

The Pros and Cons of Performance-Based Compensation

By Lewis C. Solmon and Michael Podgursky

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Introduction

The Milken Family Foundation has proposed a bold new, systemic school improvement strategy. Its goal is to improve the quality of the teaching profession because excellent teachers enhance student learning. This program, known as the Teacher Advancement Program, or TAP, has five components, one of which is performance-based compensation. Salaries depend upon teacher achievements, teacher performance, tasks undertaken, and student achievement. Thus, it is important to understand the pros and cons of performance-based compensation.

The purpose of this paper is to compile and analyze the current and historical criticisms of performance-based compensation in K-12 education. We believe that new compensation methods are not only feasible, but necessary, in order to attract the best and the brightest into the teaching profession, keep the most effective of these in teaching, and motivate all teachers. However, this is not the prevailing view held by the education establishment. Indeed, the passion and emotion of most educators is so strongly negative on this topic that even the most market-oriented of policy analysts have dropped the term "merit pay" from their vocabulary. Thus, that will be the only time you see the term in this paper.

According to a 1998 Gallup Poll, more teachers (40 percent) now favor performance-based compensation than in previous years—31 percent in 1989 and 32 percent in 1984. (Langdon, 1998) The reasons teachers gave for opposing performance-based compensation were:

- it is difficult to evaluate teacher performance;
- teacher morale problems could result; and
- performance-based compensation programs would present political problems in the schools.

The poll notes that the recent trend in the implementation of teacher pay is to link overall school performance to specific reform goals, instead of rewarding individual teachers for the quality of their teaching.

"Differentiated pay" for teachers can have a number of different meanings, some more controversial than others. First, teachers may receive higher salaries for performing additional functions such as mentoring other teachers, designing curricula, providing in-service programs, and so on. This type of salary differentiation has occurred for quite a while and is relatively uncontroversial. Perhaps the greatest dissatisfaction with "functionally differentiated pay" occurs when some teachers are asked to do more than others, and the salary increase does not adequately compensate them for the time required to perform these added tasks.

Next, teacher salaries may differ based upon their own achievements (passing a certain test, obtaining an advanced degree, or receiving National Board Certification). There may be logic in this type of differential pay if it can be demonstrated that the achievements that qualify a teacher for extra pay are related to improving job performance. Many of the "achievements" recognized with higher pay may be quite shallow. In most districts, passing a course or earning a degree can result in a salary increase. Course grades, the degree of learning achieved, or the relevance of the course to the teacher's class subject may be more accurate measures of performance, but these do not affect salary. Controversy might arise if all teachers do not have "equal access" to various achievements. Examples of this would be tests that are offered only in English even though a teacher's first language is not English, and testing for National Board Certification, which is costly in terms of time and money, and might be prohibitive for those highly qualified teachers with limited resources.

National Board Certification is designed to certify that a teacher has certain skills, knowledge, or competencies. However, such competencies could be assessed directly and rewarded accordingly. Direct assessment would avoid charges that some teachers might pass the test without being able to demonstrate similar competency in the classroom. If protocols can be developed to assess skills and competencies directly and objectively, teachers could be rewarded for demonstrating competency in the classroom. The key word here is "objectively." For when teachers are judged on how well they are doing their jobs, such judgments are frequently viewed as being unfair, inaccurate or biased. When financial rewards are attached to such judgments, reactions can be very critical.

The above methods of paying teachers differentially are based on process, or judgments of teachers' accomplishments or current practices. However, teachers do things for a purpose: to help students learn. The newest form of differentiated pay says, in essence, we do not care how teachers do it, but if their students learn more, they should be paid more.

Today, some argue that teachers should be paid more depending on the achievement of their students. This usually translates into attributing some or all of student standardized test score gains (referred to as value-added gain) to the teachers, and compensating teachers differently based upon how well their students are learning. Below, we will discuss some of the problems with this approach.

