

A New Series of Papers on Teacher Compensation from the University of Wisconsin CPRE Group

There is strong consensus around the country that talented and capable teachers will be needed in all classrooms in order to accomplish the nation's goals of teaching all students to high standards, and closing the achievement gap. Although there are many policy and practice issues that have to be addressed in order for the nation's education systems to recruit and retain the quality of individuals that are required, including schools and classrooms in many of the country's large urban and poverty impacted districts, the teacher compensation system itself must be changed. Teacher salary levels will have to be hiked in many places to enable school systems to compete for the quality of talent required to be successful, and the salary structures themselves need to be changed in order to pay teachers for the knowledge, skills and responsibilities to be successful, including bonuses for improved student performance.

With support from the College Board, the Consortium for Policy Research in Education (CPRE) Group at the University of Wisconsin-Madison is producing a series of papers that addresses the compensation aspect of the strategic management of human capital in public education:

1. **New Teacher Pay Structures: The Compensation Side of the Strategic Management of Human Capital: A Summary**, by Allan Odden
2. Do Teacher Pay Levels Matter?, by Anthony Milanowski
3. How to Design New Teacher Salary Structures, by Herbert G. Heneman, III and Steve Kimball
4. How to Pay Teachers for Student Performance Outcomes, by Anthony Milanowski
5. How to Fund Teacher Compensation Changes, by Allan Odden
6. Exploring a Federal Government Role in Funding Increased Teacher Compensation, by Andrew Reschovsky

This paper is available in the Resources section of <http://www.smhc-cpre.org>.

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NEW TEACHER PAY STRUCTURES: THE COMPENSATION SIDE OF THE STRATEGIC MANAGEMENT OF HUMAN CAPITAL

By
Allan Odden

This paper argues that the compensation system for teachers can and should be changed to better support the goal of teaching all students in all classrooms to high and rigorous performance standards. In many districts, teachers, particularly the most effective teachers, are both underpaid and ineffectively paid. In most states, teachers are paid less than jobs that require similar knowledge, skills and responsibilities, disadvantaging the education system in recruiting the best and the brightest into education. In most districts, teachers receive annual pay increases on the basis of factors that have little or no relationship to increases in student performance, so the pay system sends the wrong signals about what teachers should do to earn higher pay. Even states and districts that experience obvious shortages of mathematics, science, and special education teachers rarely recognize that the teacher labor market is segmented and fail to pay such teachers more as a result. Similarly, often times, the toughest schools have the lowest paid and least effective teachers, rather than the highest paid and most effective teachers. Though rising in use, few states and districts provide any pay for improved student performance, although this is the most important goal of the education system. No organization that pays its key employees in these unproductive ways can hope to dramatically increase its performance – student achievement in education – over the short, medium, or long term

To be sure, many aspects of the education system also require change. And when given the choice, teachers, particularly the best teachers, prefer strong principals who create a safe and orderly environment and manage the school with a focus on improving instructional practice and increasing student achievement, rather than just more pay. In addition to outlining changes in how teachers are paid, this paper also addresses how the human capital management systems should be changed to enhance the impact of teacher and administrator compensation change.

1. OVERVIEW OF ISSUES

This section first discusses the various components of teacher wages and then discusses the issue of how much teachers should be paid, strategies for getting quality teachers into low performing and high poverty schools as well as into subject areas experiencing shortage, how to link the teacher salary structure to organizational strategies to improve instructional practice, and whether some aspect of teacher pay should be linked to student achievement outcomes.

Components of Teacher Compensation

Teacher compensation consists of five key elements: base pay, base pay progression, variable pay, benefits, and working conditions.

Base pay is the monthly check. It is the most important element of pay with regard to recruiting and retaining individuals in teaching or pretty much any profession or occupation. It is the pay element teachers can count on receiving every month.

Base pay progression is the means by which teachers earn pay increases over time. In nearly all districts in the United States, teacher salary increases are triggered by years of experience, education degrees and education units. Unfortunately, neither of these factors is strongly linked to student learning gains, except for years of experience for the first three years.

Variable pay is money that might or might not be earned. Usually, variable pay is provided as a bonus for improving organizational performance – student performance in education.

