

**Paying For What You Need:
Knowledge- and Skill-Based
Approaches to Teacher Compensation**

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About This Report

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Teacher Compensation: A Call For Change

“You get what you pay for”—or so the old saying goes. Many advocates of education reform would argue that this maxim underscores one of the most important—and overlooked—elements of reform: the need for a thorough reexamination and reconfiguration of teacher compensation.

In *Paying Teachers for What They Know and Do: New and Smarter Compensation Strategies to Improve Schools*, Allan Odden and Carolyn Kelley of the Consortium for Policy Research in Education’s Teacher Compensation Project argue that America’s current teacher compensation structure is in need of re-engineering. They recommend consideration of a range of innovative structures that reward teachers for acquiring new professional knowledge and skills and faculties for meeting schoolwide achievement goals. What they argue, in essence, is that if you get what you pay for, shouldn’t you pay for what you need?

July 16, 1997 Seminar

On July 16, 1997, teacher compensation issues were discussed at a Sacramento seminar jointly sponsored by the Consortium for Policy Research in Education (CPRE), Policy Analysis for California Education (PACE), the California State University Institute for Education Reform, the Center for the Future of Teaching and Learning, and the Hoover Institution of Stanford University. The seminar gathered 38 California policy-makers, administrators, educators and policy advocates to hear presentations by CPRE researchers Allan Odden (focusing on general compensation issues and concepts) and Carolyn Kelley and Tony Milanowski (looking at examples of districts that have tried implementing knowledge- and skill-based pay elements). The seminar was hosted and moderated by Jerry Hayward, co-director of PACE.

Four major areas of focus were addressed in the course of the seminar:

- ◆ why teacher compensation needs to be changed;
- ◆ how knowledge and skill-based pay works;
- ◆ approaches to creating school-based performance awards; and
- ◆ effective processes for developing and implementing pay changes.

Allan Odden is a professor of education administration at the University of Wisconsin-Madison, where he also serves as co-director of the Finance Center of CPRE and is a prolific author on the topics of school finance and education policy. In addition, at the time of the seminar he was a visiting fellow at the Hoover Institution at Stanford University.

Carolyn Kelley is an assistant professor at the University of Wisconsin-Madison and director of CPRE’s Teacher Compensation Project. She has conducted research on school-linked services and the utility of private sector approaches to public school problems.

Tony Milanowski is a senior research associate with CPRE specializing in survey research on teacher compensation issues.

Presentation of Allan Odden

(NOTE: Throughout this report, comments made by individuals participating in the July 16 seminar are summarized without quotation; all text contained herein should be regarded as paraphrasing and/or synthesizing what was actually said, and not as quotes attributable either to the presenters or to any other participant.)

CPRE's Two-Track Exploration of Teacher Compensation

At CPRE we've been exploring knowledge- and skill-based pay approaches to teacher compensation on two tracks simultaneously: discussions with key education leaders, and research examining the results in districts where some of these approaches have been implemented already.

In our discussions (funded largely by the Pew Charitable Trust) we began by working with national teacher union leaders from the National Education Association and the American Federation of Teachers. More recently we've also been working at the state and local district level, primarily with teams of union and management leaders who are interested in exploring knowledge- and skill-based pay approaches. We're finding that once a state enacts legislation like (SB 98 [Sher-1995] and SB 1570 [Greene-1995])¹ in California, that the next step tends to be to "let a thousands flowers bloom" at the local level; that is, to let people experiment with incorporating different ideas and approaches into their salary structures.

On another track (funded by the U.S. Department of Education's Office of Educational Research) we're examining what happens when new approaches to teacher compensation are tried. There is a lot of information available from organizations outside of education about group performance awards and other innovations in knowledge- and skill-based pay, and a lot of research around what they look like, what the key elements are, how they affect worker motivation, what the impact is on the organization and what the impact is on productivity. But there is almost no comparable information in the area of public education, in part because we have rarely tried it, and in part because in the few places where it has been tried, little research has been done to examine its effect.

So we're trying on the one hand to stir the pot and convince more states and districts to try out these new approaches and on the other hand to do research so we can develop a stronger information base regarding how these approaches work in an education context.

The Goal of Restructuring Teacher Compensation: Improving Schools

Sometimes people enter the arena of teacher compensation with the objective of changing pay systems, or to get more money for schools. That is not CPRE's primary goal; our focus is to think through a whole series of things that could be done to improve the school system. We believe these have to include a better instructional program, including a great deal of professional development, leading to higher student achievement. Our central goal is that the schools become better and the kids learn more.

What we're trying to define is how to improve schools—specifically, how to create both individual teacher and schoolwide capacity to teach a high-standards curriculum program successfully to all students. And when we look at

¹ SB 98 (Sher-1995) allowed districts and unions to negotiate exceptions to the uniform salary schedule; SB 1570 (Greene-1995) requires the State Board of Education and the Superintendent of Public Instruction to develop an incentive plan by December 31, 1997 for the improvement of student academic achievement.

improving instruction and achievement, we begin by defining the elements of a human resources strategy to create and sustain this capacity. You have to recruit individuals with the needed skills and support professional development that generates new skills and knowledge.

The connecting point in all this is the concept of augmenting or even—over the long term—replacing large pieces of the current salary system with base pay increments linked directly to the knowledge, skills and expertise that the system needs and should be working to develop in its teachers. That’s why CPRE started looking at different approaches to teacher compensation—as a way to improve schools.