If the *basis* of differentiated pay is agreed upon, the next step is to determine the process. The first issue is whether differentiation should be by individual teachers or by groups of teachers. Grouping could be by whole schools, by discipline (i.e., all math teachers), or by grade levels. In this scenario, a lump sum might be allocated to successful groups of teachers who would decide how to allocate it, i.e., for purchase of supplies or to increase salaries. Advocates of group rewards point out that student achievement is rarely due to a single teacher, but depends upon all current and past teachers. They also point out that when a teacher's rewards depend upon the behavior and performance of other teachers, each will pressure others, be pressured to do their best, and work together to maximize student achievement. Those skeptical of group pay fear "free rider effects" whereby certain teachers may slack off, believing that others will work harder to achieve desired outcomes and the slacker will benefit anyway. In such cases, the number of free riders may increase over time, and if so, goals will not be achieved. To those who say that the group will vote the free riders a smaller share of the group salary increase, opponents of group pay point out that teachers almost always vote to split the gain equally among the participating teachers. Both group and individual pay may be justified, but our sense is that individual rewards must be included as part of an effective performance-based pay plan.

Even if some differentiated pay takes the form of group pay, some performance-based compensation plans will stipulate that rewards be paid directly to individual teachers. How should such a system be designed? There are several principles that must be adhered to, and several questions that need to be asked.

- Part of a teacher's compensation must continue to be secure—a certain fraction of salary will be "base pay."
- Of the total salary, what is the percentage of base vs. variable pay?
- Once a performance-based system is in place, is the base pay fixed or will it increase? A plan could include annual cost-of-living increases allowed for in the base pay. Alternatively, incentive pay could be added to a traditional step salary schedule. However, steps should probably be based only on years of service, with educational attainment falling under the teacher achievement category.
- Will salary ever decrease? Presumably, if a teacher is determined to be particularly effective in one year but less so the next, his or her salary (the incentive part) would be lower in the second year.
- Could certain parts of the performance pay (e.g. National Board Certification) be added permanently to the base, whereas others (student value-added achievement) vary year-to-year?
- Are fringe benefits based upon base salary or upon total salary each year?

Historical Background of Performance-Based Compensation

Wilms and Chapleau take a negative view of pay-for-performance in education. According to these authors, pay-for-performance was first tried in England in 1710, with disastrous results, including teachers becoming obsessed with the system's financial rewards and punishments. A similar system was instituted in Canada in 1876. Test scores on examinations increased quickly in subjects where the subject matter could be easily measured, but the system caused teachers to focus their energies on students who were most likely to succeed, helping them cram for examinations while ignoring the others. In 1883, a public outcry ended the experiment abruptly. In 1969, the idea re-emerged in the United States as "performance contracting" (shortly after desegregation began in urban schools). Similar to the current political atmosphere surrounding education, the Nixon administration made school accountability a top priority. An experiment was initiated which tied school funding to students' test scores in Arkansas. Although scores did go up dramatically, there were accusations that one of the contractors was teaching to the test. The initiative then was expanded into 18 cities and encountered problems with disorganization, scandal and lack of results. The argument Wilms and Chapleau make is that teachers are just as adept at deflecting or sabotaging reforms of this kind today as they were in England in the 1800s. They believe history has shown that "politically driven reforms like pay-for-performance are nothing more than reflections of public frustration." (Wilms & Chapleau, 1999)

Albert Shanker, the late head of the American Federation of Teachers, also took a skeptical view of performance-based compensation. Shanker has said that performance-based compensation programs are initially strongly supported by taxpayers, who consider them to be fair and tough, but when teachers start qualifying, awards start being given, and the programs become expensive, performance-based compensation programs are often the first to be eliminated. As an example, Texas passed a performance-based compensation law in 1984 and underestimated the amount of teachers that would qualify, and they ended up changing the rules retroactively and disqualifying nearly one-third of the teachers in the program. (Shanker, 1993)

More recently, a review by the Lexington Herald-Leader showed that in the Kentucky performance-based compensation program, there were 151 cheating complaints and little effort by the state of Kentucky to investigate them. (Houtz, 1997)

