





Alternative Teacher Compensation: A Primer

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This policy primer is designed to provide baseline information about new forms of teacher pay that are emerging around the country, to support the local conversations and negotiations that will lead to the development of innovative compensation systems. It identifies reasons why teacher compensation is high on local, state, and federal policy agendas, describes some of the new pay programs that have been implemented, and offers an initial analysis of what we are learning from these various and diverse pay experiments.

lmost every school district in the United States uses a simple table to determine teachers' salaries. Salary schedules display some minor variations across school districts, but most are based on only two factors: the number of years a teacher has served in the district, and the number of postgraduate credits or degrees the teacher has completed. In recent years, however, a growing number of districts have begun experimenting with teacher pay plans that move beyond the conventional salary schedule. These experiments vary widely in their aims and structure, but all of them seek to align compensation more closely with the district's strategies for improving the quality of instruction that students receive.

Teacher quality is the single strongest determinant of student achievement. In one study, half the variation in scores between white and African-American students was attributable to differences in the effectiveness of individual teachers (Ferguson, 1991). Moreover, teachers have a cumulative effect on student achievement (Sanders and Rivers, 1996). Students who spend three years in classrooms with relatively ineffective teachers may never catch up academically to their peers who have more effective instructors (Sanders and Horn, 2006).

Ensuring a high quality teacher in every classroom is among the most important actions a school district can take.

Attracting high quality teachers, particularly to urban schools, is only half the battle. Retaining them there long enough to learn their craft well and to make a difference for their students is an equally difficult challenge. Without effective support in the form of rigorous induction, ongoing professional development, effective professional evaluation, and compensation linked to improving professional practice, teachers may leave the classroom for other professional opportunities.

The retention problem is complicated further because younger teachers, the so-called Generation X (born between 1961 and 1981) and Generation Y (born after 1981) have different levels of organizational commitment than earlier workforce generations. Many Baby Boomers, for example, entered teaching with the idea of a single 30-year career span, but the post-Boomer generations of teachers have different expectations. They anticipate changing jobs and employers multiple times throughout their working lives. If they are even to consider a lifetime commitment to education, these teachers will require a different career structure than their veteran colleagues, including regular opportunities for professional advancement and pay systems that match their rising professional aspirations.

The current teacher salary structure awards pay on the basis of years and units. This approach to teacher pay is increasingly out of step with both the job market for college educated workers and the goals of school districts, which include attracting and retaining teachers in hardto-staff schools and subjects, improving teachers' professional practice, and increasing student achievement. Change is in order.

Compensation strategies that support closer alignment between school district goals and expenditures for teacher salaries could provide powerful support for improvements. Thus far, however, California has been all but absent from the national conversation about new forms of teacher compensation. Now is the time for California to take the lead in thinking differently about teacher pay.

HOW ARE TEACHERS CURRENTLY COMPENSATED?

Nearly all teachers in the United States' 15,000 school districts —including the more than 1000 districts in California—are paid on the single salary schedule, a compensation structure first introduced in Denver and Des Moines in 1921 (Odden and Kelley, 1997). An artifact of the civil service system, the single salary schedule was viewed as a way of tamping down the graft, corruption, and political favoritism that often plagued school district decision-making, especially in the areas of hiring and salary setting.

Following World War II, when the school population burgeoned and teachers were in short supply, the single salary schedule was widely adopted as a way of equalizing pay across gender, race, and position at a time when female teachers (most of whom taught at the elementary level) were paid less than male teachers (most of whom taught at the secondary level); and black teachers were paid less than white teachers. Standardizing teacher salaries was a means to attract large numbers of new recruits to the profession.

By the 1960s, 97 percent of school districts in the United States had adopted the single salary schedule as their method of paying teachers (Sharpes, 1987). With the advent of collective bargaining in the 1960s and 1970s, the unions representing teachers—affiliates of the National Education Association (NEA) and the American Federation of Teachers (AFT)—came to view the single salary schedule as the pay arrangement that offered teachers a system of equitable, objective, and predictable salary distribution (Kerchner, Koppich, and Weeres, 1997). Teachers had confidence in a salary system based on years of service and numbers of college credits earned. In addition, this system allowed teachers to plan with reasonable assurance what their salary levels would be from one year to the next.

Moreover, the single salary schedule was a good fit for a profession that favored egalitarianism and eschewed competition (Lipsky and Bacharach, 1983). Finally, in an education system that measured productivity on the basis of inputs (e.g., the number of dollars invested in the system) and valued professional training (credentials and courses) as a proxy for expertise, the single salary schedule served as a kind of pay-for-performance (Kerchner, Koppich, and Weeres, 1997). It remained the primary means of paying teachers through the 20th century.

Table 1 illustrates a typical single salary schedule.

Some school districts have tinkered a bit with the single salary schedule, attaching a modest number of pay differentials. These include bonuses for teachers who earn advanced certification through the National Board for Professional Teaching Standards or for those who assume additional professional responsibilities. These modest changes notwithstanding, the basic architecture of this salary arrangement remains virtually unchanged (Koppich, 2008).