Other Reasons to Look at Teacher Compensation

In addition, there are other reasons to take a close look at how teacher compensation is structured:

- ◆ compensation consumes roughly 50 percent of the education budget—making it a very useful tool toward achieving reform goals (the current structure is not strongly linked to student performance);
- ◆ compensation is now part of efforts to professionalize and improve the teaching profession;
- ◆ compensation changes can be linked to and reinforce the goal of standards-based reforms;
- ◆ compensation issues are surfacing again in the policy arena (as they tend to cyclically every ten or fifteen years), and we want to avoid a continuing focus on merit pay as the primary alternative; and
- ◆ we have new ideas for restructuring compensation that have been tried successfully in several places.

The Key: Professionalizing Teaching Through Standards and Assessments

The 1996 report of the National Commission on Teaching and America’s Future focused particular attention on the issue of professionalizing teaching; I believe this is the appropriate context in which to raise issues about compensation structure. The report offered a whole series of recommendations both to upgrade pre-service and in-service teacher training and to strengthen the teaching profession generally. The Commission report linked efforts to enhance teaching as

Flexibility in the Collective Bargaining Process

Q: Isn't it true that the collective bargaining process itself does allow for some flexibility in the way compensation is set up?

Yes and no. What we’re talking about today in terms of knowledge- and skill-based pay is still what I would call conceptually the single salary schedule, only with a few minor elements added. In a number of states with collective bargaining, however, the structure of the salary schedule is set in law; it defines the schedule essentially as having rows of years of experience and columns of education units and degrees. Therefore, in collective bargaining states—including California—before you can amend the schedule you often have to revisit state law and at least insert language that specifically allows local districts to do so. What states like California and Colorado have done is to open up the possibility of change to local districts and then encourage them to experiment with new approaches to the single salary schedule.

a profession to changes in the compensation structure for teachers, specifically recommending the establishment of base pay increments based on assessments of knowledge, skills and expertise against established professional standards. The idea is to create a compensation structure in which a teacher who goes through the assessment procedure for the National Board of Professional Teaching Standards (the Board) and earned Board certification becomes eligible for a step pay increase based on that accomplishment.

This concept reflects in part a new view of teaching as an increasingly complex activity. The recognition is growing that teachers today are attempting to teach complex material to diverse sets of students, and that, as a result, they need to have mastered more subject matter content, to know more about how students learn and to have a better grasp of a variety of teaching strategies. Many teacher training institutions are incorporating more of these elements into their pre-service training programs, but we're still at the beginning of that process.

Aiding in this evolution of teaching as a profession is the emergence of written descriptions of good teaching practice and standards that can be used to assess individual teachers. Ten years ago if someone was asked to describe what makes a good teacher, most people would say "Well, it's hard to describe, but I know it when I see it." But if you asked me now what all the elements of a good teacher are, I can go get a 40-page single-spaced document from the National Board and hand it to you. A similar teacher standards document targeted specifically to beginning teachers has been developed by the Interstate New Teacher Assessment and Support Consortium (INTASC), and the Educational Testing Service also has a somewhat less rigorous test called PRAXIS III. Just having this kind of information written down and available is a major advance.

Written standards make the process of assessment much more effective, and help teachers identify which skills they have and which they need more training for. These assessments are being used more and more as determining factors in high stakes decisions, including licensure, pay increases and increases in responsibility. The emerging policy goal here is that teachers won't earn their full professional license until they have passed the INTASC and/or PRAXIS reviews of their teaching skills. A related goal is that achieving Board certification will earn teachers a significant salary increase.

California Districts That Reward Board Certification

Q: Are there any school districts in California right now where teachers who gain Board certification do receive significant pay increases?

The district and teachers' union in Poway Unified School District (in San Diego County) just negotiated a procedure for doing that. There may be others. The National Board itself has an extensive tracking program; they should be able to answer that question for every state. Board certification as a milestone triggering pay increases is a concept that seems to have had a hard time catching on in California so far. There is money in the federal budget this year to allow the National Board to finish developing all the certifications and assessments, and also provide incentives to states and local districts to support teachers going through the Board certification process and/or provide some salary increases for teachers who gain certification. Right now, 69 percent of the teachers in California who are assessed by the Board pass, which is very high.

Board Certification: A Key Benchmark

Board certification identifies people who are excellent teachers; not only do they know their subject matter, but they get good results from kids in terms of student achievement. So it can be used in a variety of ways, including as an element of the pay structure. Some districts have already made Board certification a gateway for some specific teacher roles. One possibility discussed (but never adopted) for California has been requiring Board certification before a person could be named as a mentor teacher. Cincinnati has a “lead teacher” program and is considering making entry into the program conditional on board certification. It’s also worth considering making Board certification a requirement before a person could become a principal.

If you want to implement knowledge- and skill-based pay, you need to do two things; you need to identify the knowledge and skills you want to reward, and you need to have an assessment instrument that’s valid and reliable in measuring against the standards you establish—an instrument like that offered by Board certification.

The Link to Standards- and School-Based Reform

Changes in teacher compensation such as we’ve been discussing are tied in with efforts to professionalize teaching; they can also be linked with the move to standards- and school-based reform. In standards- and school-based reform, you set standards and goals for student achievement and measure progress and results, while also decentralizing the schools.

There are three natural links between compensation structures and these reforms:

- ◆ the results orientation of standards-based reform could be reinforced by a school-based incentive/reward program, as long as the program is implemented collegially and schoolwide;
- ◆ because the more rigorous curriculum program envisioned in standards-based reform requires teachers to know more content, more about how kids learn that content and more skills to teach the content, this element of reform could be reinforced by incentives to improve teachers’ knowledge and skills; and
- ◆ decentralized, site-based management requires teachers to play more roles in school management, roles for which they often need training in leadership and managerial skills, setting up another opportunity to implement a system of knowledge and skill-based incentives.

If you look at other organizations going through similar kinds of decentralization-oriented restructuring, they tend to change their compensation system to gear it more towards the acquisition of knowledge and skills, and to top it off with some kind of group-oriented incentive or bonus program. So overall education reform strategies could be reinforced (not driven by, but reinforced) by changes in the compensation system.

