



Pioneering Teacher Compensation Reform: K-12 Educator Pay Innovation in Colorado



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Executive Summary

The transformation of teacher compensation is an integral piece of improving the overall quality of the K-12 instructional workforce. Research overwhelmingly shows the predominant single salary schedule, which pays teachers strictly according to seniority and academic credentials, to be ineffective and financially unsustainable. Numerous local innovations place Colorado at the forefront of teacher compensation reform.

Standing at the head of the pack is **Harrison School District Two's** Effectiveness and Results plan, fully implemented in the fall of 2010. Having eliminated the unproductive single salary schedule, Harrison provides three key lessons to policy makers:

- Credible measures of effective instruction should enable teachers to earn more *or* less.
- Effective teacher performance pay also requires reform of evaluations, professional development, assessments and data.
- Formal teachers union collaboration is not vital to reforming compensation and may impede enacting effective performance pay.

The only other Colorado school district to jettison the single salary schedule, **Eagle County Schools** adopted merit pay in 2001, and then refashioned the system into "Strategic Compensation" in 2007. Several other Colorado districts have advanced compensation reform with significant financial support from the U.S. Department of Education's Teacher Incentive Fund: **Denver Public Schools** (ProComp) and Fort Lupton's **Weld County School District Re-8** in 2006; as well as the state's largest district, **Jefferson County Public Schools**, and **Colorado Springs District 11**, both piloting programs awarded in 2010. Another pioneer in compensation reform, **Douglas County School District R-1**, is developing a more comprehensive pay-for-performance system.

Many Colorado school-level innovators also have implemented a variety of compensation reforms. The Academy 20 option school **Discovery Canyon** has adopted performance-based pay as part of TAP (formerly known as the Teacher Advancement Program). From 1995 to 2011, many charter schools have implemented innovative approaches to teacher compensation. Reforms include salary increases for advanced career paths, teacher-ranked merit pay, market-based differential pay, and student academic growth bonuses.

Lessons from the innovative districts, option and charter schools include the following:

- Though convincing proof still lacks, some brands of compensation reform may contribute to improved student learning outcomes.
- Compensation reform should be viewed mainly as a tool to help shape who serves in the teaching workforce.
- Results among the Colorado compensation innovators in improving teacher retention are mixed, at best.
- School-wide bonus pay plans work best alongside individual awards, helping focus teachers on core academic skills.
- Compensation reform implementation requires transparency and open channels for public and employee feedback.
- Inequitable or overly subjective pay systems can and should be modified while still preserving a performance-based focus.
- Different alternative compensation systems can reward different objectives, based on a school's particular needs.

Tighter budgets should not discourage continued innovation of educator compensation. Rightly done, differential and merit-based pay can help contribute both to long-term financial health and a stronger focus on improved student learning. Pioneering Colorado districts and charter schools have paved the way for others to follow and surpass.

Introduction: An Overview of Research

As identified more than a quarter century ago in the seminal education report *A Nation at Risk*, raising the overall quality of the teaching workforce remains a crucial piece of K-12 reform. In 2010 the Colorado General Assembly adopted Senate Bill 191, which upgrades the state's teacher and principal evaluation systems and makes tenured status harder to achieve. Yet even while the governor's Council on Educator Effectiveness wrestles with the challenges of implementation, local leaders continue to make progress in another key facet of enhancing instructional quality. School districts and charter

schools are designing and using compensation systems that seek to reward teachers (and in many cases principals and other staff) more directly for their value added to their students and school.

The industrial model of paying teachers may have made sense in a historical context, but rapidly has fallen out of pace with the needs and demands of today's K-12 public education system. Rewarding teachers based strictly on years of service and graduate-level credits and degrees alleviated concerns of sexual and racial discrimination. For years it also has undermined the valuable distinctions of instructional quality. Teachers long have been able to distinguish among themselves the top performers from the poor performers. But today's improved data systems allow for clearer definition of teacher effects on student learning.

Research continues to show the single salary schedule — still the dominant pay system in K-12 education — aligns very poorly with improved student achievement. A National Council on Teacher Quality (NCTQ) analysis of all 102 available studies on the topic shows

not a single statistically significant positive connection between teacher advanced degrees and student learning. A number of studies showed a significant *negative* correlation.¹ Yet Colorado spends nearly 1.8 percent of its total K-12 operating budget on so-called "master's bumps," teacher pay increases for earning advanced degrees.² As for the salary schedule's heavy rewards for seniority, experience beyond three to five years generally proves to add no value to teacher effectiveness.³

The September 2010 release of a study on a Nashville teacher pay incentive program made major headlines both nationally and locally. In the *Washington Post*: "Teacher bonuses not linked to better student performance, study finds."⁴ The *Denver Post* echoed the lead: "Offering teachers bonuses for student growth didn't raise scores, study finds."⁵ The headlines obscure some key points of significance, however. The IMPACT study⁶ analyzed the performance of Nashville students under the tutelage of 296 middle school math teachers, based on whether the teacher was eligible for a randomly-assigned bonus of \$5,000, \$10,000 or \$15,000, or no bonus at all. Only a third of the bonus-eligible teachers were successful in meeting the student assessment goals during even one year of the three-year study.

NCTQ correctly noted that the Nashville study was not properly designed to measure instructional improvements because "teachers and principals were unaware who won bonuses and were not provided with resources to voluntarily improve their own instruction."⁷ Generally, merit-based compensation reforms can be adopted to pursue one or more of three policy goals: induce existing teachers to put forth more effort, motivate high-quality teachers to continue in the profession, and/or attract new persons into

NCTQ correctly noted that the Nashville study was not properly designed to measure instructional improvements...

professional employment. As Harvard economics and education professor Thomas Kane observed, the Nashville study only focused narrowly on the first goal.⁸

However, the debate over whether individual incentives effectively can provoke teachers to influence greater student learning is unsettled. Less well publicized than the recent Nashville study is published research by professors at the University of Arkansas. Developing a theoretical model for teacher productivity, researchers found that a Little Rock program's financial rewards for significantly improving students' math and reading test scores provided teachers with a measurable level of external motivation. Greater learning gains were found in Little Rock schools where merit pay was offered than in control schools, a result reflected in many quantitative studies that have measured the impact of teacher incentive pay on student achievement.⁹

Not all incentive-based compensation is created equal. Released in February 2011, a two-year Columbia University study of New York City's School-Wide Performance Bonus program—a collaborative effort between the Department of Education and the teachers union—shows the program has had “very little impact” on measurable student learning outcomes. The only modest benefits were observed in smaller schools where individual teachers have more incentive to excel or may have more opportunity for meaningful collaboration.¹⁰ The findings contrast somewhat with the positive results analyzed from an Israeli high school performance “tournament” that offered school-wide bonuses for improving student achievement.¹¹

K-12 Compensation: Colorado Terrain

Colorado provides fertile ground for locally-crafted, innovative K-12 compensation sys-

tems because of the flexibility provided in state law. According to statute, “The board of a school district shall adopt by resolution a salary schedule that may be by job description and job definition, a teacher salary policy based on the level of performance demonstrated by each teacher, or a combination of the salary schedule and salary policy.”¹² Apart from the creation of a one-time grant program paid for by \$1 million in federal funds, the Colorado General Assembly has done little else to advance K-12 compensation reform. The State Board of Education has deemed it a legislative priority to “recognize, reward and compensate effective educators.”¹³

Colorado teacher compensation innovation has emerged from a number of separate locally-initiated reforms. Starting in the 1990s and accelerating in recent years, various school districts—including some of the largest—and charter schools have forged approaches to reward instructors based on how well they serve students and fulfill the mission of the school. They accord individual skill and accomplishment greater weight in the compensation equation, without sacrificing faculty collegiality or collaboration. They measure and reward contributions to the school beyond loyalty as defined by years on the job.

Performance Pay in Harrison: A Colorado Model

Harrison School District Two has adopted the most innovative and forward-thinking educator compensation system in Colorado (and perhaps nationwide): the Effectiveness and Results (E and R) program, which was fully implemented in the fall of 2010. Located in the southern part of Colorado Springs, Harrison enrolls more than 11,000 students and employs more than 800

Harrison School District Two has adopted the most innovative and forward-thinking educator compensation system in Colorado...

full-time equivalent teachers. Under the local freedom granted in Colorado state law, Harrison does not have a collective bargaining agreement with a teachers union. Seven in 10 Harrison students are eligible for the federal free and reduced lunch program due to family poverty, the highest rate in El Paso County and a rate comparable to Denver Public Schools.¹⁴

Because Harrison teachers may either increase or decrease their current earnings based on measured instructional effectiveness, the E & R Plan is a true pay-for-performance system.