The Pros and Cons of Performance-Based Compensation

We now consider the concerns over "performance-based compensation" that have been raised over the years and attempt to respond to each of them. For years, schools have discussed the issue of compensating teachers for their accomplishments, their performance, and the achievements of their students. Historically, "performance-based compensation" for teachers has been dismissed, in particular by the unions, for myriad reasons. **We have classified the arguments against such pay systems into general categories and responded to each argument. As we elaborate on each criticism of performance-based compensation, we have utilized direct quotes (in italics) from a group of educators who were asked to tell us what they believe, or what they have heard others say are the problems with, or negative aspects of performance-based compensation.** We received thoughtful and sometimes passionate responses from over fifty educators, each of whom has received Milken Educator Awards from the Milken Family Foundation. These are exceptionally talented and accomplished educators who are probably more likely than most teachers to find performance-based compensation acceptable. Nevertheless, we asked specifically for the negatives and for the most part that is what we got. We are grateful for the help these distinguished educators have provided, both in elaborating on what are perceived as the most common criticisms and in suggesting additional ones.

1. Performance-based compensation programs encourage competition rather than collaboration among teachers.

Many argue that individual merit is at odds with the collegial character of effective schools, and that performance-based compensation would, in effect, stifle reform by pitting teachers against each other in search of a more lucrative paycheck. Teachers resent other teachers getting merit increases if they do not. This creates conflict and dissension at a school.

A spirit of competition would take over. Professional judgments and jealousies are human nature...high-conscience people rise above this mentality, but teachers with low morale or less ambition will feel endangered rather than empowered...I work day and night and the guy next door comes late and leaves early...the system unfortunately does not know the difference...

This situation is unfortunate if the two different behaviors cause differences in student learning.

If certain teachers get merit increases, will administrators (principal) be jealous, especially if evaluators are other teachers? I guided and watched my staff grow from teachers who were very skeptical of others being in their room, or of others giving any evaluative comments to teachers who accepted and requested the feedback from their coworkers. However, when a financial reward is attached to the

evaluation, teachers somehow revert to skepticism due to a fear of the judgment not being completely equitable for everyone.

I'm especially interested in the comment that teachers became competitive and stopped sharing ideas and the climate of the school changed—it reminds me of what happens in a department store when employees begin to be paid on commission.

Teachers will no longer be willing to share their hard work if they fear that someone else is going to take credit and get the extra pay. [It creates] competition rather than the cooperative effort schools are trying to foster. When teachers share their ideas and others are observed using them, sometimes the originator gets credit and sometimes not. Even if it were written that a portion of the performance-based compensation depends on sharing, less sharing will occur after performance-based compensation is implemented.

In the Teacher Advancement Program (TAP) designed by the Milken Family Foundation, collaboration among teachers is critical. Learning guides work with associate teachers, who work with mentor and master teachers. By design, the TAP model encourages collegiality and interaction among teachers. We need models of professional development that stimulate and encourage collaboration. Our view is that performance-based compensation models can be implemented in systems that encourage collaboration. Collaboration may be one aspect of performance that gets rewarded.

2. The Union Environment and the Collaborative Nature of Teaching

The union environment is also cited as another reason why performance-based compensation for teachers won't work. The argument is made that unions are socialist in origin and philosophy, and just as students are not treated differently, teachers don't expect to be treated differently when it comes to pay. Performance-based compensation is inequitable by definition. If teachers wanted to change the pay structure, they would have done so years ago through negotiation.

A few of our responding educators took issue with comments like those above:

When comments are made that point to administrators who would seem to knowingly be unfair to their teaching staffs, it bothers me that we describe our colleagues as people who would play games in order to advance in a merit system. These comments indicate to me that there is a lack of integrity being demonstrated within our profession. It is of greater concern that as an educational body we fall into a "us against them" mindset—administrators against teachers and teachers against administrators rather than working with one vision to serve all of our children. We must recognize that not every teacher or every administrator, even some of our friends, can do this job effectively. Furthermore we must recognize the need to build a common vision in order to most effectively serve our students.

Rather than pitting teacher against teacher or school against school, the district has designed a system where rigorous goals are set to improve student achievement. Each school sets a student improvement goal that even

indicates the evaluation process to be followed and the percentages of reward to be shared by the staff if/when the goal is reached.