A History of Teacher Compensation

A lot of people have listened to what we have to say and responded, “Yes, we know, but you’re talking about education here. It’s not going to change.” And it’s true that the teachers’ pay schedule hasn’t changed in the entire time—25 or 30 years now—that I’ve been involved with these issues, but if you go back far enough you find that teacher compensation has actually changed quite a bit over time.

Teacher pay in the United States has gone through three basic periods: the pre-1880 “room and board” era, position-based salaries from 1880 through 1920, and the single salary schedule era from 1920 through the present. In the early industrial

economy of the 19th century, when a lot of people were paid in kind, most of a teacher’s pay was usually room and board. A teacher would come to a community and be provided with free board while moving from home to home (at the time it was felt that if teachers didn’t have a home of their own and always lived with a family they would be more likely to “maintain high moral standards”). When the full-blown industrial economy came about, you started to have contracted teachers and larger schools.

The single salary schedule emerged early in the 20th century and has remained since. What it means conceptually is that if you and another teacher in your district have the same set of characteristics—defined solely as years of experience and units of education—you and the other person are going to receive the same pay, irrespective of whether you are an elementary teacher or a secondary teacher, man or woman, minority or non-minority. This was an effective solution to many of the inequities of the previous position-based salary system because it made pay differences based on objective criteria and not subject to administrative whims (under the position-based system, teachers negotiated contracts with principals; if the principal liked you, you got a better deal). The single salary schedule is also easy to administer, which has surely been a factor in many people’s cautious reactions to the idea of a knowledge- and skill-based pay system, which is more complicated.

There are two key points to take from this piece of the discussion:

- ◆ teacher compensation has changed significantly over time; and
- ◆ knowledge- and skill-based pay does not replace the single salary schedule, it augments the criteria used to determine base pay increments.

Merit Pay: Flaws and Alternatives

There is a push for change from the policy community. Kentucky is experimenting with school-based incentive/performance awards programs, as are about two dozen other states. California and Colorado have passed laws encouraging districts to create new ways to pay teachers, Wisconsin and Minnesota tried to do so, and everywhere I go at the state level, this issue comes up.

Teacher Compensation: A Historical Comparison

Room and Board — 19th Century

- √ minimum skills required
- √ “teacher proof” curriculum
- √ teaching a temporary job
- √ teachers as a model of high moral character

Position based salaries — 1880-1920

- √ more skills required for a more professionalized teaching force to produce better schools
- √ teaching becoming permanent job but mainly for women
- √ an annual “merit” element
- √ fit into a new education bureaucracy
- √ lower pay for elementary levels and for women and minorities

Single salary schedule — 1920 to present

- √ single pay structure regardless of grade, gender, race or ethnicity
- √ predictable
- √ objective bases for salary increments - experience and education units
- √ easy to administer
- √ not subject to administrator whim

What we're attempting to avoid is our history of failures with merit pay. There has been a lot of experimentation with and a lot of research done on merit pay in education, and the bottom line is, it doesn't work. Unfortunately, the legislative debate surrounding teacher compensation is often still focused on merit pay; that has clearly been the case in California and Colorado in recent years.

What policy-makers need to realize is that merit pay has failed both in the private sector and in education because it rewards the top 15 or 20 percent of the organization's performers without making any effort to improve the overall system or result. You're rewarding individuals, whereas in education, student achievement gains are produced by people working together. Merit pay cuts against the grain of the culture of teaching—and merit pay meets the same pattern of failure in the private sector, because more and more private sector organizations are being set up in teams. In other organizations trying to improve performance, new ideas such as skill-based pay and group (not individual) performance awards have been tried and have been successful.

Merit Pay

Versions of merit pay were tried in the 1920s, 1960s and 1980s, but individual merit pay has never worked because:

- ⇒ it creates competition among teachers when collegiality is essential;
- ⇒ it ignores the majority of teachers;
- ⇒ teachers are rarely evaluated well — until recently there were no written standards of excellent teaching practice;
- ⇒ it is often funded inadequately; and
- ⇒ it is usually disbanded in the short term — the 1980s program in Florida lasted two years.

So-called merit programs that have remained:

- ⇒ are primarily in wealthy districts;
- ⇒ reward tasks rarely related to instruction;
- ⇒ often include large percentages of, if not all teachers; and
- ⇒ are more-pay-for-more-work programs, rather than programs for the “best” teachers.

The most common reason why merit pay hasn't worked for teachers is because the funding isn't maintained. This is one of the dangers of even raising this issue of compensation; it's hot right now, everyone involved wants to look at it, but our experience with merit pay in education is almost every time a new proposal gets rammed through, the funding is eliminated within two years. The first time there is any real criticism, or a budget crunch, the program is stripped of its funding.

One of the results of this tendency is pervasive cynicism among teachers about new pay schemes. And that means that, in order for any of these programs to have a real effect, the money has to stay in place for a long time period, because the money is not a motivator until the teachers become convinced they may actually see the award made. In the first round, the money functions almost solely as a reward, rather than as a motivator.

The other key tactic if you have an incentive program is to budget initially for a large percentage of people to receive incentive awards (my suggestion is to set aside one percent of the total salary budget). If you have a surplus at the end of the first year, then you roll over the excess to the next year as a cushion against the possibility of cuts in the program. The orientation needs to be that we have to improve results. We want all of our strategies to be aimed at getting people on the bandwagon to improve results.

Most merit pay programs are not really merit pay. Most involve doing more work for more money. And most are

not focused on improving student outcomes, or on improving the entire school rather than just rewarding the top 15 percent. The best schools are characterized by a strong professional/collegial culture where the teachers are working hard together to improve the overall quality of the school. When you go in and say you're only going to reward the top 15 percent, in terms of a managerial strategy for public schools, it cuts across the grain of the institution. It's fundamentally flawed.