Appointed Harrison superintendent in 2006, Mike Miles has led the effort to transform how his district's teachers are developed, evaluated and rewarded. Superintendent Miles has championed the idea that performance pay cannot be implemented successfully in isolation. It needs to be part of a systemic reform that includes the following:¹⁵

- Training of principals as instructional leaders who are held accountable for the quality of instruction they supervise;
- A culture of regular, consistent and effective instructional feedback, based on frequent observation by

principals (at least 8 times a year for non-probationary teachers, 16 for probationary teachers) and professional communication;

- Effective teacher evaluation instruments that make useful distinctions based on measurable and observable criteria;
- A system that collects and analyzes data for use in improving student instruction; and
- A system that provides professional development support for teachers and principals to work together to improve instruction.

Harrison is one of two Colorado school districts to have abandoned completely the traditional salary schedule. In Harrison a teacher's evaluation now is based on two equal factors. Half of the evaluation is deter-

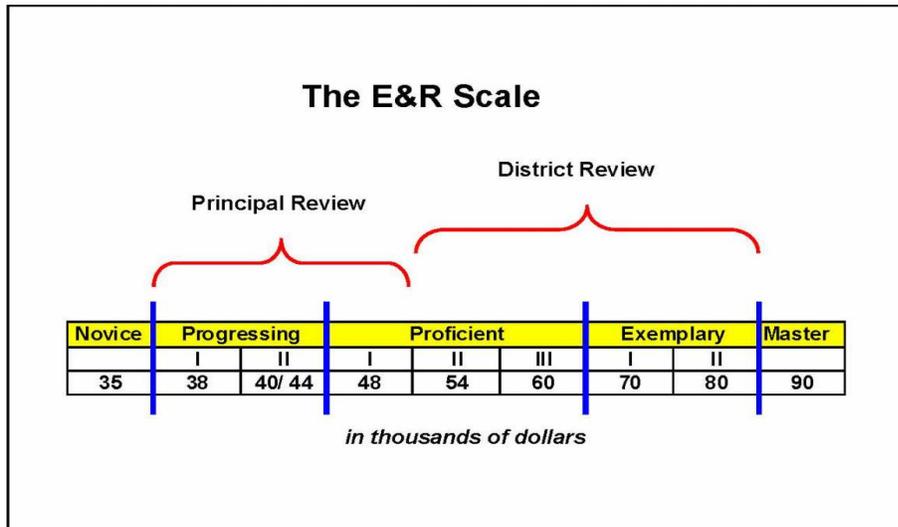
mined by classroom **performance** – primarily instructional quality – and other professional responsibilities. The other half of the evaluation is based on an eight-part **achievement** template. Four parts are determined by class-level and school-wide academic growth, as measured by the CSAP or other external assessments. The other four parts are determined by a battery of homegrown assessments (tied to state standards and district curriculum maps) and final exams administered to students each semester.¹⁶

Starting in the 2010-11 school year, Harrison teacher compensation is tied directly to one of nine effectiveness levels based on a proven ability to demonstrate thresholds of mastery in both performance and achievement.

Teachers can earn a base salary ranging from \$35,000 as a novice to \$90,000 as a master, as shown in figure 1. Principals consulted with district administrators to make teachers' initial placement on the nine-tier scale in April 2010. Using 2010-11 evaluations and student achievement data, the next round of placements is scheduled to be completed by June 2011.¹⁷

Years of service and advanced degrees now are omitted completely from the compensation equation. Unlike the *incentive pay* programs that have been studied in Nashville and New York City, Harrison has embraced a breakthrough form of *performance pay*.¹⁸ Incentive-based compensation only offers bonuses as rewards for achieving goals or completing tasks. Because Harrison teachers may either increase or decrease their current earnings based on measured instructional effectiveness, the E & R Plan is a true pay-for-performance system. No other American school district is known to have approached the issue so boldly, thoroughly and systematically.

Figure 1



Source: Harrison School District, hsd2.org

potentially difficult future budget choices. As part of a \$1.1 million total grant award, the Denver-based Daniels Fund recently bestowed \$800,000 to aid the E & R Plan, primarily to design and implement internal assessments. Principals in Harrison are also on a performance-based compensation plan.²¹

At first, district leaders contemplated two separate pay scales, based on instruction in “core” vs. “noncore” academic subjects. Resistance from teachers serving on a focus group caused Miles and his administration to abandon the idea. A survey of Harrison teachers conducted in 2010 found substantial support for the district’s upgraded system of evaluation and feedback with lingering concerns about the compensation overhaul.¹⁹

While it is too early to make ultimate determinations, Harrison’s superintendent said he has observed some “positive, unforeseen outcomes” in the early phases of full implementation. More teachers are planning instructional time systematically to work through curriculum maps and meet assessment targets. More teachers are using evaluation rubrics to help students in writing essays. And more teachers are collaborating across disciplines to improve instruction.²⁰

Miles has set a five-year window in which to evaluate the plan’s success, as measured on the basis of student learning results. The plan was created with long-term financial sustainability in mind to reduce or eliminate

Eagle County Evolves Beyond the Salary Schedule

Like Harrison, Eagle County Schools in the heart of the Rocky Mountains does not bargain exclusively with a teachers union. In 2001 Eagle County broke ground as the first Colorado school district to get rid of the traditional teacher salary schedule. Eagle County’s move was part of a comprehensive reform based on the Teacher Advancement Program.²² What began as a groundbreaking performance pay program underwent some significant changes in 2007 to become re-fashioned as “Strategic Compensation.” During the first phase of compensation reform, the district’s academic performance held steady. Several factors prompted a comprehensive review to refine the pay system:²³

- Failure of evaluation system results to match reliably with student growth data
- Insufficient professional development opportunities related to the new evaluation tool
- Complexity and lack of transparency in the formula to determine merit-based payouts
- Widespread teacher resistance due to top-down implementation

Following the initial salary placement, Eagle County does not automatically increase pay for teachers based on longevity or academic credentials. The current system offers a structural pay raise up to 4 percent based on job performance, earned through multiple observations by different trained evaluators. Also available are one-time bonuses up to 4 percent based on multiple measures of student assessment. School-wide and district-wide academic growth, as measured by the CSAP, ACT and NWEA tests, are the main drivers of the bonus. The district also makes year-to-year inflation adjustments to teachers' compensation.²⁴

Teachers hired after ProComp demonstrate greater impacts on students' tested math and reading growth...

Without a local union, Eagle County nonetheless adheres to teacher collaboration as a vital component of implementing performance pay. Most current teachers do not consider merit-based compensation an important factor in their employment decisions. An internal survey conducted in Eagle County found that strategic compensation did not affect 73 percent of district teachers' decisions regarding how long they would work in the district. Nonetheless, 13 percent (generally higher-performing) said it makes them more likely to stay longer, while 14 percent (generally lower-performing) said it makes them more likely to leave sooner.²⁵

A \$295,000 Alternative Compensation of Teachers (ACT) grant awarded through the Colorado Department of Education in January 2010 enables Eagle County to "strategize and plan to develop sustainable infrastructure" for its Strategic Compensation system, through increased focus on such areas as student assessment, teacher evaluation, specialized professional development, and the integration of multiple data systems in compensation decision-making. With ACT funding,

Eagle County also hosted an October 2010 conference to share strategies with attendees representing K-12 agencies from across the nation who are looking to implement or sustain alternative compensation systems.²⁶

Denver ProComp Plus Five Years

The idea for Denver's Professional Compensation for Teachers (ProComp) first took root in 1999. In the ensuing decade of negotiations, pilot projects, ballot elections and phased-in implementation, ProComp has received a great deal of justly-deserved national attention. The scope of change has been significant for a district serving more than 78,000 students, most of whom are deemed at-risk because of family poverty. Today, most Denver Public Schools (DPS) teachers are paid according to ProComp's "results-based" compensation. June 2011 is the final deadline for teachers hired before 2006 to opt in to ProComp. All DPS teachers hired since 2006 automatically are enrolled in the new pay system.²⁷

An evaluation of ProComp, conducted by the University of Colorado Boulder's School of Education and released in the spring of 2010, found the pay system has had a greater impact on who is teaching in the classroom than on individual teachers' productivity. Teachers hired after ProComp demonstrate greater impacts on students' tested math and reading growth – especially at the elementary school level – than do their counterparts. At the same time, veteran teachers who opted in to ProComp have a mixed record compared with peers who have not subscribed to alternative compensation. DPS' overall student academic growth has improved since ProComp's implementation, but researchers warn against drawing any causal effects. The evaluation also determined that the district's bonuses awarded for serving in high-need schools have resulted in greater teacher retention at those sites.²⁸

