

Pay for Performance, Knowledge, and Skills

SB 5627 directs the Basic Education Finance Joint Task Force to examine school employee compensation systems that include “pay for performance, knowledge, and skills.” This handout provides an overview of state, local, and national initiatives that include these elements.

Background

Effective teachers matter in the academic progress of their students, and their impact can be significant.¹ Long-term changes in the overall labor market, however, have expanded opportunities for women, and “the relative attractiveness of teaching as a career choice for talented women has diminished.”² As class sizes have been reduced and the student population has grown, the need for more teachers has more than doubled in the last 50 years. These trends in combination have altered the pool of individuals entering the teacher labor market. Specifically, researchers have found declining average SAT scores among the teacher labor force.³ Additionally, low-income, low-performing, and minority students, particularly in urban schools, are most likely to receive instruction from the least experienced and less effective teachers.⁴

Some policymakers have responded to these trends by initiating educator pay reforms. Typically, these reforms award additional pay to:

- recruit and retain teachers in hard-to-staff schools and positions; and
- create incentives for teachers and staff to improve their knowledge, skills, and effectiveness.

Pay Reform Initiatives

Educator pay reforms focus on four broad approaches: pay for teaching assignments in hard-to-staff schools; incentive pay for hard-to-staff positions; knowledge- and skills-based pay; and performance pay.

Hard-to-staff school bonuses are provided to teachers in schools with concentrations of low-income or low-performing students. Six states, including Washington, provide a hard-to-staff school bonus or salary differential for teachers.⁵ In Washington, teachers who receive certification from the National Board for Professional Teaching Standards (NBPTS) receive a \$5,000 bonus for working in low-income schools, in addition to the regular \$5,000 NBPTS bonus.⁶

¹ The December 2007 WSIPP report to the Task Force analyzed the empirical research on this topic and found that on average, a one standard deviation (SD) gain in teacher effectiveness produces a .21 SD increase in annual student test score gains. For more information see: S. Aos, M. Miller, & A. Pennuci. (2007). *Report to the Joint Task Force on Basic Education Finance: School employee compensation and student outcomes* (Document No. 07-12-2201). Olympia: Washington State Institute for Public Policy.

² S. Loeb & M. Reininger. (2004). *Public policy and teacher labor markets: What we know and why it matters* (Page 2). East Lansing: The Education Policy Center at Michigan State University.

³ E. Eide, D. Goldhaber, and D. Brewer. (2004). The teacher labour market and teacher quality. *Oxford Review of Economic Policy*, 20(2), 230-244.

⁴ H. Lankford, S. Loeb, & J. Wyckoff. (2002). Teacher sorting and the plight of urban schools: A descriptive analysis. *Educational Evaluation and Policy Analysis*, 24(1), 37-62.

⁵ The other states are Alaska, California, Hawaii, Louisiana, and New York. Each of these states, as well as Washington and 20 other states, provide other benefits for teachers in hard-to-staff schools, including tuition/fee support, loan or housing assistance, and retirement plans. For more information, see: S. Loeb & L. Miller. (2006). *A review of state teacher policies: What are they, what are their effects, and what are their implications for school finance?*. Stanford, CA: Institute for Research on Education Policy & Practice.

⁶ In Washington, low-income schools are defined as having the following percentages of students eligible for free or reduced price lunch: 50 percent (high schools); 60 percent (middle schools); and 70 percent (elementary schools).

Incentive **pay for hard-to-staff positions** is provided to teachers in subject areas in competitive labor markets, usually content areas requiring technical skills such as math and science. The rationale for subject-area bonuses is that “individuals with different attributes face different financial opportunity costs to enter the teacher labor market,”⁷ and the additional pay is intended to increase the incentive for individuals with high-demand skills to enter and remain in the teacher labor force. In Washington, the Professional Educator Standards Board (PESB) has identified statewide teacher shortages in math, science, special education, and English as a second language.⁸ Four states provide a subject-area salary differential for public school teachers: Alaska, California, Louisiana, and New York. Sometimes, incentives are provided in the form of recruitment bonuses or housing and loan assistance.⁹

Knowledge- and skills-based pay rewards teachers for completion of specified training or demonstration of particular skills based on a standardized measure, such as a state or national

teaching certificate. For example, 37 states compensate teachers for becoming NBPTS certified; as noted above, Washington teachers receive a \$5,000 annual bonus for NBPTS certification. Under “career ladder” knowledge- and skills-based pay models, teachers are awarded pay increases as they achieve levels of certification or assume new responsibilities such as mentoring or curriculum development.¹⁰

Pay for performance systems link part of educators’ salaries to specified outcomes, usually increases in student test scores in combination with other measures. Pay for performance policies are the most controversial teacher pay policies in the United States.¹¹ At present, eight states have performance pay initiatives in place: Alaska, Arizona, Florida, Minnesota, North Carolina, Ohio, South Carolina, and Texas.