What Motivates Teachers?

Money isn't most teachers' primary motivation; they don't go into education expecting to make a lot of money. So one of the questions inherent in all this is, can we design an incentive plan that won't interfere with teachers' motivation? Current teachers like the single salary schedule in part because every time someone has tried to change it, they've messed it up. Teachers like what they have and they're often reluctant to see it change.

To a large degree, the same things motivate teachers that motivate workers generally:

- ◆ clear measurable goals focused on student achievement (which there aren't enough of currently);
- ◆ opportunities to engage collaboratively with other teachers over effective teaching practices;
- ◆ opportunities to expand their professional expertise and learn new skills;
- ◆ opportunities to make decisions not only on curriculum and instruction, but also on school management;
- ◆ producing results — improved student achievement; and
- ◆ higher salaries are a motivator *on the margin*; they
 - increase the number of able individuals entering teaching;
 - decrease movement from district to district; and
 - increase retention in the profession.

We believe you can design a knowledge- and skill-based compensation teacher compensation plan that does have a positive effect on teacher motivation.

Knowledge- and Skill-Based Pay

So what do you need to do to implement knowledge- and skill-based pay?

First, you need written descriptions of the competencies being sought and credible standards for assessing them—which is what the National Board, INTASC and PRAXIS are developing. You must be able to explain credibly to teachers why one of them qualifies for an incentive and another does not.

The INTASC and PRAXIS assessments are aimed at beginning teachers, and the National Board focuses on standards for advanced, expert teachers. One valid question is whether there should or could be steps in between beginning and advanced status. It generally takes more than a couple of years to become a professional teacher who meets high, rigorous standards.

Some ideas being tried out in Connecticut suggest an approach to this issue. There, state education authorities give a provisional license to beginning teachers. Then they use both PRAXIS and INTASC to assess individuals' general teaching skills, and they do not grant a full teaching license until the candidate has passed both.

Avoiding Crisis-Driven Retreats

Q: What is to prevent policy-makers from pulling knowledge- and skill-based pay funding in a fiscal crisis?

What we have to do is set up the same situation we have in the single salary schedule: knowledge- and skill-based pay increments that are built into the schedule. You simply add knowledge and skill achievements to the existing factors of years of experience and units of education and build the increments right into the schedule itself.

It is not a large stretch to imagine linking passage of each of these assessments to significant pay increments, culminating in National Board certification. For most teachers, somewhere between three and ten years' experience is needed in order to achieve Board certification. If all you did was tie these three events—passage of PRAXIS and INTASC and Board certification—to pay increments, these would provide very sound anchors for a knowledge- and skill-based pay system.

What the Board is finding is that teachers are asking for some “stepping stones” from where they start to Board certification. That is the arena where there could be a lot of action at the state and/or the local level to develop mechanisms to reward teachers for going through specific professional development and training experiences to help them enhance their practice up to Board standards.

One idea would be for each state's board of education, working with the unions, to identify two to three additional points in between INTASC and National Board certification, develop written standards describing how teachers can reach them, and work out some kind of assessment procedures. You could consider only using Board-certified teachers to do those assessments. And you could set this up statewide, or you could do it locally in individual districts; NEA's recent endorsement of peer review could be very helpful in setting up assessment mechanisms in individual districts quite inexpensively.

Another idea for setting up these “stepping stones” involves the Board process itself. The certification process consists of ten exercises which are graded on a one to four scale, with four being outstanding and three being a passing score. The Board currently allows applicants to bank passing scores on individual exercises until they have passed all ten, rather than requiring all ten be passed at once. States or districts could consider granting pay increments to teachers who get a four on any of the exercises, or to those who get numerous threes. Or they could consider the teacher's entire effort to achieve Board certification as a professional development exercise, and grant them an initial pay increment just for making the attempt.

There are many ways, large and small, to try to design this kind of knowledge- and skill-based pay structure. But all of them feature National Board certification prominently, because it is the one truly rigorous assessment of teaching practice that is up and running.

Performance Awards

Performance awards are another concept that should be considered alongside knowledge- and skill-based pay increments. The core elements of an effective program of performance awards are as follows:

- ◆ awards should be provided to everyone in a school, including faculty, administrators, support staff and the student body fund—you want everyone in the school to be pulling for the same result;
- ◆ there should be a sufficient, stable, long-term funding pool;

- ◆ student achievement should be the anchor measure of performance, and tracking a broad range of core subjects tends to have a better academic effect than emphasizing one or two individual subjects to the exclusion of the others;
- ◆ performance awards can be considered for other valued results such as high school graduation rates, parent satisfaction, student or teacher attendance, etc.;
- ◆ a good achievement test is needed—a state assessment can work if one exists; and
- ◆ awards for improvement over time should be provided and targets set specifically and carefully (the Kentucky program has set a 20-year goal and provides performance awards for annual incremental goals representing 1/20 of the total improvement sought) —targets that are either too easy or too hard to reach will not achieve the kinds of impact you are trying to generate.

Financing Performance Awards

How do you finance performance awards? I've looked at this many different ways, and the results always come out to be that you need about 1% of the operating budget dedicated to performance awards in order to have a real effect on achievement². Funding needs to be sufficient and long term; as mentioned previously, the best way to achieve that is to build awards into the regular budget.