Table 1. Colorado K-12 Compensation Innovations, by Date

Name	Year Launched	School District	Charter School	Option School
Douglas County Performance Pay Plan	1993	x		
Cherry Creek Academy Pay for Performance	1995		x	
The Classical Academy Strategic Compensation	1997		x	
Eagle County Strategic Compensation	2001	x		
Liberty Common School Performance Pay	2002		x	
Highline Academy Salary System	2004		x	
Denver Professional Compensation System	2005	x		
Discovery Canyon TAP System	2005			x
Platte River Academy Pay for Performance	2005		x	
Fort Lupton Teacher Incentive Fund	2006	x		
Pinnacle Charter School Performance Pay	2007		x	
Peak to Peak Charter Compensation System	2007		x	
KIPP Sunshine Peak Academy Pay for Performance	2009		x	
Caprock Academy Performance Pay Pilot	2009		x	
Harrison Effectiveness and Results	2010	x		
Colorado Virtual Academy	2010		x	
Jefferson County Strategic Compensation (TIF)	2011	x		
Colo. Springs 11 TAP System (TIF)	2011	x		
GOAL Academy Compensation System	2011		x	

In early 2011 the University of Colorado Boulder is expected to release a disaggregated analysis of ProComp’s effects based on teacher characteristics. The University of Colorado Denver’s Center for Education Policy Analysis also is in the process of completing a separate evaluation measuring some of the impacts from ProComp.²⁹ The Washington, D.C.-based Center for Education Reform gives the pay system a letter grade of C, noting that it’s “a step in the right direction” with “too little of an emphasis on student achievement.”³⁰

Innovations Spurred by Teachers Incentive Fund Awards

Weld County School District Re-8 (Fort Lupton)
North of the Denver metropolitan area, Weld County School District Re-8 in Fort Lupton serves more than 2,000 students – nearly two-thirds of whom are eligible for the federal free and reduced lunch program due to

family poverty. The district is in the final year of a five-year grant from the U.S. Department of Education’s Teacher Incentive Fund (TIF). TIF is a Bush-era Department initiative that provides grant awards to state and local education agencies which propose performance-based innovations in teacher and principal pay.³¹

One of the primary reasons Weld Re-8 submitted its TIF proposal in 2006 was to alleviate the problem of teacher turnover prevalent in the low-income district. Following the 2005-06 school year, one in four employees, including three out of 10 classroom teachers, did not return to the district. Three years later, both turnover rates reduced to about 16 percent.³² Yet school officials attribute the higher retention rate more to the poor conditions of the education job market than to the additional value provided by their incentive pay plan.³³

At the heart of Weld Re-8’s TIF-funded incentive pay plan are school-wide awards granted according to results on the Colorado Growth Model. The Model uses a complex formula to measure the level of additional learning students demonstrate on state math, reading and writing tests. Schools are given a “median percentile growth rating” based on the relative learning growth each student shows compared to his or her academic peers. In Re-8 schools where a majority of students show above average learning gains on one or more state tests, employees are eligible for cash awards. The principal and all teachers who served on campus and return to district employment the following year then receive bonuses. The dollar value of the bonus is determined by multiplying the growth percentile by 10. For example, half of Twombly Elementary students finished at or above the 56th percentile in math test score improvements from 2007 to 2008. Therefore, the Twombly principal and all Twombly teachers who returned to the district for 2008-09 received a bonus of \$560.³⁴

The district operates a high school, a middle school, two elementary schools and a K-8 Core Knowledge program. After one year of granting school-wide awards based on the state’s accreditation ratings, three annual cycles of Growth Model bonuses have been distributed in Fort Lupton as listed in table 2:

Instructional paraprofessionals receive school bonus awards worth 40 to 50 percent of the teacher awards (since the salaries for paraprofessionals are typically about 40 to 50 percent as much as teacher salaries). In 2009-10 the average Weld Re-8 teacher earned \$44,642 in base salary, and the average principal \$84,886.³⁵ The Growth Model bonuses range from \$560 to \$2,210; so they are about 1 to 5 percent of annual salary for teachers, and somewhat less for principals.

A 2009 addition to Weld Re-8’s TIF project was the Voluntary Incentive Paths (VIP) program. Either individuals or teams of teachers may choose to work with their principal to set one goal per school year to address a need related to student achievement. In most cases teachers use a standard assessment tool to measure increased academic learning or other positive student outcomes. Teachers present the findings associated with their goals, as well as any strategies and techniques used to achieve them, at a springtime lesson fair.

Successfully meeting a VIP goal earns teachers bonuses ranging from \$250 to \$1,000; the VIP bonus is above and beyond any Growth Model bonus received, and amounts to about an additional 2 percent of an average teacher’s base salary. In 2009-10, 29 of the district’s 175 teachers participated in VIP.

School	50th Percentile Growth Targets				Principal and Teacher Bonuses			
	2007-08	2008-09	2009-10	3-Yr Total	2007-08	2008-09	2009-10	3-Yr Total
Ft. Lupton High School	3	1	3	7	\$1,750	\$500	\$1,765	\$4,015
Ft. Lupton Middle School	2	0	0	2	\$1,170	\$0	\$0	\$1,170
Butler Elementary	3	3	1	7	\$1,950	\$1,885	\$630	\$4,465
Twombly Elementary	1	0	1	2	\$560	\$0	\$695	\$1,255
Quest Academy (K-8)	3	3	3	9	\$2,170	\$2,210	\$1,960	\$6,340

The number increased to 45 in 2010-11. As evidence of VIP's positive impact, more Re-8 teachers have taken on the challenge of incorporating subject matter outside their discipline (e.g., an art teacher focusing on improving writing skills by having students create graphic novels). Teachers also have designed new assessments for measuring student progress. A \$23,059 Alternative Compensation of Teachers grant awarded in January 2010 by the Colorado Department of Education was used to train teachers from each school in the various assessments so they can serve as local "data resources."³⁶

Jefferson County Strategic Compensation

Jefferson County Public Schools, comprising Denver's western suburbs, is the state's largest school district, with about 85,000 students – about 25,000 of whom live in poverty according to federal measures.³⁷ In September 2010 the district was declared one of 62 recipients of a Teacher Incentive Fund (TIF) grant from the U.S. Department of Education: \$32.8 million over five years to create a "Strategic Compensation" test pilot in as many as 20 of the district's low-income elementary and middle schools. The district touts Strategic Compensation as part of a comprehensive reform of professional development and teacher evaluation. Jeffco won an award in an Evaluation Competition conducted by the U.S. Department of Education. As a winner, the district will be part of a national TIF evaluation to help determine the value of teacher effectiveness stipends in high-need schools.³⁸

In October 2010, Mathematica Policy Research, an independent firm that provides data evaluations for governments and businesses, recommended that Jeffco's plan be modified. The original Jeffco plan would have moved teachers in treatment schools off the traditional salary schedule. Teachers

would have been paid from \$40,000 to \$100,000 a year based on probationary status, evaluation ratings, student growth ratings, and mentorship responsibilities.³⁹ As modified, teachers in the treatment schools will remain on the steps-and-levels system with one-time stipends up to \$12,000 available for performance evaluations and student growth. The change was initiated in order to meet the research design requirements of the national TIF evaluation, and also because of teacher concerns about reducing salaries at the pilot sites. District officials say a change that placed the control schools into the new tiered system with a different compensation model would have been too expensive for the grant proposal budget. In December 2010 the U.S. Department of Education approved and the Jefferson County Board of Education formally accepted the change.⁴⁰

The current school year is dedicated to forging the details, including votes scheduled in each of the eligible schools to determine whether they will participate in the pilot. Starting in 2011-12, all participating schools will implement peer evaluation, increase planning time, and create career paths for master and mentor teachers. In addition, half of the participating schools will reward teachers based on performance evaluations and student growth, while the other half will serve as a control group – receiving comparably-sized across-the-board pay increases of 1 percent. The district has contracted with Compensation Innovations to analyze the effects of Jeffco's Strategic Compensation pilot through 2014-15.⁴¹

Colorado Springs School District 11

Colorado's other 2010 recipient of a TIF grant is Colorado Springs School District 11, the state's eighth-largest district, serving nearly

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30,000 students. Roughly half of District 11 students are eligible for free and reduced lunch.⁴² The \$15.2 million, five-year grant will fund a TAP⁴³ pilot in 10 of District 11's highest-need schools: six elementary, two middle and two high schools.⁴⁴ Created in 1999 by education philanthropist Lowell Milken and overseen by the National Institute for Excellence in Teaching,

At Discovery Canyon, although teachers are compensated according to the Academy 20 district's steps-and-levels salary schedule, a teacher can earn bonus compensation as much as \$2,500 for meeting measured student learning goals.