In redesigning a teacher pay system, attention must be paid to overall average pay levels or average teacher base pay, the factors that trigger base pay progression, and variable pay.

Teacher Wage Levels

As teacher wages increase to levels that make teaching more attractive economically, more and higher quality individuals decide to enter and remain in teaching. But another aspect of teacher wage level differences is that teachers migrate from lower paying to higher paying districts, often from large city to suburban districts, although movement from lower to higher paying districts exists among suburban districts as well.

When New York City raised average teacher salaries by about 43 percent over a five year time period, it reduced the percentage of teachers without a full teaching credential from 17 to 2 percent, and had much less trouble filling all teaching positions. So wage levels do matter.

We suggest that a competitive wage level for teachers would be the same as wage levels for jobs with similar knowledge, skills, and responsibilities or of all college graduates. After reviewing many such comparisons, we argue that average teacher wages across the country should be hiked by between \$5,000 and \$10,000 per teacher. However, we strongly recommend that it be done through newly designed teacher wage structures, and *not* the current single salary schedule.

Getting Teachers into Low Performing Schools and Subjects Experiencing Shortages

One of the most acute problems in America is the shortage of high quality teachers in many of the nation's large, urban districts that enroll high numbers and concentrations of students from low income and high needs backgrounds. Too many classrooms in these districts are staffed by teachers with limited expertise and, in part, as a result, student achievement is low. This is one major cause of the achievement gap among groups of students in the country.

Public schools, through the single salary schedule, have long valued pay equity for teachers. The goal has been to pay teachers with similar qualities – years of experience, education units, and degrees – the same wage. But large urban districts and the high poverty and minority schools within them experience shortages of capable individuals willing to teach in those districts and schools. Many are coming to the realization that such teachers are in a different education labor market and might need to be paid more.

Initial pay differentials for high need schools were in the \$1000-2000 range; however, most districts now realize that that is not a sufficient differential and are beginning to provide incentives in the range of 10-15 percent, or at least \$5000.

A similar argument can be made for specific subjects experiencing teacher shortages, again largely in many of the nation's big city school districts. The most common subjects are mathematics, science, special education and expertise in working with English Language Learners (ELL). Research has shown that incentives at the level of \$1000-2000 have small, marginal impacts, but incentives at \$5000 and above get more attention and have more impact.

However, working conditions also matter for teachers in these urban schools. CPRE as well as other research has found that new teachers can be more interested in the quality of the principal and the effectiveness of the inner-city school than a salary incentive. Thus, districts should attend both to leadership and working conditions as well as pay incentives in efforts to get better talent into inner city, urban classrooms and schools.

Linking Teacher Salaries to Instructional Improvement Strategies

Multiple research studies have shown that better instruction is the prime factor in schools that produce improved student achievement. Thus, factors that are directly linked to improved instructional practice should be a major part of any new teacher salary schedule, particularly the factors producing base pay increases or annual raises. Such a strategy would have the pay system sending the message that improved classroom performance is a main route to pay increases over time. The overall goal would be to redesign teacher salary structures so that the major factors behind base pay progression would be enhanced teacher instructional practice rather than teachers' years of experience or education units.

Several performance evaluation or performance assessment systems have been created to measure a teacher's instructional practice, or in other words, provide a measure of a teacher's instructional assets. Many measure a teacher's instructional practice at four different levels—beginner, novice, professional, and master—based on their instructional expertise or instructional assets.

The Consortium for Policy Research in Education has found that districts operating these systems can produce scores for teachers that are reliable across teachers, grade levels, and assessors. Further, CPRE research has shown that these instructional practice measures successfully identify teachers whose students are likely to have higher levels of student learning improvements. Master teachers as a group produce more learning gains than professionals, who produce more learning gains than novices, who produce more learning gains than new teachers as a group.