Class	I	I	II	II	III	III	IV	IV	V	V	VI	VI	VII
	BA*	Daily	BA+24**	Daily	BA+36	Daily	MA or	Daily	BA+60	Daily	BA+72	Daily	BA+84***
		Rate		Rate		Rate	BA+48	Rate	BA+42***	Rate	BA+54***	Rate	BA+66***
									MA+12		MA+24		MA+36
Steps	Steps												
1	\$38,497	\$209.22	\$45,714	\$248.45	\$47,041	\$255.66	\$48,407	\$263.08	\$48,407	\$263.08	\$48,407	\$263.08	\$48,407
2	\$38,497	\$209.22	\$47,041	\$255.66	\$48,407	\$263.08	\$49,809	\$270.70	\$49,809	\$270.70	\$49,809	\$270.70	\$49,809
3	\$39,871	\$216.69	\$48,407	\$263.08	\$49,809	\$270.70	\$51,255	\$278.56	\$52,741	\$286.64	\$52,741	\$286.64	\$52,741
4	\$41,062	\$223.16	\$49,809	\$270.70	\$51,255	\$278.56	\$52,741	\$286.64	\$54,269	\$294.94	\$55,845	\$303.51	\$55,845
5	\$42,286	\$229.82	\$49,809	\$270.70	\$52,741	\$286.64	\$54,269	\$294.94	\$55,845	\$303.51	\$57,464	\$312.30	\$59,132
6	\$43,481	\$236.31	\$49,809	\$270.70	\$54,269	\$294.94	\$55,845	\$303.51	\$57,464	\$312.30	\$59,131	\$321.36	\$60,845
7	\$44,122	\$239.79	\$49,809	\$270.70	\$54,269	\$294.94	\$57,464	\$312.30	\$59,131	\$321.36	\$60,845	\$330.68	\$62,611
8	\$44,712	\$243.00	\$49,809	\$270.70	\$54,269	\$294.94	\$59,131	\$321.36	\$60,845	\$330.68	\$62,611	\$340.28	\$64,426
9	\$45,289	\$246.14	\$49,809	\$270.70	\$54,269	\$294.94	\$59,131	\$321.36	\$62,611	\$340.28	\$64,426	\$350.14	\$66,295
10	\$45,884	\$249.37	\$50,296	\$273.35	\$54,269	\$294.94	\$59,131	\$321.36	\$64,489	\$350.48	\$66,358	\$360.64	\$68,283
11	\$46,419	\$252.28	\$50,829	\$276.24	\$54,649	\$297.01	\$59,131	\$321.36	\$66,423	\$360.99	\$68,348	\$371.46	\$70,330
12	\$46,419	\$252.28	\$50,829	\$276.24	\$54,649	\$297.01	\$59,131	\$321.36	\$68,417	\$371.83	\$70,399	\$382.60	\$72,440
13	\$46,419	\$252.28	\$50,829	\$276.24	\$54,649	\$297.01	\$59,131	\$321.36	\$69,680	\$378.70	\$71,662	\$389.47	\$73,704
14	\$46,419	\$252.28	\$50,829	\$276.24	\$54,649	\$297.01	\$59,131	\$321.36	\$69,680	\$378.70	\$71,662	\$389.47	\$73,704
15	\$47,532	\$258.33	\$51,941	\$282.29	\$55,760	\$303.04	\$60,242	\$327.40	\$70,944	\$385.57	\$72,926	\$396.34	\$74,968
16	\$47,532	\$258.33	\$51,941	\$282.29	\$55,760	\$303.04	\$60,242	\$327.40	\$70,944	\$385.57	\$72,926	\$396.34	\$74,968
17	\$48,572	\$263.98	\$52,983	\$287.95	\$56,801	\$308.70	\$61,283	\$333.06	\$72,207	\$392.43	\$74,188	\$403.20	\$76,231
18	\$48,572	\$263.98	\$52,983	\$287.95	\$56,801	\$308.70	\$61,283	\$333.06	\$72,207	\$392.43	\$74,188	\$403.20	\$76,231
19	\$49,683	\$270.02	\$54,093	\$293.98	\$57,913	\$314.74	\$62,394	\$339.10	\$73,471	\$399.30	\$75,454	\$410.08	\$77,495
20	\$49,683	\$270.02	\$54,093	\$293.98	\$57,913	\$314.74	\$62,394	\$339.10	\$73,471	\$399.30	\$75,454	\$410.08	\$77,495
21	\$49,683	\$270.02	\$54,093	\$293.98	\$57,913	\$314.74	\$62,394	\$339.10	\$74,732	\$406.15	\$76,717	\$416.94	\$78,758
22	\$49,683	\$270.02	\$54,093	\$293.98	\$57,913	\$314.74	\$62,394	\$339.10	\$74,732	\$406.15	\$76,717	\$416.94	\$78,758
23	\$49,683	\$270.02	\$54,093	\$293.98	\$57,913	\$314.74	\$62,394	\$339.10	\$75,998	\$413.03	\$77,979	\$423.80	\$80,021

TABLE 1A TYPICAL TEACHER SALARY SCHEDULE

WHY CONSIDER CHANGING THE SINGLE SALARY SCHEDULE?

A system that pays teachers solely on the basis of years and units has the virtue of simplicity and a kind of fairness, but it produces neither professionally competitive nor market sensitive salaries. It does not offer incentives or recognition for stellar teaching, and it fails to recognize the reality that some teaching jobs are more challenging than others and some subject area openings are more difficult to fill.

Policy discussions, and efforts at change, center on the basic principles that govern teacher salaries. Whether these emerging forms of pay travel under the name pay-for performance, alternative compensation, or professional pay, all are geared toward amending, revamping, or replacing the nearly ubiquitous single salary schedule.

Proponents of salary reform argue that how salaries are determined—the architecture of the salary system—should reflect what matters most for improving student achievement. The efficacy of the single salary schedule has been challenged in this regard (Loeb, 2000). Experience and advanced degrees account for only a tiny percentage of the explainable contributions teachers make toward improving student learning (Hanushek, 1994; Goldhaber, 2006). Moreover, the single salary schedule ties teachers to what is almost invariably a very slow salary climb (Koppich, 2008).

Salary schedules in California are negotiated at the local level. It is within the power of school districts and the teachers' bargaining agent to change them (Strunk, 2009). Such changes are currently high on local, state, and national policy agendas. The issue goes far beyond well-worn

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arguments about teachers' level of pay, focusing instead on the explicit and implicit incentives created by such compensation.

MONEY AND MOTIVATION

Teaching has never been a road to riches, and those who choose a teaching career generally do so for reasons far more important than the paycheck they receive. Still, pay matters. Teachers consider pay when making decisions such as whether to leave the profession or stay in it. Pay can also be a factor when teachers decide what school or district to choose.

Additional dollars can also make a difference in persuading teachers to do or try things they might not otherwise choose to do, such as earning advanced degrees, participating in professional development, assuming new responsibilities, or attempting new instructional approaches that stretch them beyond their familiar practices. If the bulk of pay is locked in by the single salary schedule, and unaffected by what a teacher does, even relatively small pay incentives can influence decisions and behavior. Teachers might or might not decide to act on an incentive, but they will almost certainly give it some consideration.