TAP is a national program that combines performance-based compensation with an emphasis on teacher leadership and multiple career paths.⁴⁵

Colorado Springs 11's version of TAP will provide teachers with annual bonuses up to \$2,500 for the following accomplishments:⁴⁶

- Raising student achievement at the classroom level;
- Raising student achievement at the school-wide level; and
- Demonstrating recognized knowledge and skills on formal evaluations (for principals, a 360-degree, or multi-rater, evaluation tool⁴⁷ to rate instructional leadership).

The three factors will be weighted differently to determine bonuses for teachers in tested grades and subjects, teachers in non-tested grades and subjects, as well as principals and assistant principals. District 11 officials see the project as a crucial strategy for effectively realigning its instructional workforce. "It will help us recruit more high-quality teachers to high-need schools," said Jessica Sharp, the district's director of grants.⁴⁸

TAP Inspiration:

Discovery Canyon Campus

As part of the research in developing their proposal, District 11 officials conducted a

February 2010 visit to the nearby Discovery Canyon Campus across district lines. Discovery Canyon, a PK-12 International Baccalaureate option school in El Paso County's Academy School District 20, has implemented the TAP system – including teacher pay incentives – since opening in fall 2005. The school is slated to graduate its first senior class in 2011-12.⁴⁹

Most schools that adopt TAP do so as part of a remedy for academic shortcomings and related challenges that result in sanctions. High school principal Jim Bailey noted that Discovery Canyon has a somewhat unique partnership with TAP. Of the school's 1,775 K-12 students enrolled in 2009-10, only 5 percent were eligible for Free and Reduced Lunch. Discovery Canyon is a high-performing school; state assessments show that its students have achieved moderate-to-high growth in the testing areas of math, science, reading and writing.⁵⁰

At Discovery Canyon, although teachers are compensated according to the Academy 20 district's steps-and-levels salary schedule, a teacher can earn bonus compensation as much as \$2,500 for meeting measured student learning goals. A TAP Leadership Team consisting of administrators and nine of Discovery Canyon's 130-plus teachers set school goals for the percentages of students rated proficient and advanced on state assessments. School leaders use other professional goals to determine potential compensation bonuses for teachers in non-tested areas (e.g., social studies). Receiving no additional funds through grants or other sources for TAP, the school has financed the program through the elimination of some non-classroom positions.⁵¹

Until District 11 launches its TIF-funded program in 10 high-need schools, Discovery

Canyon remains the only active TAP school in Colorado. TAP advocates cite several research studies that show the effectiveness of the program's elements, including the ability of its evaluation system to identify teachers who make a positive impact on student learning.⁵² However, a recent evaluation of the TAP system's implementation in Chicago found it had no significant effects on student math and reading achievement or on teacher retention.⁵³

Discovery Canyon reports a slightly lower teacher turnover rate than the school district average.⁵⁴ Though more than 80 percent of students already demonstrate proficient or advanced status on state tests, the school's academic growth is higher than the state average in 16 of 21 tested areas (three subjects in each of seven grades). Academic growth ratings among fourth through seventh grade students increased across the board between 2008 and 2010, especially in the area of math.⁵⁵ "I totally attribute that to TAP because we're so purposeful in our instruction," high school principal Jim Bailey said.⁵⁶

Douglas County Looks at Next Steps

Douglas County School District R-1, Colorado's third-largest school district, was one of the nation's earliest innovators of teacher compensation. Beginning in the 1993-94 school year, the district tied salary advancement to satisfactory evaluations. The district also began to offer modest pay incentives for taking on non-traditional responsibilities, demonstrating relevant knowledge and skills, and school-wide student growth.⁵⁸

In 2010 the Board of Education convened a task force that is working to develop a Continuous Improvement in Teacher Effectiveness (CITE) plan. Much like Harrison 2, the district is pursuing a comprehensive approach that first involves the creation of a

well-defined differentiated teacher evaluation system tied to metrics of student academic growth. The goal is to add layers of school-wide, group and individual pay incentives in future years.

Charter School Compensation Pioneers

Due to their smaller size and the absence of teacher tenure and restrictive collective bargaining agreements, charter schools typically can implement pay reforms more quickly than school districts. Working in the shadow of larger school districts, at least four Colorado charter schools have operated alternative teacher compensation systems for five years or more. Spread along the Front Range, the four innovative charters have implemented diverse policies but all with a shared focus of aligning compensation more closely to quality instruction and improved student outcomes.

Cherry Creek Academy

Founded in 1995, the K-8 Cherry Creek Academy (CCA) in south metro Denver is one of the state's longest-running charter schools. Under the leadership of a board chosen by the parents, the school opened its doors with a Pay-for-Performance system and has sustained it for more than 15 years. Board president Karen Secor observed that starting a new school with merit-based compensation is easier than trying to convert existing schools from a more standard pay system. Many charter founders make the mistake of focusing insufficient attention on merit compensation during the founding period, she said.⁵⁹

CCA uses a forced ranking method to determine compensation rewards. Each teacher is given a unique ranking from first to last based on observed and measured job per-

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formance. Bonuses are graduated, meaning higher-ranked teachers secure a larger bonus while teachers near the bottom may receive none. Base pay for CCA teachers ranges from about \$30,000 to \$55,000, with teachers able to earn bonuses worth an additional 10 percent as funds are available. The system remains fiscally sustainable in part because of somewhat high teacher turnover. Most teachers stay between five and 10 years, which keeps a significant number of less-experienced and lower-paid instructors on faculty.⁶⁰

CCA has a regularized but informal rubric for measuring teacher performance and assigning eligibility for bonuses. About 40 percent is weighted according to student

From 2005 to 2007, however, TCA refined its program into a “Strategic Compensation” model. The transformation is similar to the one that took place in Eagle County.

achievement and growth on CSAP and other assessments: NWEA/ MAP and STAR. Teachers in harder-to-test subjects like art and world language are rewarded based on school-wide testing performance. As a result, these teachers have incorporated tested subjects like math and writing into their coursework. Another 40 percent of the bonus is tied to the principal’s evaluation, which makes use of both scheduled and unscheduled observations as well as a portfolio documenting a teacher’s work at helping a challenged student overcome academic obstacles. The final 20 percent is based on a combination of parent evaluations and extra responsibilities assumed beyond normal teaching duties (e.g., basketball coach or yearbook advisor).⁶¹

The Classical Academy

The Classical Academy (TCA) in Colorado Springs is another long-established charter school. As its name indicates, the school embraces traditional classical education based

on ancient Greek and Roman understandings.⁶² The school opened in 1997 with a full-fledged teacher merit pay system in place. From 2005 to 2007, however, TCA refined its program into a “Strategic Compensation” model. The transformation is similar to the one that took place in Eagle County. TCA’s initial program was discarded because it was viewed as highly subjective, created a great deal of uncertainty, and typically benefited teachers who were skillful negotiators more than those who added the greatest value to the school and its students.⁶³

TCA’s newer Strategic Compensation model offers higher pay for teachers as they advance through six tiers based on professional preparation, instructional performance, adoption of the classical philosophy, additional duties or contributions, and teamwork and leadership. TCA does not incorporate measured student assessment growth in its compensation determinations. Tier placement primarily is determined through evaluations using a mixture of objective and subjective criteria. Newly hired teachers may be placed in any of the first three tiers according to their qualifications and expected performance from the hiring process. Teachers must move beyond the second tier after three years of employment. The six tiers are as follows, in ascending order, with the 2009-10 distribution noted in parentheses:⁶⁴

1. New Hire (10% of teachers)
2. Grammar (12% of teachers)
3. Logic (52% of teachers)
4. Advanced Logic (17% of teachers)
5. Rhetoric (7% of teachers)
6. Master Teacher (2% of teachers)

TCA’s strategic compensation system has enabled the school to attract high-quality candidates and retain teachers serving in the highest tiers. However, the system remains sustainable by paying most teachers within

the mid-level tiers, and providing them “annual incremental raises and performance incremental raises.”⁶⁵

Another dimension that affects earnings is a market demand factor, which differentiates pay based on the type of instructional position. Because there are more qualified applicants, elementary, physical education and junior high social studies teachers earn the base amount as determined by their tier placement and years of service. On the other hand, a harder-to-find AP physics, AP calculus or special education teacher earns a 14 percent differential premium, while an advanced Latin instructor brings home an additional 20 percent over the base amount.⁶⁶

Liberty Common School

Located in Fort Collins, the Liberty Common School adopted a performance-based teacher pay model in the 2002-03 school year. (Originally serving students kindergarten through 9th grade, the school’s facility expanded in 2010 to add a 10th grade, and is on target to become a full K-12 school by fall 2012.) The compensation system is rooted in the desire to pay teachers for achieving results, not necessarily to increase activity or effort. Years of service and educational credentials are replaced by five performance bands as criteria for determining compensation. Teachers are placed in bands according to their ratings in five areas:⁶⁷

- Content knowledge
- Design, planning and assessment
- Pedagogy, instruction and delivery
- Classroom management
- Supplemental responsibilities