These four types of pay for performance, knowledge, and skills systems are usually provided in various combinations with one another in local, state, and national initiatives; examples are provided at the end of this handout.

Four Types of Pay for Performance, Knowledge, and Skills Systems

Supplemental Pay Is ...		
For:	Provided to:	Based on:
Hard-to-Staff Schools	Individual teachers, school-wide	Teaching assignment in low-income or low-performing schools
Hard-to-Staff Positions	Individual teachers	Teaching assignment in certain subjects with competitive labor market
Knowledge and Skills	Individual teachers	Teachers’ completion of training, demonstration of skill, or assumption of increased responsibilities
Performance	Individual or teams of teachers, school-wide	Student test scores, assessments of teacher instructional practices

⁷ D. Goldhaber, M. Armond, A. Liu, & D. Player. (2007). *Returns to skill and teacher wage premiums: What can we learn by comparing the teacher and private sector labor markets?* (Page 13). Seattle: University of Washington, Center on Reinventing Public Education, School Finance Redesign Project.

⁸ <http://www.pesb.wa.gov/AlternativeRoutes/AlternativeRoutes.asp>.

⁹ Loeb & Miller (2006).

¹⁰ See, e.g., the models described in: Professional Educator Standards Board. (2003). *Getting and keeping the teachers we need: Paying for what we value*. Olympia, WA: Author; and A. Odden & M. Wallace. (2007). *Rewarding teacher excellence: A teacher compensation handbook for state and local policymakers*. Madison: University of Wisconsin-Madison, Consortium for Policy Research in Education.

¹¹ D. Goldhaber. (2006). *Teacher pay reforms: The political implications of recent research* (Page 12). Washington, DC: Center for American Progress.

Lessons Learned From Other States' Experiences

The empirical evidence on paying educators for performance, knowledge, and skills is limited, but some rigorous studies have been recently completed. Dr. Dan Goldhaber, a consultant to the Institute on this project, offers the following overview of teacher pay reforms and current research:

“Even though the research on teacher compensation reform is hardly definitive enough to recommend the use of specific pay reforms to reach specific goals, the few quantitative studies that do exist suggest that a more strategic use of teacher compensation could lead to both a more equitable allocation of teachers among students and increased student achievement.”¹²

Lessons learned from experiences in other states indicate that to recruit and retain teachers where they are needed most, pay reform policies should at a minimum include hard-to-staff school incentives. Hard-to-staff school incentives have better support among teachers than other pay reforms¹³ and can reduce the tendency for more effective teachers to gravitate to better working conditions in more affluent schools.¹⁴

¹² Goldhaber (2006), p. 26.

¹³ A recent survey of teachers in Washington State found that substantially more teachers support hard-to-staff school pay compared with pay for certain subject areas or for performance. D. Goldhaber, M. DeArmond, & S. DeBurgomaster. (2007). *Teacher attitudes about compensation reform: Implications for reform implementation*. Seattle: University of Washington, Center for Reinventing Public Education, School Finance Redesign Project. A recent report on a survey of Florida teachers recommended that the state increase support for pay reform by providing monetary incentives for teachers to work in hard-to-staff schools. B. Jacob & M. Springer. (2007). *Teacher attitudes on pay for performance: A pilot study*. Nashville, TN: Peabody College of Vanderbilt University, National Center for Performance Incentives.

¹⁴ Recent research from North Carolina indicated that without special consideration for hard-to-staff schools, pay for performance, knowledge, and skills policies can have the unintended consequence of increasing teacher migration to higher-performing (in most cases, more affluent) schools. J. Vigdor. (2008). *Teacher salary bonuses in North Carolina*. Nashville, TN: Peabody College of Vanderbilt University, National Center for Performance Incentives.

Pay for performance, knowledge, and skills policies are usually better received by educators when they include:

- multiple measures of teachers' performance (i.e., a combination of the following: school-wide test score gains, individual student test score gains, standards-based classroom observation, principal or peer evaluations);
- knowledge- and skills-based pay (e.g., for NBPTS certification or career ladder advancement);
- incentive pay for teachers outside of core subject areas, as well as for principals and other instructional administrators;
- relatively substantial monetary rewards (e.g., at least 5 percent of base pay);¹⁵ and
- opt-in or opt-out policies.¹⁶

Most incentive pay systems include professional development components to help teachers increase their effectiveness.