WHAT PURPOSES MIGHT A NEW PAY SYSTEM SERVE?

If pay incentives can help to align teachers' decisions and actions with specific strategies for improving the performance of schools and students, then an important consideration when constructing a new teacher compensation system is to be clear about what the new system is designed to accomplish. New pay plans currently being implemented, some of which are examined in the next section of this paper, typically are targeted to at least one of following purposes:

- Increasing teachers' knowledge and skills— New pay systems often are designed to reshape teachers' professional development. Pay incentives structured around teachers' knowledge and skills are designed to improve teachers' instructional practice in the service of improving student learning.
- Attracting teachers to hard-to-staff schools—Urban districts often have difficulty attracting and retaining well-qualified teachers in low-performing schools, which typically have high populations of minority and low-income students. New financial incentives can make it more attractive for teachers to accept assignments in these schools, and help to address the assignment inequity that often results in an overabundance of inexperienced and under-qualified teachers in schools facing the greatest challenges.
- Attracting teachers to hard-to-staff subjects—In a perfect world, teachers in all fields would be in adequate supply. In the real world, this is not always the case. Teachers of mathematics and science, English as a Second Language, and special education are more difficult to recruit than teachers in other fields. Offering financial incentives for teachers in shortage areas could make these fields more attractive.
- Creating professional growth opportunities—Too often, teaching is a static career.
 Job responsibilities rarely change with experience. Teachers often leave teaching because

in order to achieve professional advancement they need either to move into administration or to move out of education altogether. Alternative compensation programs can support the creation of new career structures that offer added pay for added professional responsibilities (e.g., being a coach or a mentor) and that allow accomplished teachers to assume differentiated responsibilities while remaining close to the classroom.

Some districts have designed career "stages" that align with differentiated responsibilities such as novice teacher, career teacher, and lead teacher. Those who earn lead teacher status take on responsibilities such as supporting (and, in some cases, evaluating) beginning teachers, providing assistance to struggling teachers, or serving as curriculum or professional development specialists. Lead teacher positions carry added salary and allow teachers to use skills they may not have an opportunity to use in their own classrooms.

 Improving student performance— A number of new teacher pay plans are linked to teachers' ability to raise their students' scores on standardized achievement tests. Rewarding teaching practices that lead to improved test scores, often called "performance pay," is the most controversial component of emerging teacher pay structures. It is also the program element that is most frequently misunderstood and most often bungled in implementation.

Value-Added Assesment

What is a fair way to account for the fact that some teachers' students begin the school year

with higher test scores than students in another classroom, or the fact that some classes enroll large numbers of students living in poverty, or struggling to learn English, while others do not? To answer some of these concerns, pay plans that seek to use test scores to measure the performance of schools and teachers have begun to experiment with "value-added" methods for assessing student progress.

Value added methodologies (there is no single method) allow each student's test results to be directly compared with that student's scores from prior years. The gains students make annually are interpreted as the "value" a teacher adds to a student's learning.

Researchers continue to debate the validity and appropriate uses of various value added methodologies (McCaffrey, 2005; Sanders, 2006) as well as the extent to which test scores measure teacher effectiveness. Consensus seems to be growing on two issues, however: 1) if student test scores are to be a component of teacher pay, value added calculations are to be preferred over simple annual attainment scores; and, 2) value added is not yet mature enough to be used as the sole measure of teacher pay, and particularly not when it comes to the pay of individual teachers. Value added methodologies do hold promise for providing teacher group performance awards (i.e., to a team, grade level, department, or school) and, perhaps with time, for individual teacher performance as well.

Why Not "Merit Pay"?

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Discussions of teacher alternative compensation are often sidetracked by references to "merit pay". Recent and painful experience means that the term merit pay has the capacity to virtually shut down potentially fruitful conversations about teacher compensation.

The United States had a short-lived policy flirtation with "merit pay" plans in the 1980s. These programs, in which the determination of teachers' eligibility for salary bonuses typically was based on principals' ratings of teachers' effectiveness, foundered on the shoals of poor planning, insufficient training, and inadequate funding (Koppich, 2008).

Principals' reviews of teachers in these systems tended to be highly subjective, based on individual administrators' views of what constitutes good teaching—"I know good teaching when I see it"—rather than on recognized standards of good practice. Judgments of so-called merit offered no gradations; one either was or was not deserving of merit pay (Snowden 2007). While it is true that evaluation is likely always to have an element of subjectivity, this is mitigated to the extent that the system operates under a framework of recognized principles and practices.

Moreover, merit pay reinforced a culture of isolation in teaching. Teachers were obliged to compete with one another for merit dollars that were in short supply, thus diminishing prospects for professional collaboration.

In addition, merit pay programs set artificial quotas. Systems were inadequately financed, resulting in fewer teachers than the number who qualified for merit pay receiving the dollars (Murnane and Cohen, 1986). Some teachers were forced to take their merit earnings in the form of commendations, congratulations, and other "psychic rewards."

Finally, funding for these programs was erratic. Teachers could not be sure if systems would be funded from one year to the next. Thus, willingness to make a commitment to new pay systems was further tempered by teachers' concern that the program would be short-lived. The merit pay program in Fairfax County, Virginia, for example, had a five-year lifespan, from 1986 to 1992. This was probably the longest (and best-known) of the merit pay programs, but it too fell victim to budget problems.

Is Pay the Answer?

Changing the salary structure, even if the result is higher salaries, is not likely by itself to serve as an adequate incentive to retain a high quality teacher workforce, particularly in hard-to-staff schools and subjects. Many factors including quality professional development, effective administration, and good working conditions are essential to attracting and retaining high quality teachers (Loeb and Reninger, 2004; Reed, Reuben, and Barber, 2006; Koppich, Humphrey, and Hough, 2006). Nevertheless, money matters.

The immediate reality is that teachers are unlikely to receive large salary increases in the near term, given current economic circumstances. Neither the public nor policy makers are inclined to support sizeable salary increases without substantial changes in the rules governing teacher pay. A salary structure more in tune with public priorities, including improved instruction for children living in poverty, better math and science instruction, and some form of increased accountability for schools and teachers may help to build political support for significant teacher salary increases.