A sixth area of student academic growth is under consideration for full inclusion. Headmaster Russ Spicer says he rolls data from state assessments into many teacher evaluations. But he has resisted including it as a

separate area of consideration because not all subjects and grades are tested.⁶⁸ Still, Liberty Common meets or exceeds state goals of student academic performance and growth.⁶⁹

The system overall enables Liberty Common to pay its teachers not only in accordance with the standards of its Core Knowledge program but also competitively with the surrounding Poudre School District. Spicer estimates that eight to 10 members of the school’s instructional staff earn more than they would under the district’s traditional salary schedule. He also notes that the compensation system promotes rather than undermines professional collaboration of instructional ideas as part of the school’s “culture of excellence.”⁷⁰

Platte River Academy

Platte River Academy (PRA) in suburban Douglas County is another Core Knowledge-based charter school that made early innovative strides in the area of teacher compensation. Launched in 2005-06, the K-8 school’s Teacher Pay for Performance Plan largely has retained its original structure. PRA teacher base pay stands at 95 percent of the surrounding district average, but teachers can earn an additional 3 to 5 percent in bonuses based on six performance strands:⁷¹

1. Student Achievement: Assessment Result (up to \$500)
2. Student Achievement: Growth (up to \$500)
3. Professional Development (up to \$300)
4. Student Safety (up to \$300)
5. Integration with Core Curriculum (up to \$1,100)
6. World Languages (up to \$900)

The first two strands include defined incentives for meeting established benchmarks on

The compensation system is rooted in the desire to pay teachers for achieving results, not necessarily to increase activity or effort.

CSAP, NWEA's Measuring Academic Progress, AIMSweb, or Developmental Reading Assessments. Bonuses also are available for successful implementation of Individual Education Plans (IEP) that help the 5 percent of the school's eligible special-needs population. The final two strands provide equitable opportunities for rewards to teachers in the arts, physical education or world languages. Unique to PRA, rewards for teachers to complete specific lessons or a classroom project related to school safety arose from parental and staff concerns about the need to differenti-

ate bullying and peer conflict. Bonuses have been aligned with specific objectives in PRA's School Improvement Plan (SIP), or an extension of it as relates to student academic performance and school-wide goals.⁷²

According to principal Gary Stueven, teacher recognition does not end with the school's incentive-based compensation. He acknowledged the incentives are probably

not large enough to significantly affect recruitment or retention. Nonetheless he observed that the plan has helped to focus teachers on the school's larger mission and on the individual needs of students who may need extra help. He further noted that if a teacher is unmotivated to document efforts with the Pay for Performance Plan or demonstrates a lack of success in its implementation, then the loss of performance bonuses will be secondary to a decision about continued employment. All licensed employees at the charter school are on an annual at-will contract.⁷³

More Charter School Innovation

Pinnacle Charter School

The number of Colorado charter schools that have broken from the traditional model of teacher compensation has grown in recent

years.⁷⁴ The Pinnacle Charter School first implemented alternative compensation in 2007-08, ten years after it opened. Located north of Denver in suburban Adams County, the school serves more than 1,700 students K-12 using a Core Knowledge-based program. Like the single salary schedule, Pinnacle teacher pay is differentiated based on the highest earned degree. School-wide bonuses are available for meeting CSAP achievement targets—\$1,000 for teachers, and \$500 for full-time and \$250 for part-time non-instructional personnel. Due to budgetary restrictions, the amounts are cut in half for the current school year.⁷⁵

Up to 5 percent of a Pinnacle teacher's salary may be determined by performance, dependent on distribution of performance and available funding. All teachers are rated from 1 to 5 each year, based on a combination of administrator evaluation (65 percent), student achievement (20 percent) and professional development or school involvement projects (15 percent). The school currently is planning to adjust the system, with plans to put more weight on student achievement through MAP computer-based assessments and other norm-referenced testing.⁷⁶

Performance-based salary increases are derived from a limited pool of funds; thus, the more teachers who earn a high 5 rating, the smaller the increase those teachers receive. Limited funds have compelled school leaders to freeze performance increases for 2010-11. While no direct impact on student academic outcomes has been measured, instructional behavior adjusted from the pay plan's outset.

Pinnacle Chief Financial Officer Carol Meininger observed that "teachers immediately became more aware of the importance of using data and measuring student performance as part of their daily routine."⁷⁷

...the plan has helped to focus teachers on the school's larger mission and on the individual needs of students who may need extra help.

Peak to Peak Charter School

Lafayette's Peak to Peak Charter School is oriented around the Core Knowledge program at the elementary school level and provides college preparation curriculum at the secondary level, serving students K-12. Seven years after opening in 2000, the school revamped its teacher pay model to incorporate factors based in job performance and market demand. To formulate the salary ranges for different teaching positions, the human resources director consults with a variety of sources – including other schools – to make a market-based determination. To measure performance, school leaders and staff have collaborated to develop and annually refine Key Performance Indicators (KPIs) that reflect the goals in the school's strategic plan.⁷⁸

A school administrator identified a distinct aspect of the pay model:

The Peak to Peak compensation system uses a 'merit matrix' tool that provides a framework for calculating salary increases by incorporating organization-wide equity with rewarding performance. This tool provides the structure to objectively include performance measures into salary calculations and move employees closer to their target salary.⁷⁹

While the weight of performance-based factors in the "merit matrix" has remained consistent since its inception in 2007, the tool has been identified as a proprietary creation of Peak to Peak.⁸⁰ Thus, further details are not available to be shared publicly.

KIPP Sunshine Peak Academy

Part of the nationally-renowned Knowledge Is Power Program, west Denver's KIPP Sun-

shine Peak Academy opened in fall 2002 to serve predominantly poor and minority students from fifth through eighth grade. In 2009 the school implemented a pay-for-performance program embedded in three "career pathways": new teacher, associate teacher and senior teacher. The purpose of the program is to retain high-quality instructors – a key component of the KIPP program's success – and aid them in their professional growth.⁸¹

Earnings can be enhanced by an annual bonus system that takes into account four factors:

- **Student achievement (50%):** Measured learning gains, using a variety of department-specific assessments. The greater the percentage of students who meet a pre-determined academic growth benchmark, the larger the bonus.
- **Teacher competency (20%):** Successful completion of different professional development opportunities – including Individual Growth Plans or teaching enrichment classes – based on department and career pathway.
- **School performance (20%):** A factor that includes CSAP performance, a "distinguished" rating on Denver's School Performance Framework (SPF) earns all teachers 100 percent of the available bonus, 70 percent for "meets expectations."⁸²
- **Commitment to excellence (10%):** Professional beliefs, values and modeling norms of the KIPP program, as determined by a combination of supervisor review, peer review and self-assessment.

KIPP Sunshine Peak's incentive-based pay system is largely funded through regular sources of revenue. Through its introduction in the fall of 2009, the program was

The purpose of the program is to retain high-quality instructors – a key component of the KIPP program's success – and aid them in their professional growth.

developed and implemented transparently and collaboratively with professional teaching staff. In the first year, two-thirds of eligible teachers secured a student achievement bonus. Nine teachers earned the full bonus by helping more than 80 percent of their students meet assessed academic growth goals. Five teachers collected 70 percent of the available bonus by helping 70-80 percent of their students to meet goals. Seven teachers failed to earn a bonus by meeting goals for 50-69 percent of students.⁸³

Highline Academy

Opened in 2004, Highline Academy is a liberal arts-focused K-8 charter school located in south Denver. The school pays teachers according to a published salary philosophy.⁸⁴ Base pay is determined by job description and external market factors. Inflationary increases for additional years of service are available. However, teacher salaries largely are driven through their placement on a four-tier career ladder achieved through knowledge and skills demonstrated and responsibilities assumed (in ascending order):

- Associate Teacher: new teacher demonstrating progress toward instructional competence, may need mentorship
- Senior Teacher: further demonstrating progress toward instructional competence, may need mentorship
- Master Teacher: demonstrates instructional competence, takes leadership role in professional development and informal mentoring
- Mentor Teacher: demonstrates instructional competence, takes formal leadership through mentoring and coaching teachers

Online Charter Schools and Compensation Reform

Colorado Virtual Academy

Incentive- and performance-based compensation for online educators represents a largely uncharted landscape. Some cyber-school operators are in the earliest phases of design and implementation. As relatively rich and fertile terrain for online K-12 education, Colorado also represents an opportunity to test pay-for-performance and related compensation innovations within the sector.