The pay schedule on the next page (Figure 1) shows a dramatically redesigned teacher pay structure. Movement down across performance categories produces the largest increases in base pay (10%); however there are small increases (1.5%) based on years of experience that are provided at a small level within each performance category. The structure sends the signal that improved classroom instruction is the prime way to earn the highest pay level. Indeed, pay

Figure 1¹

A Knowledge-and Skills-Based Pay Plan

	Step Within Level	BA	MA	MA 60/ Doctorate
Beginning	1	\$40,000	\$41,600	\$43,264
	2	\$40,600	\$42,224	\$43,913
	3	\$41,209	\$42,857	\$44,572
Novice	1	\$45,330	\$47,143	\$49,029
	2	\$46,010	\$47,850	\$49,764
	3	\$46,700	\$48,568	\$50,511
	4	\$47,400	\$49,297	\$51,268
	5	\$48,112	\$50,036	\$52,037
	6	\$48,833	\$50,787	\$52,818
Professional	1	\$53,716	\$55,865	\$58,100
	2	\$54,522	\$56,703	\$58,971
	3	\$55,340	\$57,554	\$59,856
	4	\$56,170	\$58,417	\$60,754
	5	\$57,013	\$59,293	\$61,665
	6	\$57,868	\$60,183	\$62,590
Master	1	\$63,655	\$66,201	\$68,849
	2	\$64,610	\$67,194	\$69,882
	3	\$65,579	\$68,202	\$70,930
	4	\$66,562	\$69,225	\$71,994
	5	\$67,561	\$70,263	\$73,074
	6	\$68,574	\$71,317	\$74,170

Percent Increase for Step	1.5%
Percent Increase for Skill Level	10.0%
Math or Science Incentive	10.0%
National Board Certification	10.0%
MA, MA60/Doctorate	4.0%

¹ The numbers are for illustrative purposes only, and just indicate the degree of pay change for instructional performance vs. years of experience.

are capped at the top of each performance category if a teacher's instructional skills do not rise to the next highest performance level. The structure also includes pay incentives for mathematics and science, as well as National Board Certification. It further includes modest increases for a Master's and a Doctorate Degree, in the area of licensure, but not for miscellaneous units.

Such a salary structure needs a strong teacher performance assessment to decide when and whether teachers could move up the different performance levels of the schedule. Such a system should reflect the district's vision of good instructional practice, and teachers would need to be assessed on at least a 3-5 year basis (see Heneman, Milanowski, Kimball and Odden, 2006).

Paying Teachers for Improving Student Achievement Outcomes

There also has been considerable movement in education to provide new teacher pay elements that are directly based on improvements in student achievement, largely state and district student achievement test scores. Since the prime goal of America's education system has been to improve student achievement in important subjects, it makes sense that some aspect of pay should be linked to improvements in measures of these important system results.

Attaining the level of achievement desired will require school systems to improve over several years. These pay elements are therefore most effectively provided as a bonus in the year they are earned. Thus, each year the improvement bar can be hiked, and the performance bonus is earned the next year only if the new and higher level of achievement is attained. This type of pay element would under gird the education system's efforts to boost student performance year after year, and would provide an economic incentive – a pay bonus – for school systems' becoming continuous improvement organizations.

Pay for performance programs have had multiple, positive impacts on schools. Most importantly, they help teachers focus on the most important goals of the education systems— student performance in the areas included in the performance bonus systems. They also help teachers channel their time, effort, and energy.

Forms of incentives based on student learning outcomes. Two major design issues confront programs that provide some pay element based on student learning outcomes. The first is determining how to calculate change in student performance. The CPRE handbook suggests using a simple balanced scorecard approach, but many in education argue for a more statistical value-added approach.

The other major issue is whether to provide the bonus to all individuals or teachers in a school, to drive the bonus to each individual teacher, or to use some combination of these two approaches. We recommend that districts and states consider both approaches.

The Teacher Advancement Program (TAP) is one of the most successful programs in the country that includes bonuses for both school wide improved performance and improved performance for each individual teacher's students.

Size of bonuses. There is no hard and fast rule about the size of bonus programs. CPRE's materials suggest bonuses in the range of 4-8 percent of base salary, which are \$2000 to \$4000 at an average base salary of \$50,000. Districts and states also should consider providing bonuses to everyone in a school if they take the school-based approach and have the funds.

Summary

We recommend that teacher salary levels should be increased, in some states more than others. However, we do *not recommend that salaries be increased through the current single salary schedule* that most districts and states use. Neither years of experience nor continuing education units strongly link to improved instructional practice or to student learning gains.