At the same time, the need for more evidence about what kinds of compensation changes make a difference offers a compelling case for more experimentation with different forms of teacher pay. Unpacking what salary compo-

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nents help to attract and retain teachers in hardto-staff schools and subjects or help teachers improve their professional practice to improve student achievement can serve the dual purpose of opening the door to public support for larger salary increases while furthering the education improvements the public and policy makers are demanding.

INNOVATIVE TEACHER COMPENSATION PROGRAMS

Since Denver began its pilot pay program in 1999, dozens of districts have developed programs that differentiate teacher pay in various ways. Related programs now include the federal government's Teacher Incentive Fund, the Teacher Advancement Program that operates nationwide, and state and local compensation plans. This section provides brief descriptions of some of the most prominent of these new teacher pay plans.

The Federal Government's Teacher Incentive Fund

In 2006, the federal government launched a \$99 million Teacher Incentive Fund (TIF). This fund created a competitive grant process through which states and school districts could apply for dollars to design and implement new forms of teacher (and principal) compensation. The program criteria required that new pay plans be targeted primarily to personnel in low-performing, high poverty schools to increase effectiveness and improve student performance. Grants were awarded for a period of five years.

Currently, 34 states and districts scattered throughout the United States have received TIF grants. These include districts such as the Beggs (Oklahoma) Independent School District, a coalition of eight rural local education agencies; the Chicago Public Schools; the Houston and Dallas Independent School Districts; Eagle County, Colorado's school district; the Prince Georges County, Maryland district outside of Washington, D.C.; Florida's Hillsborough County school district; the Lynwood, California Unified School District; and an Ohio coalition consisting of the Cincinnati, Cleveland and Toledo public school districts.

The economic stimulus program, signed in February 2009 by President Obama, includes \$200 million for a new round of TIF grants.

SRI International was awarded a contract by the U.S Department of Education in fall 2008 to begin an evaluation of the TIF Program. That work is scheduled to last for four years.

The Nationwide Teacher Advancement Program

The Teacher Advancement Program (TAP), now part of the National Institute for Excellence in Teaching, was launched in 1999 by the Milken Family Foundation. The program is organized around four elements:

- multiple career paths (career teacher, mentor, master teacher) with increasing responsibilities and pay (\$7,000 per year for mentors; \$15,000 per year for master teachers) to provide teachers with additional professional opportunities that do not require them to leave the classroom;
- ongoing professional growth, including a restructured school day that provides teachers, led by master and mentor teachers, with time to collaborate;

- instructionally-focused accountability through six-times-per-year peer and administrator evaluation with performance measured against TAP's research-based Teaching Skills, Knowledge, and Responsibility Standards; and,
- *performance-based compensation* structured around both individual and group performance based on gains on standardized tests using a value-added calculation.
 TAP currently operates in 50 districts and more than 220 schools.

A 2008 study of TAP by the National Center on Performance Incentives at Vanderbilt University examined the correlation between student test score gains in math and participation in the TAP program (Springer, Ballou, and Peng, 2008). Researchers found a positive effect on student gains in the elementary grades, but less compelling results for grades 6 through 10. They note that the fidelity of implementation across TAP schools, variation in the schools themselves, and a small study sample size may have affected their results.

State Level Programs

Several states have made funding alternative compensation plans for teachers a state priority. We feature two of them here: Minnesota and Texas. These were selected because they are the longest continuously-funded state programs.

Teacher Alternative Compensation in Texas

Texas has funded three teacher pay programs: the Texas Educator Excellence Grant (TEEG), the District Awards for Teacher Excellence (DATE) Program, and the Governor's Educator Excellence Grant (GEEG). The programs, which began in 2006, differ in their specifics, but all target teachers in low-performing schools and all are designed to provide dollars both to create capacity to improve instruction and to reward teachers who accelerate student learning.

TEEG, the first of the programs created, is non-competitive, funded at \$100 million per year, and targeted to 1,000 high-need schools. The program's initial evaluation, conducted by the National Center on Performance Incentives under contract to the Texas Education Agency, examined the impact of the program on teachers' motivation and attrition as well as on student achievement. Teachers were generally positive toward the program, but the evidence on student achievement gains was mixed.

GEEG and DATE are both competitive programs in which districts and schools have the flexibility to structure and implement pay plans to meet their specific local needs. DATE's \$147.5 million annual allocation is divided among 200 school districts encompassing nearly 50 percent of Texas public school students. Evaluation data are not yet available for GEEG and DATE.

Minnesota's Q Comp

Minnesota Governor Tim Pawlenty in 2005 approved an initial \$86 million in state funds for the Quality Compensation Plan (Q Comp). The program is designed to increase teachers' knowledge and skills, attract and retain high quality teachers in Minnesota public schools, and support teachers in their efforts to improve student achievement. Administered by the Minnesota Department of Education, Q Comp provides approximately \$260 per student to participating districts. Districts must apply for the money to design and implement their Q Comp plans; they are not required to participate. Under the law, the new pay plans must include five components:

- a career ladder (or job advancement system) for teachers;
- job-embedded professional development which, in keeping with research on effective professional development, must be integrated into the workday, led by teachers, and site focused;
- a comprehensive, standards-based evaluation system;
- performance pay in which measures of student academic achievement on standardized tests align with at least 60 percent of increases in teacher compensation; and,
- 5) an alternative salary schedule that reforms that traditional steps and lanes configuration.

The state provides technical assistance to districts that are interested in Q Comp in the form of a detailed website, regional workshops, and an annual statewide conference.

Teachers are directly involved in the design and implementation of district level Q Comp plans. The law specifies that the teachers' bargaining representative must be part of the development team, sign off on the plan that is submitted to the state, and negotiate the reconfigured salary schedule.

District Level Compensation Programs

Many districts across the country have taken up the challenge to develop and implement new forms of teacher pay. In this section, we provide brief descriptions of six of these plans: Denver, Colorado; Toledo, Ohio; New York City; Minneapolis, Minnesota; Montgomery County, Maryland; and San Francisco, California.