Most programs of this type offer around an additional \$1,000 to \$1,200 annually to each teacher in a school that meets established achievement goals. If education funding is running around \$6,000 per pupil, a one percent set aside equals \$60 per pupil, and at 20 pupils per staff you have \$1,200 available for every staff member, perhaps more if fewer teachers qualify. This is generally sufficient, especially with more site-based management

The money, though, isn't really the motivator. A thousand dollars isn't really going to motivate anyone that much. Performance awards work for two reasons: they're clear on goals: they establish clearly for teachers what the schools' priorities are and what they should be spending their energy on; and they generally produce a number of subsidiary benefits such as decentralization, professional development, active leadership from the principal and support from the central office. The bottom line is that these things can be funded with a modest investment from the overall budget and you get a lot more out of it than just the money piece itself.

Pitfalls of Performance Awards—and How to Avoid Them

Q: Why would a union agree to a performance-award scenario in a district where, say, one-third of the schools are already meeting the goals set in the program and therefore wouldn't be eligible for the awards? Wouldn't the teachers at those high-achieving schools oppose the plan and why would a union want to go through this kind of controversy?

achieving schools; a lot of them are urban, low-achieving schools. In most areas of the country, you have very few schools hitting high percentiles in tests like the National Assessment of Educational Progress (NAEP). You need to set a high bar for achievement and focus efforts on the schools that need help the most.

In most of the districts that are looking at these kinds of plans, you don't have any super-high-

Performance Awards cont'd on next page

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Q: What happens after a school moves up and meets the top standards? Don't they lose the money then?

No one's actually run into that problem yet (laughter). What happens typically in the places where these incentive systems are being implemented is that they set up a series of goals that are reachable—but no school is close at the beginning. You're right that if you have a lower ceiling you have a problem. In Kentucky, the gap between the school's current level of achievement and the goal is prorated over the ten year period according to where it starts out. That way a school with relatively high levels of achievement and one with lower levels at the beginning each have to increase achievement by one-tenth of the total gap they begin with, but that one-tenth amount varies according to the size of the initial achievement gap.

Q: A student assessment system sensitive enough to show gains is expensive, as are teacher assessments, and taking the National Boards is expensive. I don't see those elements costed out here.

That's right, mainly because most districts are already putting in assessment systems, so we just costed out the bonus piece, not the testing. The movement is to more and more performance-oriented teacher assessments, and that is more expensive than simple paper-and-pencil testing, but districts are generally willing to spend the money. The Board assessment is a whole other cost analysis that we haven't done yet.

Assessing Student Achievement: Information Technology Can Help

Q: One of the issues in California as far as assessing student achievement is student mobility. How much interest do you see in developing information systems to allow better academic tracking of mobile student populations?

There isn't as much interest or effort as there should be at this point. If districts are going to measure student achievement they have to be able to break students down individual by individual, group by group, classroom by classroom, teacher by teacher, and figure out where they are, what needs to be changed and who needs to be trained. Very few districts have kept up with the advances in information technology in the past decade. Giving local people easy access to this kind of information is a vital element of decentralization. The state clearly could help develop that kind of an infrastructure.

Calibrating your student assessments is very important and very easy to mess up. You have to account for issues such as mobility and learning disabilities; the main thing is not to use average scores. If all you use is the overall average score, then the tendency is to simply focus on improving the performance of the kids who are easiest to teach, i.e. the ones who are already high-achieving, and you don't want that to happen. You have to make sure you measure—and generate movement—across the range of achievement. You can do this by saying that X percent of students have to rise out of the bottom quartile of achievement, or that a certain percentage in each quartile has to make a certain amount of progress.

A Discussion About Knowledge- and Skill-Based Teacher Compensation

(NOTE: The middle segment of the seminar featured a discussion among the seminar participants led by Dr. Odden and Jerry Hayward of PACE. Dr. Odden initially invited the participants to express their best hopes and worst fears about the new approaches to teacher compensation that were the subject of his presentation.)

Best Hopes

- √ it will prove to be a useful way to focus in on student achievement
- √ it will improve student achievement
- √ it will raise the level of professionalism among teachers
- √ it will help teachers to focus on tangible, measurable professional goals
- √ it will increase teacher satisfaction by aligning compensation with professional development
- √ it will help define a career ladder that will keep teachers in the profession
- √ discussion will generate some parameters from teacher organizations that can be used to meet their concerns while redesigning the compensation system

Worst Fears

- √ it won't be sustained, which will just confirm the pervasive cynicism among teachers
- √ performance awards may be vulnerable to cheating/graft
- √ the difficulty associated with assessing student achievement will raise costs
- √ it will increase pressure to dumb down academic standards into something that is easier to measure
- √ it will be used by administrators as another means to do more with less money

Other Comments

Seminar participants raised a variety of other issues with regard to knowledge and skill-based pay:

Which Element Works Better—School Performance or Skill-Based Teacher Compensation?

- ◆ The school performance element seems doable; the skill-based pay element where we're making distinctions among teachers who do the same work might prove difficult to sell to teachers.
- ◆ The school performance awards may actually be the more problematic element; when you make student outcomes the basis for pay, you're giving the entire institution from the principal to the janitor an incentive to try to beat the system.

The Challenges of Assessment

- ◆ Assessing teacher practices is difficult; identifying poor teaching is usually easy, but differentiating between good teaching and outstanding teaching is much harder and risky.
- ◆ Unless you develop standards and an assessment process while working hand-in-hand with teachers, the resulting procedure won't have any credibility with teachers; you're going to have to incorporate some kind of peer review into the system (if administrators make the determinations than you have essentially reinstated merit pay).
- ◆ There is real difficulty involved in moving from a culture of individual teachers to a more collaborative culture such as we're talking about in creating an assessment process that incorporates peer reviews—the idea of a collaborative culture among teachers has really only gotten lip service thus far.

Teachers' Perspectives

- ◆ The process of developing and implementing this kind of new approach to teacher compensation needs to be collaborative.
- ◆ Pay for knowledge and skills may be attainable, but National Board certification is expensive (it costs about \$2,000) and may not be attainable for many teachers.
- ◆ In our district, we developed a system where the district approves all courses teachers take and the approved courses are aligned with district goals and we found that 85 percent of teacher participated; then we redesigned the pay schedule and created a renewable pay step that expires after five years if teachers don't continue taking classes.