This kind of plan could falter due to the "free rider" problem. Some faculty might slack off, rely upon others to work hard to achieve the goals and then share the benefit. Once the hard workers see others slacking off, they are likely to do so as well.

The argument is frequently made that since teaching requires teamwork and collaboration, performance-based compensation is inappropriate and counterproductive. Yet performance-based pay is commonplace both in the private sector and in higher education. The typical question in higher education is not whether individual performance-based compensation should be used, but what is the right mix of individual and group pay incentives. For example, if the pool of funds available for pay increases is three percent, a decision is made as to what fraction to distribute across-the-board, and what fraction to distribute as individual performance or merit. It would be unusual to find a situation in which the pay mix for professionals is entirely group-based. Since collaboration is important in schools, some fraction of performance-based pay should be tied to group or school-wide performance. On the other hand, a good deal of effort is not collaborative and, as will be argued below, can be measured or assessed. Thus, it does not seem plausible to argue that individual merit should play no role in teacher compensation.

Moreover, just because effort is collaborative, it does not follow that all pay should be distributed across-the-board. In fact, some members of the group may be better "team players" than others, and advance the goals of the team more than others. Compensation of professional athletes provides a good example. Many professional athletes, including highly paid stars, are members of teams, yet this does not mean that pay raises are distributed across the board. Although sports teams and schoolteachers differ greatly in their ultimate goal, it is nonetheless interesting to note that the entire St. Louis Rams football team will receive a bonus for playing in the Superbowl, however, certain members of the team will receive larger pay raises than others. The key issue is not whether production is collaborative or not, but whether individual contributions to the team effort are observable. In general, individual contributions to team effort are readily observable in sports competition.

The absence of performance-based compensation, and the presence of tenure, is one reason why many "school-wide" collaborative education reforms fail. Teachers in a particular school have little incentive to join a school reform team or advance the goals of the team by changing their teaching practice or collaborating in the implementation of reforms. New forms of work or teaching require additional effort on the part of teachers. Yet the conventional salary schedule provides no incentives for teachers to collaborate or exert the required effort.

3. There is no clear definition of what constitutes a "good teacher." In other words, what is merit based upon?

Measuring a teacher's value to the educational process is nearly impossible.

At my school, I would be hard-pressed to point out someone who I think is not working hard for the students. Do I think they are all equally effective? No. How to evaluate that without creating massive dissension? Very difficult.

Clear targets to measure performance must be developed and they cannot be based only on "standardized tests." Test scores are a very narrow indicator of a student's achievement.

How do you decide who gets what? Test scores? It is possible to produce outstanding results without being an outstanding educator. What will be used to measure outcomes in the arts: contest results, performing works from a standardized list?

The great teacher is an artist! This artist works in an imperfect situation with "raw materials" over which there is no control outside of the classroom. The teacher deals with student deaths either from violence or natural causes. The teacher deals with administrators that couldn't teach if their life depended upon it. The teacher deals with administrators who are fantastic. The teacher deals with central office employees who have no idea what goes on in the classroom but control the purse strings for education. None of these situations are acceptable to a skilled craftsman producing products for sale, especially when they are working at earning a bonus or performance-based compensation.

Teaching is not a science. A faster more talented teacher cannot always turn out students that achieve at increasingly higher levels.

There are some effective teachers who are innovative, but may currently conflict with the administration and some peers for the very fact they are innovative. Some administrators and peers may view their activities as unnecessary because they are not following the local curriculum standards of learning. Will teachers who spend personal time developing advanced teaching methods that are not perceived as a necessary part of their job be rewarded?

Also, there is such a difference in philosophies, and sometimes educators consider others to be "good teachers" when they agree with the methods used by that person.

Even if a teacher complies with the accepted norm, the norm changes frequently, particularly if leadership changes.

There are so many things schools seek to do for students that basing performance-based compensation only on test scores diminishes the value and values of school.