ProComp in Denver

Denver's initial foray into alternative teacher compensation was the Pilot Project, launched in 1999 and continuing until 2003. The Pilot Project was a cooperative effort of the Denver Public Schools (DPS) and the Denver Classroom Teachers Association (DCTA), under which teachers set measurable performance objectives for their students. The Pilot Project was evaluated by the Community Training and Assistance Center (CTAC) which found a positive correlation between the schools that participated in the pilot program and increases in student test scores.

Pro Comp was launched in 2004. Part of a nine-year collective bargaining agreement between DPS and DCTA, ProComp is designed to link teacher pay to the district's instructional mission and attract and retain well qualified teachers in the Denver Public Schools. Under ProComp, pay based on experience and units is replaced with a system in which teachers earn added compensation for:

- acquiring and demonstrating knowledge and skills linked to improving student achievement;
- meeting market demands for teaching in hard-to-staff schools and subjects;
- successfully completing performance evaluations; and,
- improving student scores on standardized tests. The plan, thus, provides multiple ways for teachers to earn added compensation.

ProComp payments can range from about \$400 per year to nearly \$2500 per year. All Pro-Comp earnings are pensionable.

The original ProComp agreement was amended in August 2008 as a result of negotiations between the district and the union. The amended agreement raised starting salaries, provided more dollars for hard-to-staff schools and subjects, increased payouts both for teaching in hard-to-staff schools and for top-performing schools, and increased the amount paid for increases on the Colorado state standardized test.

Teachers employed in Denver when the plan went into effect were offered the choice to participate in the new pay system or to remain on the standard salary schedule. The district and union developed a web-based calculator that predicted teacher earnings out several years so that teachers could determine which system was financially more advantageous for them. Any teacher hired after January 2006 is automatically placed in ProComp.

ProComp is funded by a voter-approved local tax on property. Dollars are set aside in a trust jointly administered by the union and the district that is designed to ensure that the system will not run out of money. An evaluation of Pro-Comp is being conducted by the University of Colorado with results scheduled to be available in spring 2009.

Toledo's TRACS

The Toledo Review and Alternative Compensation System (TRACS) is a three-tier plan that operates as a cooperative effort of the Toledo Public Schools and the Toledo Federation of Teachers. Begun in 2002, the system is designed to align enhanced teacher compensation with more effective teaching and improved student learning as well as to increase teacher retention. It is administered by a joint union-management Professional Assignment and Compensation Committee, comprising three teachers appointed by the union and two administrators appointed by the district.

Each of the TRACS tiers encompasses different duties and responsibilities. TRACS A focuses on individual teacher professional development and provides incentive dollars for teachers to participate in professional development linked to improving teaching and learning. Participating teachers can earn five percent above base salary.

TRACS B is designed to improve measurable levels of student achievement. Based on group (team, grade level, school) effort, it is designed financially to reward teachers in schools that meet or exceed pre-established achievement goals as measured by students' scores on Ohio's standardized tests. Groups of teachers who reach designated goals earn ten percent above base pay.

TRACS C is focused on individual teacher performance. Teachers who participate must have a minimum of five years of successful teaching experience, at least three of them in Toledo public schools. TRACS C includes an embedded career ladder with three levels—Career, Accomplished, and Distinguished.

Teachers at all three TRACS C levels remain in the classroom. Career status teachers must select an area of student achievement to focus on and continually assess their students' progress toward it. Accomplished teachers, in addition to their classroom teaching duties, serve as peer reviewers and curriculum developers. Distinguished level teachers must agree to be assigned to high-needs schools for periods of not less than three years. Teachers eligible for TRACS C dollars can earn 15 percent above base pay. TRACS A and B are funded out of the district's general fund revenues. TRACS C is funded with federal Teacher Incentive Fund dollars.

The School-Wide Performance Program in New York City

New York City, the nation's largest school system, announced agreement on a new teacher compensation plan in November 2007. Under the terms of the agreement between the city, the school district, and the United Federation of Teachers, participating schools must be designated as "high need" and have approval of 55 percent of the school's faculty. Teachers then are eligible for incentive dollars based on their students' growth on the state's standardized achievement tests.

Eligible schools qualify as "high-need" under New York's Contracts for Excellence state fund, based on the proportion of students who are English Language Learners, have disabilities, are in poverty, have low academic achievement, or are at risk of not graduating. Average proficiency scores for 4th grade New York State English language arts and 8th grade and high school mathematics exams are also included in the formula. Based on a cumulative score, or "concentration of need," schools are ranked from highest to lowest need. Ninety percent of the participating schools were selected from among the city's neediest schools.

New York City's pay plan reflects a group performance reward model. Those schools that reach the growth target receive the equivalent of \$3,000 per teacher, the money to be apportioned by a four-person committee: two teachers selected by the teachers, the principal, and a fourth person designated by the principal. The implications for individual teachers can vary from school to school. The committee has the authority to distribute the dollars as they see fit, with the caveat that seniority may not be the primary basis for allocating funds. If the committee cannot decide how to divide the dollars, the school forfeits the money.

In September 2008, the district announced that 122 of the 205 participating schools, or 60 percent, received bonuses totaling \$22.5 million. Funded in the first year by a New York City-based business coalition led by The Eli and Edythe Broad Foundation and the Robertson Foundation, both of which committed \$5 million, the pay program will be funded in subsequent years by the City.

A multi-year evaluation by the Rand Corporation will appraise performance gains at schools that participate in the program, examine reasons why some schools chose to participate in the program and some did not, review the way award dollars were distributed by the school committees, and examine the program's impact on hiring and retention.

Alternative Pay in Minneapolis

Minneapolis' alternative pay system is part of Minnesota's state Quality Compensation for Teachers (Q Comp) program.

Minneapolis' version of Q Comp, the Alternative Teacher Professional Pay System (ATPPS), is a cooperative effort of the Minneapolis Public Schools and the Minneapolis Federation of Teachers. The program was begun in 2002 as ProPay and expanded, with state funding, in 2006. ATPPS is overseen by a joint labor-management committee.