The Colorado Virtual Academy (COVA) is the state's largest charter school, enrolling more than 5,000 students from around the state in its home-based K-12 virtual learning program. In 2010 the COVA board⁸⁵ approved the development of a compensation system to reward teachers who show top-flight instructional performance. Teachers and administrators studied several existing models before developing a plan to put into effect for the 2010-11 school year.⁸⁶

The framework of COVA's plan is divided into two major categories: merit pay and bonus awards. Permanent salary increases (merit pay) are available based on student pass/fail rates and evaluated performance, as measured by how well teachers engage students, instigate higher-level discussions and use innovative techniques in online instruction. The first round of permanent increases will be issued in June 2011, and will be added to teachers' compensation for the following school year.⁸⁷

Also in June 2011, COVA teachers will be awarded a one-time bonus award based on student retention rates—due to the challenge of high student mobility facing the virtual school—and well-defined rubrics of student academic growth on Scantron assessments, DIBELS or other defined skill checks. Level 5

Incentive- and performance-based compensation for online educators represents a largely uncharted landscape.

(“stellar”) performers will receive the full bonus worth 5 percent of salary. Levels 4 down to 2 will obtain progressively smaller shares, while Level 1 performers will procure no bonus at all. School leaders expect a significant amount of overlap among “cream of the crop” teachers who rate high in both the merit pay and bonus award categories.⁸⁸

Head of school Heidi Heineke-Magri says that COVA’s merit pay plan is shaped by the dual goal of strengthening the composition of the online charter school’s teaching corps and of improving the professional practices of existing instructors through tangible incentives. She also expects the school will be able to sustain the rewards for its high-performing teachers through existing revenue streams, at least through 2013. COVA next is looking to upgrade the effectiveness of its teacher evaluation system, and to create both a tuition reimbursement package and sick leave bank to aid further in retaining top-notch instructors.⁸⁹

GOAL Academy

Authorized by the state’s Charter School Institute since it opened in 2008, GOAL Academy serves 1,350 students grades 8 through 12 statewide through its online delivery system. GOAL’s board has approved the development of a compensation bonus matrix for its 80 teachers, with the aim of issuing bonuses by the end of the 2010-11 school year. GOAL leaders seek to incorporate student achievement results – mainly based on course completion rather than testing performance – as a major factor. Other factors are tied to internal organizational goals, individual teacher professional development goals, and surveyed student and parent satisfaction. Depending on which level of objective is met in each of the areas, a teacher could qualify for a 10 percent (gold) or 30 percent (platinum) bonus.⁹⁰

Many of the features of a performance pay system are consistent regardless of whether operated in a brick-and-mortar versus an online school. GOAL Academy faces a couple significant challenges common to any school that would pursue such an endeavor: the fast pace of implementing the program and the issue of whether and how to address non-teaching staff in the distribution of rewards. GOAL’s status as an online school also lays the foundational challenge of ensuring teachers achieve necessary technological proficiency as a prerequisite to earning any bonuses. The program’s particular outreach to at-risk youth raises the question of how to provide equitable reward opportunities to teachers who have to guide students through extensive remedial coursework. GOAL Academy still is weighing whether remedial course completion should be counted toward attaining bonuses, and if so how.⁹¹

Alternative Compensation of Teachers Grants

In 2008 the Colorado General Assembly approved legislation creating a \$1 million competitive grant program for school districts and charter schools seeking money to develop and launch alternative teacher compensation programs. A year later, while the Colorado Department of Education was determining which proposals should receive awards, the legislature canceled funding. In January 2010 federal dollars through the American Recovery and Reinvestment Act were used to provide seven Alternative Compensation of Teachers (ACT) awards totaling \$980,000 to nine districts, including one joint application.⁹²

As explained earlier, Eagle County and Fort Lupton secured ACT grant funding in support of their existing programs. Jefferson

Many of the features of a performance pay system are consistent regardless of whether operated in a brick-and-mortar versus an online school.

County (\$465,156) received the largest award to aid in developing its Strategic Compensation system. The Charter School Institute (\$59,350)⁹³, Lake County R-1 School District (\$38,360)⁹⁴, and Pueblo School District 70 (\$17,000)⁹⁵ were also among the ACT grantees. No additional new compensation systems have yet been launched as a result.

Conclusion

Though not a panacea, merit pay is a crucial item in the K-12 education reform toolbox. The move from the traditional steps-and-levels salary schedule to performance-based compensation has been long overdue, and the process slower than ideal. The cutting-edge Effectiveness and Results system in Harrison School District 2 offers some key lessons that can help accelerate reform in an effective manner:

Compensation reform should be viewed as a tool at least as much to help shape who serves in the teaching workforce as to alter individual teachers' behavior and practices...

- It is past time to eliminate the unproductive and unsustainable approach of paying teachers overwhelmingly based on years of seniority and academic credentials.
- While incentive pay (bonuses) represents an improvement over the traditional salary schedule and may be seen as a stepping stone to deeper reforms, true performance pay holds the greatest promise of successful long-term change.
- Effective performance pay requires a comprehensive approach to reform involving teacher evaluation, targeted professional development, internal assessments and data.
- While formal collaboration with a teachers union may be seen as a politically astute tactic in some cases, it is not vital to providing innovative compensation; in fact, it well may be a hindrance to implementing effective performance pay.

Additional lessons taken from Colorado's wide variety of local educator compensation innovations include the following:

- Promising signs, but not convincing proof, exist that some brands of compensation reform may contribute to improved student learning outcomes.
- Compensation reform should be viewed as a tool at least as much to help shape who serves in the teaching workforce as to alter individual teachers' behavior and practices; still, incentive pay in some cases has shown evidence of changing behavior.
- Results among Colorado K-12 innovators in using alternative compensation to improve teacher retention are mixed, at best, and may deserve further analysis.
- Used alone, school-wide bonus pay plans hold very little promise of boosting student achievement; nevertheless, school-wide incentives can be balanced alongside individual awards to help focus teachers across disciplines on core academic skills.
- Compensation reform should be implemented transparently in front of employees and taxpayers, with channels left open to receive and respond to feedback.
- Systems that rely too heavily on subjectivity or produce grossly inequitable results can and should be modified while still preserving a performance-based focus.
- As reflected in the diversity of innovations underway in Colorado, different alternative compensation systems can give rewards for different objectives, based on the particular needs of the school.

As Colorado K-12 public education faces more restrictive budgets, the boundaries of innovative compensation continue to be tested. The single salary schedule remains the centerpiece of unsustainable expenditure patterns. Performance-based compensation, incentive awards, and differential pay are

part of the long-term solution to ensuring both financial health and a stronger focus on improved results in student learning. The boundaries of innovation should continue to be tested. The good news is that numerous pioneering Colorado school districts and charter schools have paved the way to help make the transition smoother and more cost-effective for those who would follow.

Notes

¹ National Council on Teacher Quality, "Restructuring Teacher Pay to Reward Excellence," December 2010, pg. 3, http://www.nctq.org/tr3/docs/nctq_salary_combo.pdf.

² Marguerite Roza and Raegan T. Miller, "Separation of Degrees: State-by-State Analysis of Teacher Compensation for Master's Degrees," Center on Reinventing Public Education (July 2009), http://www.crpe.org/cs/crpe/download/csr_files/r_r_crpe_masters_jul09_db.pdf.

³ Steven G. Rivkin, Eric A. Hanushek, and John F. Kain, "Teachers, Schools, and Academic Achievement," *Econometrica* vol. 73, no. 2 (2005): 417-458, <http://edpro.stanford.edu/Hanushek/admin/pages/files/uploads/teachers.econometrica.pdf>; Donald J. Boyd, Pamela L. Grossman, Hamilton Lankford, Susanna Loeb, and James H. Wyckoff, "How Changes in Entry Requirements Alter the Teacher Workforce and Affect Student Achievement," *Education Finance and Policy* vol. 1, no. 2 (2006): 176-216, <http://www.teacherpolicyresearch.org/portals/1/pdfs/Reducing%20Entry%20Requirements%20EPF%202006.pdf>; Dan Goldhaber, "Everyone's Doing It, but What Does Teacher Testing Tell Us about Teacher Effectiveness?" CALDER Working Paper No. 9. Washington, D.C.: National Center for Analysis of Longitudinal Data in Education Research (2007), http://www.caldercenter.org/PDF/1001072_everyones_doing.PDF.

⁴ Nick Anderson, "Teacher bonuses not linked to better performance, study finds," *Washington Post*, September 21, 2010, <http://www.washingtonpost.com/Wp-dyn/content/article/2010/09/21/AR2010092103413.html>.

⁵ http://www.denverpost.com/ci_16139066.

⁶ Matthew G. Springer, Dale Ballou, Laura S. Hamilton, et al. "Teacher Pay for Performance: Experimental Evidence from the Project on Incentives in Teaching," Vanderbilt University, September 2010, <http://www.rand.org/pubs/reprints/RP1416.html>.

