachers compensated using a career ladder had higher reading and math scores suggests that teacher quality can be reliably rewarded when there is a well-designed evaluation system in place. However, according to the authors, the evidence that teachers on high rungs of the career ladder were not uniformly better also emphasizes the challenge of designing an effective alternative compensation system (Dee & Keys, 2004).

Consortium for Policy Research and Education Study

A study conducted by the Consortium for Policy Research and Education examined the motivational effects of school-based performance awards on teachers in Kentucky, Maryland, and the Charlotte-Mecklenberg, North Carolina school district. Results of the study showed that, in all three locations, organizational resources were provided to support goal achievement. Teachers understood and were committed to the program's goals. Performance awards appeared to motivate teachers and focus their efforts. The most important motivational factor was teachers' belief that they could achieve their specified goals and that their efforts would positively impact their students' achievement.

The study did find, however, that teachers were under increased pressure and stress and worked longer hours. Some teachers were not certain that they would actually receive the bonus, even if they achieved their goals. Teachers in schools that

received a reward were more likely to believe they would be rewarded again in the future if they met their goals (Oregon School Boards Association, 2006).

In summary, studies of alternative compensation systems have produced mixed results, although there appear to be some early indications that they may have a positive impact on teacher performance and student achievement. Rigorous, long-term studies that control for students' previous achievement and randomly assign students and teachers to performance pay and comparison groups are needed before definitive conclusions can be drawn.

ON A LOCAL NOTE

School-Based Performance Pay. Two forms of school-based performance pay are currently in effect in M-DCPS:

- The district's top performing schools are rewarded, based on significant learning gains on the FCAT reading and mathematics exams. A bonus of five percent of employees' base salary is paid to teachers at the top three elementary schools in each regional center, the top middle school in each regional center, the top three senior high schools in the district, and the top magnet school in the district.
- School Recognition Pay is a bonus paid by the Florida Department of Education (FLDOE) to schools that increase by one or more school performance grades or maintain a performance grade of "A" from one year to the next. These schools receive \$100 for each student enrolled. Bonuses are distributed to all employees at the school as lump sum payments (not a percent of the employee's salary). Determination of the bonus amounts each category of employee will receive is decided by each school's Educational Excellence School Advisory Committee (EESAC).

Individual Performance Pay. On February 21, 2006, Florida's State Board of Education unanimously approved a plan to tie public school teachers' pay to their students' performance (Florida Department of Education, 2006). Districts are required to submit proposals by June 15, 2006 and have a new pay

plan in place for the 2006-07 school year. The FLDOE will ask the legislature for funding for salary supplements for the 2006-07 school year. The compensation plan has two parts:

- All teachers' base salaries will be determined by their annual performance evaluation. The evaluation must be based primarily on student performance. Districts have flexibility in determining how student performance will be measured and incorporated into the salary. An example provided by the FLDOE suggests that each salary step consists of a range and teachers are to be paid along that continuum, depending upon the extent to which they improve student achievement. The step might range from \$32,000 to \$33,000. Teachers with the best performance would earn \$33,000, while teachers whose performance is below satisfactory would receive \$32,000.
- Teachers whose students make the largest learning gains will receive a salary supplement equal to at least five percent of their base salary. Districts can decide if the supplement will be applied as a bonus or rolled over into a teacher's base salary. This part of the plan is known as Effectiveness Compensation (E-Comp). Outstanding teachers will be identified as follows:
 - Teachers who teach courses in subjects assessed by the FCAT. The top 10 percent of teachers statewide will be identified by the state, as measured by improved student achievement on the FCAT. Districts must reward these teachers with a supplement equal to at least five percent of their base salary. If the state does not identify a minimum of 10 percent of a district's FCAT teachers, the district must add to their group of identified teachers until a minimum of 10 percent receive a reward.

In subsequent years, the state will identify 25 percent of outstanding teachers statewide. If a teacher is identified in the state's top 10 percent and then, in subsequent years, stays in the state's top 25 percent, he or she will continue to receive a salary supplement.

- Teachers who teach courses in subjects not assessed by the FCAT. Districts must reward the top 10 percent of teachers whose content is not assessed by the FCAT with a supplement equal to at least five percent of their base salary. For the 2006-07 school year, districts are authorized to use existing personnel evaluations to identify these teachers. Personnel appraisal systems must identify a minimum of "satisfactory," "above satisfactory," and "outstanding" levels. In the future, districts will be required to incorporate objective, external measures of student performance to identify teachers. Districts will be able to select from a menu of state-approved assessments or develop their own assessments.