The program focuses heavily on improving teaching practice through professional development, offering teachers multiple ways to advance on the salary schedule. Maintaining the basic salary schedule architecture, ATTPS' salary steps (now called "career increments") are achieved by a combination of experience, implementing professional development plans linked to student achievement goals, and maintaining a professional portfolio. Salary lanes, called "professional growth credit lanes," are marked by achievement of National Board Certification, earning subject specific masters degrees, and acquiring teaching specialization in areas of designated district need. In addition, Minneapolis teachers can earn incentive dollars by assuming teacher leadership responsibilities including service as mentors, peer or cognitive coaches, professional development providers, and members of site leadership teams and district-wide committees.

Another component of the Minneapolis compensation plan is Quality Performance Awards. Each school receives a Quality Performance score from one to five based on a system that uses 33 indicators of school effectiveness, including value-added student test scores, student attendance, and results of parent and student satisfaction surveys. Teachers can earn professional growth credits, which translate into salary advancement, according to their school's Quality Performance score. Fifteen professional growth credits merit a teacher an approximate \$500 bonus.

Participation in ATTPS is voluntary for Minneapolis teachers. About half of the district's teaching staff has elected to participate thus far.

The Career Lattice in Montgomery County, Maryland

The career lattice in Montgomery County, Maryland is part of the district's teacher quality initiative, the Professional Growth System. The result of a collective bargaining agreement between the Montgomery County Public Schools (MCPS) and the Montgomery County Education Association (MCEA), the career lattice is designed to provide "stages" in a teaching career. A principal purpose of the career lattice is to attract and retain high-performing teachers, in part by providing teachers with options to vary their professional routines and encourage them to remain in the classroom.

The lattice designates three stages in a teacher's career: 1) induction; 2) skillful teaching; and 3) lead teacher. The induction phase is for novice teachers and emphasizes professional development under the tutelage of mentors, consulting teachers (part of the peer assistance and review program), staff development teachers, and administrators.

Skillful teachers are tenured teachers who have demonstrated effectiveness in the classroom. Skillful teachers receive ongoing professional growth and development; they can remain at this stage for the duration of their careers.

Lead teacher is a competitive status. Lead teachers assume added responsibilities as coaches, mentors, peer evaluators, staff development specialists, and in other positions linked to instructional and school improvement. Lead teachers earn an additional \$2,000 per year.

The program is overseen by the Career Lattice Joint Panel, composed of an equal number of teachers recommended by MCEA and administrators recommended by the Montgomery County Association of Administrative and Supervisory Personnel (the administrators' union). The district is represented by the associate superintendent for human resources. Montgomery County's career lattice is in its initial stages of implementation. Stages one and two—induction and skillful teaching—are now being implemented. The lead teacher position becomes effective July 1, 2009.

San Francisco Quality Teacher and Education Act of 2008

In June 2008, San Francisco voters approved Proposition A, a parcel tax that will give the San Francisco school district approximately \$29 million per year until 2028, with the money to be used mainly for added teacher pay. The parcel tax assesses each property owner \$198 per building per year. The proposition garnered wide support, including from the city's board of supervisors, mayor, school board, teachers union, and the local chamber of commerce. Needing a two-thirds vote to pass, Proposition A received 70 percent voter approval.

Under the Memorandum of Understanding between the San Francisco Unified School District and the United Educators of San Francisco, a merged AFT-NEA local that represents the district's teachers, parcel tax dollars will be used both to boost all teachers' salaries and to provide some differentiated pay.

The parcel tax will increase beginning teachers' salaries to almost \$50,000 a year while increasing all salaries between \$4,000 and \$6,000. Teachers in schools deemed hard-to-staff will receive an additional \$2,000 annually. Teachers in hard-to-staff subjects will receive an additional \$1,000 each year. In an effort to curb teacher attrition (currently, one in five teachers leaves the district after three years or less), teachers will also receive a one-time bonus of \$2,500 and \$3,000 after their fourth and eighth years respectively in the district. The San Francisco program also creates 50 master teacher positions, each to be paid an additional \$2,500 per year, and increases the number of peer assistance and review coaches who provide support and evaluation for underperforming tenured teachers. In addition, by agreement between the district and the union, the 20 schools that show the most improvement in their achievement will receive block grants of \$30,000 per school.

The San Francisco pay plan, still in its developmental stages, is being designed to serve a number of purposes, including giving all teachers a badly needed salary boost, targeting dollars to teachers in high-need subjects and schools, and making the performance evaluation system more effective.

San Francisco's parcel tax-driven pay changes will be evaluated by Stanford University. The evaluation will focus mainly on the program's impact on attracting and retaining high-performing teachers and improving the performance of less successful teachers.

As the previous examples illustrate, teacher compensation programs serve a variety of pur-

poses, often simultaneously. Some, like Denver and New York City, target increasing scores on standardized student achievement tests. Minneapolis and Denver emphasize teacher professional development and improving teachers' knowledge and skills. At least three programs— TAP, Montgomery County, and Toledo—focus on building a career in teaching. Some of the programs, such as Denver and San Francisco, try to make teacher compensation more sensitive to market needs.

Table 2 illustrates which elements of alternative compensation each of the described districts targets. As is evident, many of the districts "mix and match" various pay components in their new salary systems.

As Table 2 makes clear, there is no one "right way" to structure teacher compensation. Context matters. The local districts and unions that have led innovation in this area have developed and implemented plans to meet their specific needs, including the need to secure the acceptance and support of teachers and taxpayers.

	Knowledge and Skills	Hard-to-staff schools/ subjects	Expanded responsibilities/ Career ladder	Improved student achievement
Denver	v	v		v
Minneapolis	v		v	
Montgomery County			v	
New York City				 ✓
Q Comp	v	~	~	 ✓
San Francisco		v		 ✓
ТАР			v	 ✓
Texas	v			 ✓
Toledo	~		~	v

TABLE 2 KEY FEATURES OF SELECTED TEACHER COMPENSATION PROGRAMS

EMERGING LESSONS FROM INNOVATIVE PROGRAMS

What, then, can we take away from these new teacher pay programs? What lessons are emerging that can be instructive to other districts looking to establish their own teacher compensation programs? What are the factors and conditions that contribute to developing and implementing new forms of teacher pay?