⁷ "Carrots without Sticks in Vanderbilt Performance

Pay Study," National Council on Teacher Quality *Teacher Quality Bulletin*, September 30, 2010, <http://www.nctq.org/p/tqb/viewBulletin.jsp?nlIdentifier=271#19973>.

⁸ Quoted by Rick Hess, "Gates R&D Chief Tom Kane on the Nashville Merit Pay Study," *Education Week* blog entry, September 23, 2010, http://blogs.edweek.org/edweek/rick_hess_straight_up/2010/09/gates_rd_chief_tom_kane_on_the_nashville_merit_pay_study.html.

⁹ Marcus A. Winters, Gary W. Ritter, et al. "The Impact of Performance Pay for Public School Teachers: Theory and Evidence," http://www.hks.harvard.edu/pepg/PDF/Papers/Winters_et_al_PEPG08-15.pdf; Matthew G. Springer, ed., *Performance Incentives: Their Growing Impact on American K-12 Education*, (Washington, DC: Brookings Institution Press, 2009); Michael J. Podgursky and Matthew G. Springer, "Teacher Performance Pay: A Review," *Journal of Policy Analysis and Management*, Vol. 26, No. 4 (2007), pgs 909-949, http://peabody.vanderbilt.edu/Documents/pdf/lpo/Podgursky_Springer_JPAM_Manuscript.pdf; Gary Ritter, Marc Holley, Nate Jensen, et al. "Year Two Evaluation of the Achievement Challenge Pilot Project in the Little Rock Public School District," http://uark.edu/ua/der/Research/merit_pay/year_two.html.

¹⁰ Sarena Goodman and Lesley Turner, "Does Whole-School Performance Pay Improve Student Learning?" *Education Next*, Vol. 11, No. 2 (Spring 2011), <http://educationnext.org/does-whole-school-performance-pay-improve-student-learning/>.

¹¹ Victor Lavy, "Evaluating the effect of teachers' group performance incentives on pupil achievement," *Journal of Political Economy*, Vol. 110, No. 6 (2002), pgs 1286-1317. Findings summarized in Podgursky and Springer, "Teacher Performance Pay," pg. 938.

¹² Colo. Rev. Stat. § 22-63-401.

¹³ The Colorado State Board of Education, 2011 Legislative Priorities, pg. 2, <http://www.cde.state.co.us/cdeboard/download/LegislativePriorities2011NewStateBoard1.13.11.pdf>.

¹⁴ Colorado Department of Education (CDE) data, http://www.cde.state.co.us/index_stats.htm.

¹⁵ Harrison School District 2, E & R Teacher Pay-for-Performance Plan, <http://www.hsd2.org/departments/human-resources/eandr>.

¹⁶ Mike Miles, superintendent, Harrison School District 2, telephone conversation with the author, October 5, 2010. The details of the template vary by teaching assignment. There are 13 different templates at the elementary school level, 21 at the middle school level and 35 at the high school level.

¹⁷ HSD E & R Pay-for-Performance Plan; Miles, October 5 telephone conversation.

¹⁸ For a more comprehensive listing of common myths

that fail to distinguish true performance pay from other alternative compensation systems, see The Center for Education Reform (CER), "Making the Grade: A Report Card on Performance Pay Programs Across the US," October 2010, pg. 3, http://www.edreform.com/_upload/MakingTheGrade-PolicyAlert.pdf.

¹⁹ Stephen Sawchuk, "Colo. District Boots Traditional Salary Schedule," *Education Week*, May 10, 2010, http://www.edweek.org/ew/articles/2010/05/12/31_pay_ep.h29.html.

²⁰ Miles, October 5 telephone conversation.

²¹ Ibid.; Carol McGraw, "Harrison earns \$1 million grant for pushing reforms," *Colorado Springs Gazette*, September 28, 2010, <http://www.gazette.com/articles/fund-105438-grant-reforms.html>; Mary McKinley, executive assistant to the superintendent, electronic mail to the author, February 4, 2011.

²² For more on the Teacher Advancement Program, see discussion under Colorado Springs District 11, pg. 10.

²³ Jason Glass, Eagle County Director of Human Resources, "Evolving Performance Pay: Lessons from Eagle County Schools," PowerPoint presentation (2008); Eagle County Human Resources Department, "Evolving Performance Pay: Lessons from Eagle County Schools," PowerPoint presentation (2010); Traci Wodlinger, director of professional development, electronic mail to Brooke Macke, director of communications, Eagle County Schools, February 3, 2011.

²⁴ Jason Glass, "Eagle County Schools Performance-Based Compensation Program," November 19, 2010, <http://prezi.com/uxonetctliux/eagle-county-schools-performance-based-compensation-program/>.

²⁵ Glass, "Eagle County Schools Performance-Based Compensation Program;" Eagle County Human Resources Department, "Evolving Performance Pay: Lessons from Eagle County Schools," PowerPoint presentation, December 2010.

²⁶ Eagle County Schools document, "Summary of Eagle County Schools Approach to Expand the Plan and Design of Alternative Compensation for Teachers (ACT)."

²⁷ More information can be found on the Denver ProComp website, <http://denverprocomp.dpsk12.org/>.

²⁸ Edward W. Wiley, Eleanor R. Spindler and Amy N. Subert, "Denver ProComp: An Outcomes Evaluation of Denver's Alternative Teacher Compensation System," University of Colorado at Boulder School of Education, May 2010, pgs 7-9, <http://static.dpsk12.org/gems/newprocomp/ProCompOutcomesEvaluationApril2010final.pdf>; Nancy Mitchell, "ProComp initial findings positive," *Education News Colorado*, <http://www.ednewscolorado.org/2010/06/01/5503-procomp-initial-findings-positive>.

²⁹ Paul Teske, Dean, University of Colorado Denver School of Public Affairs, electronic mail to the author, December 20, 2010.

³⁰ CER, "Making the Grade," pg. 5.

³¹ <http://www2.ed.gov/programs/teacherincentive/index.html>.

³² CDE, School/District Staff Statistics, <http://www.cde.state.co.us/cdereval/rvprioryearHRdata.htm>.

³³ Carol Ruckel, TIF coordinator, Weld School District Re-8, telephone conversation with the author, September 10, 2010.

³⁴ Ruckel, September 10 telephone conversation.

³⁵ CDE data, Fall 2009 Average Salaries and Experience, <http://www.cde.state.co.us/cdereval/rv2009AveSalaryExp.htm>.

³⁶ Ruckel, September 10 telephone conversation; Weld Re-8 Teacher Incentive Fund document, "Voluntary Incentive Paths Program;" Ruckel, electronic mail to the author, January 19, 2011.

³⁷ Colorado Department of Education, Fall 2009 Pupil Membership Data, <http://www.cde.state.co.us/cdereval/rv2009pmlinks.htm>.

³⁸ Kristy Parsons, strategic compensation project manager, Jefferson County Public Schools, telephone conversation with the author, September 10, 2010; Jeffco Strategic Compensation website, <http://www.jeffcostrategiccompensation.org/>.

³⁹ "Jeffco Strategic Compensation" grant narrative, Teacher Incentive Fund Evaluation Competition, 2010.

⁴⁰ Alex Resch and Alison Wellington, "Proposed changes to Jefferson County PBCS," Mathematica Policy Research, Inc., Memorandum to Elizabeth Warner, October 18, 2010; Kristy Parsons, telephone conversation with the author, December 16, 2010; Alison Wellington, Mathematica senior researcher, telephone conversation with the author, January 5, 2011; Parsons, telephone conversation with the author, January 7, 2011; Amy Weber, executive director of human resources, electronic mail to the author, February 2, 2011.

⁴¹ Parsons, September 10 telephone conversation; Jeffco Strategic Compensation website; Weber, February 2 electronic mail.

⁴² CDE, Fall 2009 Pupil Membership Data, <http://www.cde.state.co.us/cdereval/rv2009pmlinks.htm>.

⁴³ TAP initially served as an acronym for the Teacher Advancement Program, since renamed "TAP: The System for Teacher and Student Advancement."

⁴⁴ The six elementary schools are: Hunt, Lincoln, Monroe, Queen Palmer, Twain and Wilson. Middle schools: Galileo and Swigert. High schools: Mitchell and Wasson. See "Colorado Springs School District 11 Receives Teacher Incentive Fund Grant," September 23, 2010, media release, <http://www.d11.org/pr/Colorado%20Springs%20School%20District%2011%20Receives%20Teacher%20Incentive%20Fund%20Grant.pdf>.

⁴⁵ <http://tapsystem.org>.