M-DCPS is in the process of entering into a contractual agreement with an outside firm to develop a new assessment and appraisal system for all instructional personnel, including classroom teachers, school psychologists, guidance counselors, media specialists, teachers on special assignment, and curriculum specialists. M-DCPS' current appraisal system identifies teachers as "satisfactory" or "unsatisfactory." The new system will identify additional ranking levels, including "above satisfactory" and "outstanding." The district is awaiting receipt of an FLDOE Technical Assistance Paper that will provide implementation guidelines for the new legislation.

To learn more about Florida's alternative compensation system, access the Web site at <http://www.floridaecom.com>.

SUMMARY

School districts around the country are implementing performance pay plans that reward teachers for improving their students' performance. A review of the literature has identified characteristics of effective performance pay plans, such as developing pay systems within the local context; involving all stakeholders in the design of the plan; creating a system that uses multiple factors to measure teacher performance; identifying clear performance criteria; providing teachers with opportunities for improvement; avoiding quotas; and providing adequate and stable funding. Research and experience have

shed some light on reasons performance pay plans failed in the past. Shared characteristics of unsuccessful plans include ambiguous or inconsistent performance standards, remote or authoritarian planning, use of quotas to determine distribution of rewards, lack of opportunities for poorly performing teachers to improve, and inadequate funding. Issues to consider when designing and implementing a performance pay plan include which staff will be eligible to receive performance pay, the criteria upon which rewards will be based, and the amount of incentive pay to be offered.

Summaries of performance pay plans being implemented in M-DCPS and around the country, including the Teacher Advancement Program, Denver's ProComp system, Minnesota's Q Comp,

and Houston Independent School District's performance pay program, are provided. Due to the newness of performance pay programs, little research exists to document their impact on student performance. Research conducted to date has produced mixed results, although there appear to be some early indications that alternative compensation systems have a positive impact on teacher performance and student achievement. Additional research must be conducted before any definitive conclusions can be drawn. Finally, it should be noted that, although successful pay plans appear to share certain characteristics, it is unlikely that one best plan will emerge from the research since the unique characteristics of each state and district make different types of plans appropriate in different contexts.

REFERENCES

- American Federation of Teachers. (2002). *Professional Compensation for Teachers*. Retrieved from <http://www.aft.org/about/resolutions/2002/compensation.htm>.
- American Federation of Teachers. (2005). *Professional Compensation*. Retrieved from <http://www.aft.org/topics/teacher-quality/comp.htm>.
- The American Legislative Exchange Council. (2005). Teacher Salary and Merit Pay. Retrieved from http://www.alec.org/viewpage.cfm?pgname=4.52_tsmp.
- Azordegan, J., Byrnett, P., Campbell, K., Greenman, J., & Coulter, T. (2005). Diversifying Teacher Compensation. *Education Commission of the States Issue Paper*. Retrieved from <http://www.ecs.org/clearinghouse/65/83/6583.pdf>.
- Charlotte-Mecklenburg Schools. (2006). Charlotte-Mecklenburg Schools Incentive Programs, 2005-2006. Retrieved from <http://www.cms.k12.nc.us/departments/HR/recruitment.asp>.
- Community Training and Assistance Center. (2004). *Catalyst for Change: Pay for Performance in Denver Final Report*. Boston, MA: Author. Retrieved from <http://www.ctacusa.com/denver-vol3-final.pdf>.
- Dee, T.S., & Keys, B.J. (2004). Does Merit Pay Reward Good Teachers? Evidence from a Randomized Experiment. *Journal of Policy Analysis and Management*, 23 (3), 471-488.
- Delisio, E.R. (2003a). Pay for Performance: What Are the Issues? *Education World*. Retrieved from http://www.educationworld.com/a_issues/issues374a.shtml.
- Delisio, E.R. (2003b). Pay for Performance: What Went Wrong in Cincinnati? *Education World*. Retrieved from http://www.educationworld.com/a_issues/issues374b.shtml.
- Denver Public Schools. (2006). Professional Compensation for Teachers. Retrieved from <http://www.denverprocomp.org>.