Ten lessons emerge from a review of the programs described in the preceding section of this paper. These programs:

- Are clear about their purposes. Whether programs focus on increasing teachers' knowledge and skills, meeting market demands, improving measurable student performance, increasing teachers' career options, or a combination of these, programs are transparent about what they are trying to accomplish.
- 2) Are designed to meet multiple challenges. Districts that undertake revisions of their compensation systems typically face multiple challenges, from attracting and retaining well-qualified teachers in highneed schools to closing achievement gaps. New compensation programs target these challenges and seek to use financial incentives as one way of ameliorating them.
- 3) Include multiple options for teachers to advance in pay. Most alternative teacher compensation programs offer multiple ways for teachers to advance in pay. They do not rely on a single method.
- Represent joint union-management undertakings. The compensation programs described in this paper reflect co-

operative ventures on the part of school districts and their local teachers' unions. In addition to being legally required in collective bargaining states (salaries are a mandatory topic of negotiations), involving teachers at the outset helps to ensure teacher buy-in, which is a necessary prerequisite to the successful implementation of new pay programs. Designing new pay plans under joint union-management auspices recognizes the simple fact that unilateral action on the part of states or districts is destined to fail.

5) Consider means by which all teachers can participate. In a compensation system based solely on standardized test scores, as many as two-thirds of teachers are excluded from the opportunity to earn incentive dollars. These include teachers in subjects that are not tested, such as art, music, physical education, foreign language, pre-K to grade 2, and teachers of English language learners and of students with disabilities. Although teachers of other subjects and non-tested grades may play a significant role in improving student achievement, without special attention they are likely to be left out of alternative teacher pay plans (Prince, 2008). Comprehensive systems find ways to include all teachers through, for example, school-wide (as opposed to individual) performance bonuses, criteria other than test scores to measure noncore teachers' eligibility for awards (e.g., observed evaluation of classroom performance), acquisition of added knowledge and skills, assumption of additional roles and responsibilities, or new student tests

created to assess teacher performance in non-core subjects (e.g., high school endof-course exams).

- 6) Are structured as incentives. The alternative compensation programs described in this paper feature carrots rather than sticks. In these programs, no one loses pay as a result of participating and there are no quotas. Everyone who is eligible for an award receives one. Additionally, many of these programs, at least at the beginning, offer teachers the option of participating rather than requiring them to do so.
- 7) Encompass incentives and rewards that are understandable and attainable. Teachers must understand the program components and what it will take for them to earn bonuses. This is not to say that all teachers must earn bonuses from the beginning, but it is essential that teachers clearly understand what challenges they must meet to receive additional pay. Communication is key here. Without frequent communication, preferably in multiple formats (oral, written, and electronic), teachers (and principals) can be left with inadequate information on which to make decisions about what bonuses to pursue and how to achieve them.
- 8) Reflect careful planning. Pay plans that make a difference are the product of careful and detailed planning. In order to design and implement a new compensation system, both the district and the local union must thoroughly think through the elements of the program, how these elements will be integrated

into the district's "big picture" on improving teacher quality, and what kinds of information must be communicated to teachers, principals, and other stakeholders. The planning process must include careful consideration of how the compensation program will be financially sustained for the long-term. Implementing new teacher pay plans is not simply a matter of rearranging the current dollars on the salary schedule. New programs require the identification of new funding streams. Where new money is to come from and how the flow of funds will be sustained over time are critical program elements.

9) Emphasize school and district capacity building. The compensation programs described in this paper emphasize capacity building on two dimensions. First, they are about increasing the capacity of school districts to provide the requisite support structures for teachers to engage in continuous, high quality professional improvement. Second, these programs enhance districts' ability to manage and make use of the data that are an essential foundation for the new systems. These data include accurately pinpointing where and what teachers teach, tracking teachers and their students (and their students' achievement results) over time, matching students to teachers, and having a central payroll system that can handle new forms of pay and the kind of teacher-to-teacher pay variability that is likely to emerge with a new compensation system.

 10) Use multiple means to measure teacher quality and effectiveness. Many new compensation programs employ multiple measures to appraise teacher effectiveness. Multiple measures, including student test scores, evaluation results, and professional portfolios are often a byproduct of pay plans with multiple purposes.

CURRENT RESEARCH ON TEACHER COMPENSATION

What have we learned so far from research on new forms of teacher compensation? What is there still to learn? Research in this area, though growing, remains sparse and incomplete. As scholars of alternative teacher compensation have noted, there currently is scarce evidence on the effects of various compensation programs either on elevating student achievement or on widening the attractiveness of teaching as a career (Podgursky and Springer, 2007; Guthrie and Scheurman, 2008).

Among the important compensation questions currently being studied are: Does money make a difference? How much is enough? What kinds of impacts might financial incentives have on multiple goals including attracting and retaining teachers in hard-to-staff schools and subjects, encouraging well qualified teachers to remain in the profession, and boosting student achievement results? Do pay incentives motivate teachers to work or behave differently? Answers to these questions will help districts to shape effective compensation programs, but a much wider array of teacher experiments will be necessary before we can arrive at useful answers.

Does money make a difference? Early research suggests that money may be necessary, but is not sufficient. Working conditions—class size, school culture, facilities, leadership, and safety—influence both teachers' satisfaction with their careers and decisions about where to teach (Loeb and Reinenger, 2004). Additional information pertinent to this question may come to light come with the spring 2009 evaluation of Denver's ProComp, being conducted by the University of Colorado.

How much is enough? The National Center on Performance Incentives is conducting a rigorous experiment in Nashville public schools among middle school math teachers. The experiment, which utilizes both control and treatment groups, offers payments of \$15,000- \$25,000 for increased student test scores. Results will be available in approximately two years.

Another research effort designed to answer the question, "How much is enough?" used North Carolina data. For three years beginning in 2001, North Carolina awarded an annual bonus of \$1800 to certified math, science, and special education teachers working in high poverty and/or low-performing secondary schools. Using longitudinal teacher data, the study attempted to identify the impact of differential pay (Clotfelter et. al., 2008). Specifically, researchers examined whether the \$1800 bonus was enough to alter the rate of teacher attrition. Researchers compared turnover patterns before and after the program's implementation, across eligible and ineligible categories of teachers, and across eligible and barely-ineligible schools.