General Comments

- ◆ National Board certification is a worthwhile goal but it shouldn't be the sole criteria for increasing pay.
- ◆ If you put tenure on the table and set a professional bar for meeting it—such as National Board certification—then you can achieve greater accountability.

Presentation of Carolyn Kelley

The example of skill-based pay I'm going to discuss took place in Douglas County, Colorado. It was one of the first cases CPRE looked at and it really underscored to us the importance of process in the development of knowledge- and skill-based compensation plans.

Background on the Douglas County Plan

Douglas County is not a typical district; it is in fact the fastest growing school district in the United States, located south of Denver. The district has a very young teaching staff. The district's fast growth—from 11,000 students in 1988 to

27,000 students in 1997—led them to hire a large number of teachers every year through the last decade. As a result, the average teacher experience in the district is eight years, and the average years of experience in the district is six years and dropping as new people are hired every year.

The district has enjoyed a long history of leadership stability; there have been two superintendents in the district since 1968. The current superintendent has been there for 17 years and the current president of the school board has been in office for 16 years. The district also has an extremely positive relationship with their union. The union’s leadership has been very involved in both discussing and initiating the program. The union leadership has been described as “collaborative, flexible and risk-taking.”

In 1992, both Colorado and Douglas County had a series of initiatives where the voters voted against education. A tax-limitation initiative was approved, which decreased support for education; an initiative that would have generated revenue for the schools through a statewide sales tax was defeated; and a local school-construction bond issue failed. The district went out to the community to try to find out why there was a lack of support for education, and they found that the community felt that the schools weren’t very accountable. So a lot of the impetus behind the skill-based pay plan was to try to convince the community that they were accountable and deserved to have the support of the community.

As a result, through contract renegotiations in 1993, they developed a task force of 20 teachers and ten people appointed by the school board who met for a year (logging over 6,000 hours of meetings) to develop a new skill-based pay plan. They spent a lot of time on communications with the other teachers, keeping rumors down and working through much of the literature on compensation and good ways to approach it. They were very successful in terms of generating support for the plan from teachers. In 1994-95, the first year of the plan, it was adopted with 92% approval from the teachers. In 1996-97, it received 99% teacher approval.

Goals and Components of the Douglas County Plan

The Douglas County pay plan had two chief goals:

- ◆ link teacher pay to teacher performance; and
- ◆ promote student achievement.

The overall plan is somewhat complex and includes eight separate components:

- (1) base pay
- (2) knowledge-based pay
- (3) performance pay
- (4) Outstanding Teacher Award
- (5) skill blocks
- (6) master teacher
- (7) group incentive pay
- (8) site-based responsibility pay

The initial three components are really the typical units-of-education- and years-of-experience-based single salary schedule, with one small twist. The knowledge-based pay component was linked to taking courses in specific district-designated subjects and performance pay was based primarily on years of experience, although teachers did have to

receive at least a satisfactory rating in their evaluation in order to receive the increment.

Outstanding Teacher Award

This component, one of two key knowledge- and skill-based pay elements, provides \$1,000 bonuses to teachers who are identified by their principals as outstanding teachers. The program is completely voluntary; teachers indicate at the beginning of the school year if they want to participate. Teachers who choose to participate submit a portfolio that can follow one of three forms: one based on district definitions of desirable teacher skills, one based on evidence of implementation of the district's curriculum content standards, and one based closely on the National Board portfolio requirements (designed specifically for teachers who planned to go for Board certification in the future). The Board was committed to providing the bonuses to all teachers who qualified and have been able to do that so far.

Outstanding Teacher Award

- ⇒ provides \$1,000 bonuses to teachers identified as outstanding
- ⇒ teachers volunteer to participate
- ⇒ portfolio-based process linked to district academic goals and National Board certification

Skill Blocks

The other knowledge- and skill-based element of the pay plan is skill blocks, which are specific skills identified by the district that it would like all of its teachers to have. The district set up a staff development process to train teachers in these particular skills; as teachers go through the training they have to show that they are learning the material, and the "final exam" at the end consists of demonstrating the skill in their classroom.

Skill Blocks

- ⇒ \$250-\$350 bonus for mastery of skills identified by the district
- ⇒ district provides training
- ⇒ process models good teaching and assessment
- ⇒ example skill blocks: technology, student assessment, gender and ethnic expectations

Once teachers have gone through and passed that final assessment they receive a \$250 to \$350 bonus for mastering the skills. This amount hardly pays for their time, but they appreciate receiving some form of monetary recognition for putting the effort into acquiring skills that can then be very useful to them in the classroom.

Results of the Plan

The Douglas County plan has generated substantial support from teachers. There has been a great deal of interest in the Outstanding Teacher Awards and the skill blocks, as well as the plan in general. It has boosted teacher recruitment in a district that has been steadily

hiring new teachers (300 this year); the number of applicants has increased and many applicants cite the program as one of their reasons for applying there.

The district has also seen an improvement in student achievement since the plan was implemented. A number of other initiatives have been going on at the same time, so it is hard to say how much the pay plan contributed toward the improvement, but improvement has occurred.

Costs

This plan was not terribly expensive. One of the things suggested by the literature describing private-sector skill-based pay plans is that when employees are involved in the process of designing a plan, you don't need a whole lot of money to do it (teachers participating in the skill blocks have reported they have found it to be a very rich professional experience).

The total cost of the new pay elements introduced was \$700,000 or 1.5 percent of their total 1995-96 teacher payroll of \$46 million. Breaking out some of the key components, the Outstanding Teacher Awards totaled \$235,000 and the skill blocks bonuses cost the district \$85,000.