Increased dollars for teacher salaries should be provided through new elements incorporated into the base pay structure for teachers. These elements should directly or indirectly link to improved instructional practice, the most rigorous indicator being a score on a performance evaluation of teachers. In addition, we recommend substantial incentives (\$5,000+) for teachers in subject area shortages (e.g., mathematics and science) or in high poverty, high needs schools, most of which are in urban districts. Finally, we recommend adding annual bonuses in the range of \$2,000 to \$4,000 per teacher for improving student performance, primarily academic achievement in core subjects.

In these ways, the pay system would incent teachers to improve their instructional practice, which is the primary way to boost student learning, would recognize the labor market realities of getting more talent to teach math, science and other areas experiencing shortages as well as high poverty classrooms and schools, and would provide bonuses when teachers boosted the main goal of the education system – student academic performance in core subjects.

2. ADMINISTRATOR PAY ISSUES

Districts should also consider changes to pay structures for administrators, including principals. Administrators then could be role models for teachers by altering their pay structure as well.

Many districts experience the same issue for principals as for teachers in trying to staff high poverty, high minority, chronically low performing or otherwise hard to staff schools. Thus, additional salary differentials might be required to recruit and retain individuals willing to tackle the more difficult education challenges in these schools.

We suggest that districts work on ways to provide base pay increases for knowledge, skills, and competencies it views as key for principals to be successful. The goal would be for the base pay program for principals to buy principal assets the district has concluded makes principals more effective, and to “top off” base pay with an annual bonus program based on improved student performance for the school as a whole.

3. MAKING PAY INNOVATIONS WORK TOGETHER

Changing the pay system by itself is not sufficient to accomplish the goals of the system. To recruit and retain the individuals needed to carry out the instructional strategies of the district and

to produce the desired student performance, most systems will need to redesign and make more strategic their overall human resources management systems and their approach to developing and managing human capital, particularly teachers and principals.

States and districts will need to give new attention to how they recruit, select, train both pre-service and in-service, deploy, evaluate, promote through career ladders, and pay teachers and leaders. These issues are problematic in many districts in the country, but particularly in many of the country's large, urban districts, which educate the vast bulk of children from low income and minority backgrounds. The power of any changes in teacher compensation will depend on the degree to which they are embedded and managed within a more strategic approach to human capital development and management. In particular, the district vision of instruction should under gird the system's teacher evaluation system, and teacher performance measures from this evaluation system should be used to define the goal of new teacher induction, to focus professional development, provide pay increases and promote into teacher leadership roles.

The state's and district's entire human capital development systems, in most places, including the pre-service training and teacher and principal professional licensure programs, need to be redesigned in ways to provide the talented and expert teachers and principals the system needs to implement the instructional program and boost student achievement.

ADDITIONAL KEY CPRE RESOURCES

- Heneman, H.G. III., Milanowski, A.T., Kimball, S.M., & Odden, A. (2006). *Standards-Based Teacher Evaluation as a Foundation for Knowledge-and Skill-Based Pay (RB-45)*. Philadelphia: University of Pennsylvania, Graduate School of Education, Consortium for Policy Research in Education.
- Heneman, H.G. III., & Milanowski, A.T. (forthcoming). *Aligning Human Resource Management Programs with Teacher Performance Competencies*. Madison: University of Wisconsin, Wisconsin Center for Education Research, Consortium for Policy Research in Education.
- Heneman, H.G. III., Milanowski, A., & Kimball, S. M. (2007). *Teacher Performance Pay: Synthesis of Plans, Research, and Guidelines for Practice (Policy Brief RB-46)*. Philadelphia: University of Pennsylvania, Consortium for Policy Research in Education.
- Odden, A. & Kelly, J. (2008). *Strategic Management of Human Capital in Public Education*. Madison: University of Wisconsin, Wisconsin Center for Education Research, Consortium for Policy Research in Education, Strategic Management of Human Capital.
- Odden, A., & Wallace, M. C., Jr. (2007a). *How to Create World Class Teacher Compensation*. St. Paul, MN: Freeload Press. Available from www.freeloadpress.com
- Odden, A., & Wallace, M. C., Jr. (2007b). *Rewarding Teacher Excellence: A Teacher Compensation Handbook for State and Local Policymakers*. Madison: University of Wisconsin, Wisconsin Center for Education Research, Consortium for Policy Research in Education.