Results of this study suggest that the \$1800 bonus was sufficient to reduce turnover rates by 17 percent among targeted teachers. Experienced teachers exhibited the strongest response to the program. Researchers add the caveat that the effect of the program may have been at least partly blunted by the state's failure to fully educate teachers regarding the eligibility criteria. In other words, researchers' estimates most likely *under*-predicted the potential outcome. If more teachers had known about the program and how it worked, the impact of the bonus might well have been greater.

Do financial incentives contribute to test score gains? Five elementary schools in Little Rock, Arkansas implemented a pay-for-performance program between 2004-2007. Researchers examined student test score changes in math, reading, and language arts in three of the schools after one year of participation in the program (Winters, Green, Ritter, and Marsh, 2008). They found that students whose teachers were eligible for performance pay made substantially larger test score gains in each of those subjects.

Interestingly, researchers also found a negative relationship between the average performance of a teacher's students the year before treatment began and the additional gains made after treatment. Moreover, teachers who were previously less effective at producing learning gains improved more than other teachers.

Does pay motivate teachers to behave differently? The Consortium for Policy Research in Education (CPRE) conducted one of the early studies of this question between 1995 and 1998. In CPRE's qualitative study of three school-based performance assessment programs in Charlotte-Mecklenburg, North Carolina, Kentucky, and Maryland, researchers focused on the motivational effects of the bonus program on participating teachers. Results were mixed, and displayed a varied relationship between teacher motivation and school-based performance awards. Study leaders posited that these differences may have been attributable to differences in the programs themselves or to variation in local contexts (Kelley and Kimball, 2000).

Finally, where do teachers and teacher union leaders stand on new forms of compensation? Emerging research suggests that both teachers and their unions are more positively disposed toward alternative compensation than policy talk might have us believe.

Nearly three-quarters of teachers (70%) support paying more to teachers who work in challenging schools. More than two-thirds (67%) favor financial incentives for teachers who "consistently work harder, putting in more time and effort than other teachers." More than 60 percent support financial bonuses for teachers who "consistently receive outstanding evaluations by their principals" (Farkas, Johnson, and Duffett, 2003).

What about teacher union leaders? Conventional wisdom holds that unions are the roadblocks to new forms of teacher compensation, opposing most changes to the single salary schedule. But recent research by Harvard education professor Susan Moore Johnson suggests otherwise. Johnson interviewed a number of fairly new local union presidents. Her study found that most of these leaders are open to new ideas about compensation. They view competitive salaries as a necessary step for attracting and retaining high quality teachers in their districts, and believe new forms of compensation are the route to more competitive salaries.

This is not to say that union leaders necessarily are comfortable with all new forms of compensation. They favor added pay for added responsibilities and financial incentives to attract well-qualified teachers to low-performing schools. They are less sanguine about added pay for teachers in hard-to-staff subjects and remain leery of systems that award added pay on the basis of student test scores. The relative paucity of definitive research on teacher compensation strongly suggests the need for a wider array of compensation pilots and experiments. A careful set of experiments among some of California's nearly 1,000 school districts would contribute to understanding the various impacts of new forms of teacher compensation on increasing teachers' knowledge and skills, attracting and retaining teachers in hard-to-staff schools and subjects, broadening teachers' career options, and improving student achievement.

CONCLUDING REMARKS

This primer has outlined new teacher compensation strategies and provided examples of programs that have been developed and implemented around the country. These new programs are designed to meet a number of important school district goals, including improving teachers' knowledge and skills to improve their professional practice, providing incentives to attract and retain teachers in hard-to-staff schools and subjects, offering qualified teachers expanded career opportunities, and improving student achievement.

However useful it may be to alter the structure of teacher compensation, of course, pay is not a "silver bullet." A new teacher pay structure, even one that increases teachers' salaries, will not by itself improve teacher quality or student achievement. Money alone will not attract the most outstanding teachers to the most challenging schools. Salaries, no matter how high or how competitive, are not likely to encourage teachers to remain at schools where working conditions are poor or administrative support weak. Pay is just one element—albeit a crucial one—of an interconnected program to recruit, develop, support, evaluate, and professionally pay teachers.

While debate continues to swirl around what kinds of compensation changes are needed, one conclusion is becoming increasingly evident: the single salary schedule has outlived its usefulness. Evidence continues to accumulate that the single salary schedule does not measure what matters most, does not provide adequate incentives for continuous improvement of professional practice, does not encompass a progressive career structure for teachers, and does not reward good professional practice over poor performance.

Districts and their teacher unions must get serious about experimenting with new compensation plans that more closely meet the demands of today's education system and its teachers.

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Dr. Koppich served as Principal Investigator for a four-year study of the impact of National Board Certified Teachers in low-performing schools. She currently serves as part of the national team of researchers providing technical assistance to recipients of the federal Teacher Incentive Fund grants and is a senior researcher on a national project on strategic management of human capital.

Her areas of specialization include education policy analysis and public sector labor relations. She is the author of numerous articles and coauthor of two books: A Union of Professionals and United Mind Workers: Unions and Teaching in the Knowledge Society. Jessica Rigby is an advanced doctoral candidate in the Graduate School of Education at the University of California at Berkeley. She is currently researching the relationship between urban central offices and school site administrators, focusing on support, agency, and decision-making. Before entering the Policy, Organization, and Measurement, and Evaluation department at UC Berkeley, she received an M.A. at Stanford University and taught high school English and history for seven years.

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ADDITIONAL RESOURCES

You can find additional information about teacher compensation reform on the websites listed below.

American Federation of Teachers (http://www.aft.org)

Center for Educator Compensation Reform (http://www.cecr.ed.gov/)

Consortium for Policy Research in Education (http://cpre.wceruw.org/)

Education Commission of the States (http://www.ecs.org/)

National Center on Performance Incentives (http://performanceincentives.org/)

National Education Association (http://www.nea.org)

Policy Analysis for California Education (http:// pace.berkeley.edu/)

Teacher Incentive Fund (http://www.ed.gov/programs/teacherincentive/index.html)

Value-added Research Center of the Wisconsin Center for Education Research (http://varc.wceruw.org)