Lessons

The Douglas County experience suggests that process issues are very important. Some of the major process issues that worked in favor of this plan were:

- ◆ involvement of all key parties in developing the plan;
- ◆ broad agreement on most valued educational results;
- ◆ adequate funding;
- ◆ general conditions of work;
- ◆ management and labor maturity; and
- ◆ persistence until the plan was perfected.

A couple of design lessons also emerged from the experience. First, as described above, monetary awards do not have to be large to provide meaningful incentives to teachers, particularly if the incentive is in line with other goals and incentives in the system already. And second, an objective, sound and credible teacher assessment system is vital for knowledge- and skill-based pay. Douglas County spent many hours developing the criteria for the portfolios required for the Outstanding Teacher Award and developing a meaningful process for evaluating teachers' progress in the skill blocks.

Presentation of Tony Milanowski

Carolyn talked about a pay system that worked, that teachers liked and that is still in place; now I'm going to talk about one that *didn't* work and, after a great deal of effort, ended up not being adopted. This case is from Robbinsdale, Minnesota, a suburb of Minneapolis-St. Paul.

Background on Robbinsdale, Minnesota's Plan

The district has 14,000 students, 20 percent of whom are nonwhite, 20 schools and a wide variety of socio-economic statuses (everything from very wealthy schools to low-income schools). The district also has 900 teachers, generally with high levels of seniority and relatively high pay levels. Pay schedules in Minnesota are a mandatory subject of bargaining and the state has a long history of collegial union-management relations. All of these positive factors ended up coming into play in a negative way as the proposal unfolded, because there wasn't a compelling need to change; people were generally happy with the status quo.

The proposal was actually initiated and championed by the union president, who had served on a commission looking at teacher pay issues and had brought back to his district some concerns. His chief concerns were that a large number of teachers were going to be retiring soon, and that the new teachers being hired might not have the skills the older teachers had. His initial goal was to have the new pay plan implemented for the 1996-97 school year.

Proposal Goals and Components

The three main goals of the proposal were:

- ◆ to attract skilled teachers and develop the skills of new teachers;
- ◆ to respond to public interest in accountability by tying pay to one aspect of performance; and
- ◆ to focus on the classroom teacher.

One major element of the Robbinsdale proposal that distinguished it from the Douglas County proposal is that it applied to newly-hired teachers only. The proposal would have eliminated some steps in the salary schedule, and replaced them with provisions such as a \$1,000 bonus if a teacher earned an M.A. in the subject they taught.

The most complex piece of the proposal would have allowed teachers to add to their base pay up to \$14,000 in knowledge- and skill-based pay determined by points earned in the following eight categories:

- (1) National Board Certification - 50 pts.
- (2) Principal Evaluation - 20 pts.
- (3) Individual Projects - 20 pts.
- (4) Participation in District Projects - 20 pts.
- (5) Content Knowledge - 10 pts.
- (6) Contribution to Teams - 10 pts.
- (7) Recognition by Professional Organizations - 10 pts.
- (8) Customer Satisfaction - 10 pts.

If a teacher earned 100 points, he or she would earn the entire additional \$14,000 available. Lesser point earnings were to be pro-rated, i.e. if a teacher earned 50 points, he or she would get an additional \$7,000. In each of elements three through six, the district envisioned using an evaluation approach that relied heavily on peer reviews, while also providing for some input from principals. A great deal of emphasis was placed on accomplishments in addition to course-taking. An appeal process was also designed. The added salary was to be granted after two years based on progress to date and guaranteed for five years, after which time the teacher's skills would be reassessed.

Outcome: Plan Not Approved by Union

The Robbinsdale proposal was successfully negotiated between the district and union bargaining teams. But when it was put to a vote, 40 percent of union members supported it, while 60 percent were opposed. The 40 percent support is actually fairly impressive considering how much of a threat this proposal posed to tradition. It is being studied again by a union-management group and some version of it is expected to be taken up once more in the next round of negotiations.

Union members gave these reasons why the Robbinsdale proposal wasn't approved:

- ◆ unfamiliarity, suspicion of change (pay is a very sensitive topic);
- ◆ communications and involvement of rank-and-file was insufficient;
- ◆ not everyone in the unit benefited (the plan focused on classroom teachers); and
- ◆ not everyone felt the need for change (there was no crisis motivating people).

Questions About Robbinsdale

Q: What about older teachers? Couldn't you end up with a situation where some younger teachers would be paid more than ones who had been there for years?

The plan allowed older teachers to opt into the system at any time if they wanted to, and they generally had many years of seniority-based step increases behind them already.

Q: What did they mean by "customer satisfaction"?

What they wanted to do, believe it or not, was to have each teacher be the subject of student and parent surveys. If everyone seemed to agree that a teacher was doing a great job, he or she would earn that ten points and the additional salary increment. There has been a great deal of discussion elsewhere about whether that kind of approach is a good idea or not.

Q: Did you cost out this plan?

We were curious about this but we actually didn't cost it because we weren't quite sure how they were going to cost it applying it only to the new teachers. Obviously there would be a savings on the front end because they cut out some seniority steps—they estimated it at around \$250,000—but that doesn't really help you get to an overall cost. There are too many assumptions. My suspicion is that over time it would have increased the payroll as new teachers came in under the program and started earning the \$14,000 in bonus money.

Lessons From Douglas County and Robbinsdale

We learned three main things from these two case studies:

- ◆ teachers are willing to consider a change, especially if a history of good union-management relations exists;
- ◆ process issues are critical to the successful development and implementation of these plans; and
- ◆ a strategic focus can help overcome obstacles to the plan.