The capacity to do extensive data collection and analysis is a critical consideration for states weighing pay incentive policies. Administering differentiated pay systems is inherently more complex than single salary schedules, and longitudinal student data linked to individual teachers is needed not only to calculate test score gains but also to evaluate the impacts of pay reforms.¹⁷

¹⁵ A related cost consideration is whether bonuses or base salary increases are included in pension determinations.

¹⁶ R. Chait. (2007). *Current state policies that reform teacher pay: An examination of pay for performance programs in eight states*. Washington, DC: Center for American Progress; H. Heneman, A. Milanowski, & S. Kimball. (2007). *Teacher performance pay: Synthesis of plans, research, and guidelines for practice*. Philadelphia: University of Pennsylvania, Consortium for Policy Research in Education.

¹⁷ For a review of Washington's data system, see: D. Goldhaber. (2008). *Making connections for youth in Washington State: The role of data in shaping state policy*. Seattle: University of Washington, Center for Reinventing Public Education; and Center for Strengthening the Teaching Profession. (n.d.). *Creating a comprehensive teacher data system*. Seattle, WA: Author.

Examples of Pay Reform Initiatives

Examples of pay reform initiatives from Denver, Florida, Minnesota, North Carolina, and Texas are provided below, listed alphabetically by state.¹⁸ In addition to state- and district-level initiatives, there are at least two nationally available resources that facilitate educator pay reform: the private Teacher Advancement Program (TAP) and the federal Teacher Incentive Fund (TIF).¹⁹ No TIF grants or TAP models have been implemented in Washington school districts.

Denver, Colorado: Professional Compensation System for Teachers (ProComp) (School-wide and Individual Pay for Performance, Knowledge, and Skills)

Year started: 1999 (pilot) 2004 (current program)

Key components: Individual teacher and school-wide incentive pay for performance, knowledge, and skills. Teachers hired before December 2005 can elect to participate in the program; participation is required for teachers hired in 2006 or later. The incentive pay counts as part of teachers' salaries for determining pensions.

Incentive pay for:

- Knowledge and skills (professional development, graduate degree, advanced license, NBPTS certification);
- Hard-to-staff subject areas (e.g., middle school math, English as a second language, special education, speech and language specialists) and schools;
- Professional evaluation (conducted every three years); and
- Improved student achievement (measured by meeting annual student learning objectives developed by teachers and principals, principal evaluations, and individual and school-wide student test score increases on the state standardized test).

Funding: A blend of local levy (\$25 million), federal TIF grant (\$22.7 million for five years), and private grants (unknown amount). A \$1 million Rose Community Foundation grant funded the pilot program. Based on maximum possible 2007-08 awards, teachers can earn up to approximately \$10,000 annually for the incentive pay components as follows: professional development units \$711; graduate degree or national certification \$3,201; tuition reimbursement \$1,000; satisfactory professional evaluation \$356 to \$1,067; hard-to-staff positions \$1,067; hard-to-staff schools \$1,067; meeting student growth objectives \$356; exceeding expectations on the state test \$1,067; and a distinguished school bonus \$711.

Research: A 2004 report on the pilot program compared outcomes for students in pilot schools with non-equivalent comparison schools; the results were mixed. The program has since been modified. (Community Training and Assistance Center, 2004)

Florida: Merit Award Program (Individual Performance Pay)

Year started: 2007 (replaced the 2006 "Special Teachers Are Rewarded" or STAR program²⁰)

Key components: Bonus pay for top-performing teachers and administrators as measured by increases in student test scores and supervisor evaluations. School districts develop implementation plans under state guidelines; state approval is required.

Incentive pay for: Proficiency and/or student test score gains on statewide standardized tests (60 percent); supervisor evaluation (40 percent).

Funding: State funded; \$147.5 million allocated annually. Bonus amounts: 5 to 10 percent of base salary.

Research: No evaluations completed to date.

¹⁸ States and districts were selected for inclusion in this handout by Task Force members' request and availability of research.

¹⁹ TIF was created by the U.S. Congress in 2006 as a discretionary grant program for school districts to implement pay for performance programs in high-needs schools. In 2007, 34 TIF grants were awarded to school districts, charter schools, consortia of districts and schools, and states (including South Carolina, Ohio, South Dakota). The average grant award in 2007 was \$2.4 million.

²⁰ The STAR program had replaced prior attempts to implement statewide performance pay programs. For a discussion of the challenges Florida has had with implementing performance pay for teachers, see Jacob & Springer (2007).