- ⁴⁶ Colorado Springs District 11, Teacher Incentive Fund grant proposal project narrative.
- ⁴⁷ "360-degree," or "multi-rater," evaluation tools incorporate feedback both from one or more supervisors as well as supervised employees. In District 11's implementation of TAP, principals will be evaluated by a supervising administrator, the Building Leadership Team and other teachers and staff in the school.
- ⁴⁸ Telephone conversation with the author, September 27, 2010.
- ⁴⁹ Jim Bailey, high school principal, Discovery Canyon Campus, telephone conversation with the author, June 10, 2010.
- ⁵⁰ Ibid; CDE, Fall 2009 Pupil Membership Data; CDE Unit of Student Assessment, CSAP District and School Disaggregated Summary Data, http://www.cde.state.co.us/cdeassess/documents/csap/csap_disag.html.
- ⁵¹ Bailey, June 10 telephone conversation.
- ⁵² http://www.tapsystem.org/policyresearch/policyresearch.taf?page=elements_ifa; Glenn Daley and Lydia Kim, *A Teacher Evaluation System That Works*, National Institute for Excellence in Teaching Working Paper, August 2010, http://www.tapsystem.org/publications/wp_eval.pdf.
- ⁵³ Steven Glazerman and Allison Seifullah, *An Evaluation of the Teacher Advancement Program (TAP) in Chicago: Year Two Impact Report*, Mathematica Policy Research, May 2010, http://www.mathematica-mpr.com/publications/pdfs/education/tap_yr2_rpt.pdf; U.S. Department of Education Institute of Education Sciences, "WWC Quick Review of the Report 'An Evaluation of the Teacher Advancement Program (TAP) in Chicago: Year Two Impact Report,'" September 2010, http://ies.ed.gov/ncee/wwc/pdf/quickreviews/chicagotap_092910.pdf.
- ⁵⁴ CDE, Fall 2009 Staff Data, <http://www.cde.state.co.us/cdereval/rv2009StaffData/links.htm>.
- ⁵⁵ CDE, Colorado Growth Model, District and School Performance Reports, <http://schoolview.org/SchoolPerformance/index.asp>.
- ⁵⁶ Bailey, June 10 telephone conversation.
- ⁵⁷ For a useful overview, see Carolyn Kelley, "Douglas County Colorado Performance Pay Plan," Consortium for Policy Research in Education, University of Wisconsin-Madison, May 2000, <http://cpre.wceruw.org/papers/Douglas%20SBPA%205-00.pdf>.
- ⁵⁸ Douglas County School District draft document, "Continuous Improvement in Teacher Effectiveness," September 2010.
- ⁵⁹ Karen Secor, board president, Cherry Creek Academy, telephone conversation with the author, January 10, 2011.
- ⁶⁰ Ibid.
- ⁶¹ Ibid.
- ⁶² Classical education seeks to advance students through the seven liberal arts—the Trivium of Verbal Arts (Grammar, Logic and Rhetoric) and the Quadrivium of Math Arts (Arithmetic, Music, Geometry and Astronomy). For more, see the Classical Academy's description: http://tcad20.org/apps/pages/index.jsp?uREC_ID=104196&type=d&termREC_ID=&pREC_ID=204416.
- ⁶³ Peter Hiltz and Doug Hering, "Designing Strategic Compensation," SlideShare presentation, <http://www.slideshare.net/hiltsp/designing-strategic-compensation>; Peter Hiltz, director of strategic programs, The Classical Academy, telephone conversation with the author, June 7, 2010, and electronic mail to the author, November 22, 2010.
- ⁶⁴ The Classical Academy, Tier Descriptions document; Hiltz and Hering, "Designing Strategic Compensation;" Hiltz, June 7 telephone conversation. TCA is revising its tier system and descriptions.
- ⁶⁵ Hiltz, electronic mail to the author, February 1, 2011.
- ⁶⁶ TCA, "Market Demand Factors;" Hiltz, June 7 telephone conversation.
- ⁶⁷ Liberty Common School, "Performance Pay – The Liberty Way," Powerpoint presentation, 2008.
- ⁶⁸ Telephone conversation with the author, October 12, 2010.
- ⁶⁹ CDE, School Performance Framework, <http://schoolview.org/performance.asp>.
- ⁷⁰ Spicer, October 12 telephone conversation.
- ⁷¹ Platte River Academy Performance Agreement, Teacher Pay for Performance Plan (2009-10); Gary Stueven, principal, Platte River Academy, telephone conversation with the author, September 23, 2010.
- ⁷² Ibid.; Stueven, electronic mail to the author, February 2, 2011.
- ⁷³ Stueven, September 23 telephone conversation and February 2 electronic mail.
- ⁷⁴ The author of this report did due diligence to find all such innovative charter schools. However, the listing may not be exhaustive.
- ⁷⁵ http://www.thepinnacleweb.org/wp-content/uploads/10_11_New_Hire_Schedule.pdf; Carol Meininger, chief financial officer, Pinnacle Charter School, electronic mail to the author, October 6, 2010.
- ⁷⁶ Ibid.
- ⁷⁷ Meininger, October 6 electronic mail.
- ⁷⁸ Kristianna Vedvik, human resources manager, Peak to Peak Charter School, electronic mail to the author, October 4, 2010, and November 3, 2010.
- ⁷⁹ Vedvik, October 4 electronic mail.
- ⁸⁰ Vedvik, November 3 electronic mail.
- ⁸¹ Kurt Pusch, principal, KIPP Sunshine Peak Academy, telephone conversation with the author, July 15, 2009.

⁸² Denver's SPF incorporates measures of student achievement, testing growth, student engagement, student re-enrollment and parental satisfaction to grant high-performing schools greater autonomy and lower-performing schools more academic supports. In 2009-10, KIPP Sunshine Peak received a "meets expectations" rating. See <http://communications.dpsk12.org/initiatives/district-summary-data/school-performance-framework/>.

⁸³ Data provided by Kurt Pusch, January 6, 2011.

⁸⁴ http://www.highlineacademy.org/upload/manager/Highline_Academy_Salary_philosophy.doc.

⁸⁵ In the interest of full disclosure, Pam Benigno, director of the Independence Institute's Education Policy Center, is a volunteer member of the Colorado Virtual Academy board.

⁸⁶ Heidi Heineke-Magri, head of school, Colorado Virtual Academy (COVA), telephone conversation with the author, January 28, 2011.

⁸⁷ Ibid.; COVA incentive pay plan documents; Heineke-Magri, electronic mail to the author, February 5, 2011.

⁸⁸ Heineke-Magri, January 28 telephone conversation.

⁸⁹ Ibid.

⁹⁰ GOAL Academy Bonus Matrix, draft document (October 2010).

⁹¹ Dr. Kris Enright, assistant state director, GOAL Academy, conversation with the author, January 11, 2011.

⁹² Colorado Department of Education, "Eight School Districts and Charter School Institute Receive Nearly \$1 Million To Create Plans To Alternatively Compensate Teachers," News Release, January 14, 2010,

<http://www.cde.state.co.us/communications/download/PDF/20100114alternativecompensationgrant.pdf>.

Colorado Springs District 11, Ellicott 22 and Florence Re-2 jointly were awarded an \$81,750 ACT grant in support of the one-year development of a teacher induction, mentorship and professional development program. "Act for Teacher Excellence" grant proposal abstract provided by District 11 through Colorado Open Records Act request, January 20, 2011.

⁹³ CDE News Release, January 14, 2010. Dale DeCesare, telephone conversation with the author, September 29, 2010. The Charter School Institute (CSI) received a \$59,350 grant to bring school leaders together, and to identify prospective target schools for compensation reform. Caprock Academy, a CSI-chartered school in Grand Junction, is exploring and testing a possible upgrade of a piloted incentive pay system. See Kristin Trezise, headmaster, Caprock Academy, CLCS webinar, November 5, 2010. Scholars to Leaders Academy in Colorado Springs has developed a teacher incentive plan framework and hopes to implement in 2011-12. See Carolyn Gery, principal, Scholars to Leaders Academy, electronic mail to the author, October 29, 2010.

⁹⁴ Lake County received and expended moneys to create a series of professional online videos of master

teachers within the district demonstrating effective instructional strategies. Further planned use of the newly-purchased video equipment includes recording of teachers' instructional practices for reflection and self-evaluation. Starting in the 2011-12 school year, the district also plans to provide stipends of \$2,000-\$3,000 to master teachers who serve as mentors or coaches.

"Lake County School District Plan to Alternatively Compensate Teachers" grant application provided by Michelle Schamberger, contract grant writer; Lake County School District R-1 Final Report, "Plan to Alternatively Compensate Teachers," provided by Colorado Department of Education, January 26, 2011.

⁹⁵ Pueblo 70 used ACT funds to refine a collaborative system of "co-teaching," including to pay stipends for 10 participating teachers and 2 project coordinators. Pueblo 70 "ACT Final Report" provided by Colorado Department of Education, January 26, 2011.

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ADDITIONAL RESOURCES on this subject can be found at: <http://education.i2i.org/>

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