Important process principles include: the involvement of all key parties in the development of the plan; proactive, effective communication with all involved employees; and persistence. Important elements of a strategic focus are: holding onto the goal of improving student performance; focusing efforts (and rewards) on knowledge and skill gaps; and designing a program that meets the overall strategic needs of the district. If performance pay works, you're going to get more of what you reward, so you want to make sure your plan focuses on the things you are worried about and want to improve. Finally, it is important to remember that knowledge- and skill-based pay communicates values to teachers.

Discussion of Case Studies

Q: What did the teachers in Douglas County think of the \$1,000 bonus plan (the Outstanding Teacher Award) being based on their principal's evaluation of their portfolio?

Interestingly, the district's administrators and the union leadership wanted it to be a peer review process, but the teachers objected. They felt peer review might be divisive and they weren't ready to try it, although the union leadership seems to be trying to work toward that as a goal. The principals received a lot of training on how to conduct the evaluations and the appeal process involved review by teachers, so there was a peer review element present.

Q: Was the teachers' unwillingness to take on the responsibility primarily because it would be time-consuming to serve on a committee or was it that they felt they shouldn't be in a position of making judgments about each other's skills?

It seemed to be more of the latter. Part of it was also a concern about confidentiality. They designed the evaluation process to be site-based so that if a teacher went through it and failed it would not show up on any district records; the district only gets the names of the teachers who actually received the awards. In practice, though, it was actually fairly open because teachers work together and tend to know what one another is working on at the school site.

Q: Do you have any data on how many applied for the Outstanding Teacher Award and how many actually received it?

It was a \$1,000 bonus and \$235,000 was disbursed, so 235 teachers got it. A fairly substantial percentage of the teachers went for it and earned it, probably more than the district had anticipated. They're trying to work with the principals now to make sure it's a meaningful award by adding some more specific means of evaluating the teachers. There were 27,000 students, which probably means about 900 teachers total; keep in mind that not everyone applies for the award.

Q: How did Robbinsdale deal with the other bargaining groups involved besides teachers?

In essence, they didn't. Management worked out separate agreements with each bargaining unit.

Q: Does Douglas have any results to show yet on how their program has affected student achievement?

They have seen achievement improvement. But they have had implementation of curriculum content standards and a series of other measures underway at the same time as the new pay plan, so you can't really say that just one of these factors caused the rise in student achievement. It's also worth noting that the plan wasn't put in place primarily to improve achievement; in fact, Douglas is a pretty high achievement district already.

Q: Was the public involved in deciding what elements were important in evaluating a good teacher?

There was some limited involvement. The district, in establishing the committee that developed the original plan, did undertake a public education campaign, but I don't believe there was a broad effort to get the public involved in discussing the specific characteristics of what makes a good teacher.

Q: You described the 40 percent favorable union vote in Robbinsdale as a positive outcome because 40 percent of the teachers were willing to change the way they were paid. Do you think a 51 percent-favorable vote would have indicated likely success or generated lasting division?

That's a very good point. All the research we've done indicates that you need to have the largest share possible supporting the change in order for it to be successful. You need the level of buy-in from teachers that gets you from grudging acceptance to enthusiasm.

Q: It seems to me that when you have an intimate group that works together year-round like teachers, peer review and assessment is a naturally awkward process. Is there social science research that suggest peer review could work as an integral part of programs like these? Are there good reasons why some third party couldn't do it?

In most cases, peer review is patterned after what the Toledo, Ohio school district does. In most cases the reviewer isn't a teacher at the same school as the person being evaluated. It's a teacher in the district, someone who is selected on a competitive basis as what is usually called a "master teacher" or something of that nature. That person comes in and conducts the assessment. There is fairly compelling evidence that teachers are much harder and more rigorous about reviewing their colleagues than are principals.

Appendix A: Survey Results

At the beginning of the July 16 seminar, the 38 participants were asked to fill out a survey on attitudes toward various teacher compensation issues. The results of the survey are tabulated below.

	Disagree	Neither Agree nor Disagree	Agree
1. Teacher have a lot of influence on student achievement.	0%	3%	97%
2. If teachers would work harder and smarter, student achievement would increase.	17%	31%	52%
3. Communities can agree on a clear, consistent set of objectives for schools.	28%	24%	48%
4. Student achievement can be measured in a fair and valid way.	3%	7%	90%
5. Teachers should be held accountable for student achievement.	0%	14%	86%
6. Holding teachers accountable for student achievement is just another way to blame teachers for society's problems.	73%	24%	3%
7. Improving teacher knowledge and skills will lead to improved student achievement.	0%	7%	93%
8. Most teachers now have the knowledge and skills they need to improve student achievement.	52%	31%	17%
9. If teachers are going to be held accountable for student achievement, they need to have more say in how schools are run.	7%	17%	76%
10. The best way to motivate teachers to improve student achievement is to pay them more when achievement goals are met.	27%	38%	35%
11. The opportunity to earn more money does not motivate teachers.	79%	10%	11%
12. The best way to increase teachers' knowledge and skill is to pay more for higher levels of knowledge and skill.	17%	24%	59%
13. Teachers' knowledge and skills can be evaluated in a fair and valid way.	3%	24%	73%
14. The public will see paying teachers more for improving student achievement as rewarding them for something they should already be doing.	34%	38%	28%
15. Public concern over student achievement will fade over time, even if it does not improve.	90%	7%	3%
16. The public is willing to pay teachers more if higher pay is tied to increased student achievement.	14%	17%	69%
17. Policy-makers will stop funding incentives for teachers as soon as the next fiscal crisis comes along.	24%	31%	45%
18. Teachers are paid enough already.	82%	18%	0%
19. Teachers don't feel comfortable with the idea that pay should be tied to student achievement.	10%	10%	80%
20. Teachers will oppose any major changes in the current pay system.	31%	21%	48%

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