Minnesota: Quality Compensation for Teachers (Q Comp) (School-wide and Individual Pay for Performance, Knowledge, and Skills)

Year started: 2005

Key components: Q Comp is a state funding stream for school districts and charter schools to provide additional pay to teachers. Pay increases become part of teachers' base salary and no salaries can be reduced. Participation is voluntary and school districts design the plans with teacher participation under state guidelines. The state requires local plans to include five components:

- Career ladder (assumption of increased responsibilities, e.g., mentor teacher, curriculum program leader, instructional coach);
- Job-embedded professional development (provided during the contracted work day);
- Teacher evaluation (based on staff development plans and using multiple evaluators and criteria);
- Performance pay; and
- Alternative salary schedule (the plan must modify the traditional "steps and lanes" salary schedule).

In the current 2007-08 school year, 39 school districts and 21 charter schools have been approved for Q Comp.

Incentive pay for: Teacher evaluations and student achievement gains (at least 60 percent); up to 40 percent can be for teachers' advancement on the career ladder. Student achievement gains can be measured by increases in school-wide standardized test scores or other measures.

Funding: State funded; \$3.6 million annually for up to 48 percent of the statewide student population. Approved school plans receive up to \$190 per student in state aid and \$70 per student in a partially equalized levy.

Research: No evaluations completed to date.

North Carolina: ABCs of Public Education (School-wide Performance Pay)

Year started: 1996-97 (modified in subsequent years)

Key components: School-wide salary bonuses for teachers and teaching assistants in schools with student test score growth.

Incentive pay for: Improved student achievement measured by regression-adjusted scores on state end-of-grade reading and math exams; a pre-test is administered at the beginning of each year.

Funding: State funded (\$103.3 million in 2007-08). Bonus amounts up to \$750 (for teachers in schools achieving "expected" growth) and \$1,500 (for "exemplary" or "high" growth).

Research: A recent study found that the performance bonus appears to motivate schools to increase student test scores, but also creates an incentive for effective teachers to migrate from low-performing to higher-performing schools. (Vigdor, 2008)

North Carolina: Subject-Area Bonuses for Teachers in Low-Performing and Low-Income Schools

Year started: 2001-02 (discontinued in 2004-05)

Key components: Bonuses for math, science, and special education teachers in low-income and low-performing schools.

Incentive pay for: Teaching math, science, or special education in a low-income middle school (at least 80 percent of students must be eligible for free and reduced price lunch) or a low-performing high school (50 percent of students perform below grade level state end of course tests in Algebra 1 and Biology).

Funding: State funded. Bonus amounts up to \$1,800.

Research: A recently published study found that the bonus had no effect on retaining teachers in hard-to-staff schools, possibly because of flaws in implementation or the relatively small size of the bonus. (Clotfelter et al., 2008)

Texas: Education Excellence Grants (School-wide Performance Pay)

Year started: 2005 (Governor's program) 2006 (legislative program)²¹

Key components: School-wide bonuses for increased student performance, teacher collaboration, and teacher participation in professional development. School participation is voluntary and schools develop their own incentive pay plans under broad state guidelines. The state requires teacher involvement in the development of local plans, and the Governor's program requires district approval of the plan. To qualify for funds, schools must demonstrate a certain level of academic performance based on the state standardized test and have high concentrations of low-income students.

Incentive pay for: Local plans must award 75 percent of the grant for measures of student performance and teacher collaboration and 25 percent for other school administration and staff. Student performance must be measured by an objective, quantifiable assessment such as the state standardized test.

Funding: Both programs are state-funded. The legislative program also received a TIF grant in 2006; the total appropriation for this program in 2007-08 is \$97 million. The legislative program provides grants to an unlimited number of campuses with amounts ranging from \$40,000 to \$300,000. The Governor's program funds 100 schools each year with grants ranging from \$60,000 to \$220,000 depending on school size; the total fund is \$10 million over three years.

Research: Two recent reports describe the first year of implementation of each program. (Springer et al. 2007 and 2008). No analysis of the grants' impact on student performance has been reported.

Dallas, TX: Outstanding School Performance Award (School-wide and Individual Performance Pay)

Year started: 1990 (most recently re-authorized in 2007)

Key components: School-wide bonuses to teachers, principals, and other staff for increases in student achievement and high-needs status. In the current program, teachers and professional staff who wish to receive bonuses must opt into the program. Support staff members are automatically enrolled in the program unless they opt out. Bonuses are provided to individual teachers with the highest student test score gains.