- Feldman, S. (2004). Rethinking Teacher Compensation. *American Federation of Teachers*. Retrieved from http://www.aft.org/pubs-reports/on_campus/2004/mar/oc-www.htm.
- Florida Department of Education. (2006). Florida E-Comp. Retrieved from <http://www.floridaecomp.com>.
- Hassel, B.C. (2002). Better Pay for Better Teaching. Making Teacher Compensation Pay Off in the Age of Accountability. *Progressive Policy Institute*. Retrieved from http://www.ppionline.org/documents/Hassel_May02.pdf.
- Hess, F.M. (2004). Teacher Quality, Teacher Pay. *Policy Review, No. 124*. Retrieved from <http://www.policyreview.org/apr04/hess.html>.
- Hinerman, M.F. (2002). Merit Pay: Should a Teacher's Pay be Based Upon Student Performance? *University of Maine at Machias EDU 460 Secondary School Seminar*. Retrieved from <http://www.umm.maine.edu:300/Education/students/SecSem-F2002/MHinerman.htm>.
- Houston Independent School District. (2006). Retrieved from http://www.houstonisd.org/HISDPortal/departments/article_collection_front/0,3147,31059228_147355259,00.html.
- Kelley, C. (2000). Making Merit Pay Work. *American School Board Journal*. Retrieved from <http://www.asbj.com/schoolspending/kelley.html>.
- Klein, T. (2006). County Schools May Pursue Merit Pay, Ely to Wait and See. *Timberjay News, 16* (36). Tower, MN. (2006, February 15).
- Lashway, L. (2001). Incentives for Accountability. *ERIC Digest 152*. Eugene, OR: ERIC Clearinghouse on Educational Policy and Management. Retrieved from <http://cepm/uoregon.edu/publications/digests/digest152.html>.
- Milanowski, A. (2003). 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 from <http://epaa.asu.edu/epaa/v11n4>.
- Milken Family Foundation. (2005). Leading Educators and School Reformers Urge Congress to Back Teacher Incentive Fund. Retrieved from <http://www.mff.org/newsroom/news.taf?page=449>.
- Minnesota Department of Education. (2005). Quality Compensation for Teachers or the Q Comp Program. Retrieved from http://children.state.mn.us/mde/Teacher_Support/QComp/index.html.
- Odden, A., & Kelley, C. (1995). Reinventing Teacher Compensation Systems. *Consortium for Policy Research in Education Finance Brief*. Madison, WI: Wisconsin Center for Education Research at the School of Education, University of Wisconsin-Madison.
- Odden, A.R., Kelley, C., Heneman, H., & Milanowski, A. (2001). *Enhancing Teacher Quality through Knowledge- and Skills-Based Pay*. Philadelphia, PA: University of Pennsylvania, Consortium for Policy Research in Education. Retrieved from <http://www.cpre.org/Publications/rb34.pdf>.
- Oregon School Boards Association. (2006). *Performance Pay Primer - Teacher Motivation*. Retrieved from <http://www.osba.org/lrelatns/perfpay/primere.htm>.
- Plucker, J.A., Zapf, J.S., & McNabb, S.A. (2005). Rewarding Teachers for Students' Performance: Improving Teaching through Alternative Teacher Compensation Programs. *Education Policy Brief, Center for Evaluation and Education Policy, 3* (5). Retrieved from http://ceep.indiana.edu/projects/PDF/PB_V3N5_Spring_2005_Teacher_Compensation.pdf.

- Ramirez, A. (2001). How Merit Pay Undermines Education. *Educational Leadership*, 58 (5), 16-20.
- Reichardt, R., & Van Buhler, R. (2003). *Recruiting and Retaining Teachers with Alternative Pay*. Aurora, CO: Mid-continent Research for Education and Learning. Retrieved from http://www.mcrel.org/PDF/TeacherPrepRetention/5021RR_RecruitingRetainingTeachers.pdf.
- Schacter, J., Thum, Y.M., Reifsneider, D., & Schiff, T. (2004). *The Teacher Advancement Program Report Two: Year Three Results from Arizona and Year One Results from South Carolina TAP Schools*. Santa Monica, CA: Milken Family Foundation.
- Solmon, L.C., & Podgursky, M. (2000). The Pros and Cons of Performance-Based Compensation. *Milken Family Foundation*. Retrieved from http://www.mff.org/pubs/Pros_cons.pdf.
- Star Tribune. (2006). How Districts Have Responded to Q Comp. Minneapolis-St. Paul, MN. (2006, January 10).
- Teacher Advancement Program Foundation. (2006). Retrieved from <http://www.tapschools.org>.
- The Teaching Commission. (2004). *Teaching at Risk: A Call to Action*. Retrieved from http://www.theteachingcommission.org/press/FINAL_Report.pdf.
- University of Southern California. (2005). *Understanding Alternative Teacher Compensation: Expert Insights from USC California Policy Institute's California K-12 School Finance Policy Symposium*. Sacramento, CA: USC California Policy Institute.
- West Ed. (2005). Reforming Teacher Pay. The Search for a Workable Goal-Driven Compensation System. *Policy Trends*. Retrieved from http://www.wested.org/online_pubs/pt-06-01.pdf.
- Wyman, W., & Allen, M. (2001). Pay-for-Performance: Key Questions and Lessons from Five Current Models. *Education Commission of the States Issue Paper*. Retrieved from <http://www.ecs.org/clearinghouse/28/30/2830.htm>.