Incentive pay for: In an earlier version of the program, pay awards were based on school-wide student test score gains on the state standardized test and the Iowa Test of Basic Skills, with weights for each that varied annually. Then and now, bonuses are also awarded based on measures of student attendance, grade promotion, dropout rates, enrollment in advanced courses and scores on tests of postsecondary readiness. Previously, schools' overall achievement gain scores are ranked from highest to lowest and teachers and staff in the highest ranked schools received bonuses. In the current program, a "Classroom Effectiveness Index" (CEI) is used to award individual teacher bonuses in addition to the school-wide incentives.

Funding: Locally funded. In 2006, the district was awarded a \$22.4 million TIF grant to cover five years of the program. Current bonus amounts are as follows: teachers with the highest CEIs receive \$2,000 to \$8,000; school-wide bonuses for teachers range from \$1,250 to \$2,000. Support personnel are eligible for \$625 to \$1,000 school-based bonuses. Principal awards range from \$7,500 to \$10,000.

Research: A 1999 study found that the Dallas awards had a positive impact on 7th grade mathematics and reading scores. Results for elementary school students were unclear. (Ladd, 1999)

²¹ A third Texas program, not summarized here, is the District Awards for Teacher Excellence authorized in 2006. The three programs together are known as the "Governor's Educator Excellence Award Program" (GEEAP) with an anticipated FY 2009 appropriation of \$247 million.

National: Teacher Advancement Program (TAP) (School-wide and Individual Pay for Performance, Knowledge, and Skills)

Year started: 1999 by the Milken Family Foundation.

Key components: Four components in the model:

- Multiple career paths for teachers (career, mentor, and master teachers);
- Ongoing, applied professional development (time provided during school day for meeting, planning, and mentoring);
- “Instructionally focused accountability” (evaluations of classroom teaching four to six times a year using a standardized assessment); and
- Performance pay.

Nearly 200 schools in 13 states²² have implemented TAP.

Incentive pay for: Classroom observations (50 percent); value-added test scores of each teacher’s students (30 percent); school-wide value-added student achievement (20 percent).

Funding: Variety of funding sources, including local, state, federal TIF grants, and private foundations. TAP recommends a minimum \$2,500 bonus per teacher for a school-wide performance award fund with a range of actual awards from \$0 to \$12,000, depending on performance. The approximate cost to implement TAP is \$400 per student.

Research: A recent study on math test scores found that TAP had a positive impact on elementary scores, but no impact in middle school and a negative impact in high school. (Springer, Ballou, & Peng, 2008). An earlier, less empirically rigorous study found positive impacts on test scores, but the grade levels were not reported. (Solmon et al., 2007)

²² Arkansas, Colorado, Florida, Illinois, Indiana, Louisiana, Minnesota, Ohio, Pennsylvania, South Carolina, Tennessee, Texas, and Wyoming.

Research Citations From Examples

Denver, CO

Community Training and Assistance Center. (2004). *Catalyst for change: Pay for performance in Denver* (Final Report). Boston: Author.

North Carolina

Clotfelter, C., Glennie, E., Ladd, H., & Vigdor, J. (2008). Teacher bonuses and teacher retention in low-performing schools: Evidence from the North Carolina \$1,800 teacher bonus program. *Public Finance Review*, 36(1), 63-87.

Vigdor, J. (2008, February). Teacher salary bonuses in North Carolina. Paper prepared for the conference, *Performance incentives: Their growing impact on American K-12 education*. Nashville, TN.

Texas

Springer, M., Podgursky, M., Lewis, J., Ehlert, M., Gardner, C., Ghosh-Dastidar, et al. (2007). *Governor's Educator Excellence Grant (GEEG) program: Year one evaluation report*. Nashville, TN: National Center on Performance Incentives.

Springer, M., Podgursky, M., Lewis, J., Ehlert, M., Ghosh-Dastidar, B., Gronberg, T, et al. (2008). *Texas Educator Excellence Grant (TEEG) program: Year one evaluation report*. Nashville, TN: National Center on Performance Incentives.

Dallas, TX

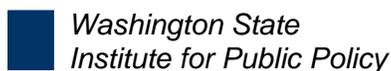
Ladd, H. (1999). The Dallas school accountability and incentive program: An evaluation of its impacts on student outcomes. *Economics of Education Review*, 18, 1-16.

TAP

Solmon, L., White, J., Cohen, D., Woo, D. (2007). *The effectiveness of the Teacher Advancement Program*. Santa Monica, CA: National Institute for Excellence in Teaching.

Springer, M., Ballou, D., & Peng, A. (2008, February). *Impact of the Teacher Advancement Program on student test score gains: Findings from an independent appraisal*. Paper prepared for the conference, *Performance incentives: Their growing impact on American K-12 education*. Nashville, TN.

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