So much of what is learned in a classroom cannot be subject to a test, for example, caring, loving attitudes and life in general. This unwritten curriculum might be more important and more long-lasting than any other subject matter learned. The life lessons and the love lessons are among the most important. It is the relationships built within classroom communities and with individuals there that are the most important part of the work. How do we evaluate these?

In 1999 two former students that I had in class in the 1960s told me they could remember nothing I taught them! They did remember me and that I was fair, caring, loving, giving, made the class work, made the class fun. Both chose careers related to my subject because of my class. How does one write things like these into performance-based compensation?

Our kids may not remember what we teach them. But they will always remember how we made them feel.

Unfortunately, how a teacher makes their students feel is difficult to evaluate.

Also, will performance-based compensation include the fact that I pay for one of my students to go to Mexico each summer on our educational tour because they just don't have the backing but are excellent students with a sincere desire to learn culture. Or the fact that I find sponsors for five or six more students so that they can also attend the trip, but without help would never be there. I don't want anything for this nor do I want it to be a known fact in my area, but teachers are doing so many things outside the classroom that no one knows about to help students.

The evaluation characteristics of "teacher performance, effort" must include some objective and measurable ones; i.e., statistical data available recording hours of effort, number of students, continuing education accomplishments, professional memberships, community involvement actions, etc.

If these areas aren't related to student achievement, however, in our view, they are incomplete evaluation methods.

I would rather see teachers paid for attaining advanced degrees; presenting workshops; taking leadership positions in the school (team/grade chairs); mentoring student teachers; and other meaningful activities.

Again, how do we know how or if these affect students?

When working in a service industry such as ours, it is difficult to isolate any one area (other than standardized testing in some people's minds!) as a measure. National Board Certification is one measure. So are advanced degrees relevant to your teaching area, willingness to be mentors to preservice or non-tenured teachers, initiative to write/work on grants and school-wide/community projects to enhance the overall school community, and other aspects mentioned in the Milken initiative. I also believe that the number of years of teaching experience is not the most effective measure of performance.

If we take this notion to its logical conclusion, then we should hire teachers randomly. After all, if we have no clear idea of who is a good teacher, who's to say that applicant A is better than applicant B? This would also apply to tenure decisions as well as promotions to mentor and master teacher. Yet no one seriously believes that these hiring and promotion decisions should be random. Moreover, most would accept the fact that it is possible to make informed decisions in these areas. Why is compensation any different?

Merit or performance-based pay is also commonplace in industries and organizations in which it would seem to be much more difficult to measure or assess individual performance than in public schools.

In fact, private businesses do pay employees based upon merit or performance. Although the assessment mechanisms and the meaning of high performance may be complex, there is much less difficulty in having workers accept being so judged. People enter other careers knowing they are going to be judged. Sometimes the results will seem fair, at other times, less so. But that is just the way it is and it is accepted.

There are a variety of quantitative indicators of performance that might be linked to individual teachers. This would include various student test scores and student attendance data. Since nearly all teachers have contact with the parent consumers, it is also possible to gauge consumer satisfaction with a particular teacher. Private school administrators are acutely aware of how parents assess the performance of individual teachers. Indeed, whether they solicit such information or not, public school administrators are also well aware of which of their teachers are favored, and which are disfavored, by parents. Moreover, it is relatively simple and low cost for an administrator to directly monitor the performance of teachers by sitting in on their classes, reviewing their lesson plans, etc.

In fact, as organizations, schools are probably more amenable to monitoring individual performance than are most private goods or service-producing firms. Contrast this to other service or goods-producing organizations, in which it is very difficult to measure the contribution of a particular professional employee to overall firm performance. In many private sector firms where team production is present, quantitative measures of individual employee performance are absent, and most members of the team have no contact with the client. Consider a research firm preparing a study for a client. The team might include professionals from a variety of backgrounds, e.g., statisticians, engineers, and economists. There are no individual indicators of performance other than successful completion of the contract. Yet performance-based compensation almost certainly plays a role in determination of pay for such professionals.

4. If student learning is the sole basis of the merit evaluation, relying on test scores can present major problems.

Student achievement, as measured by test scores, is often suggested to be an appropriate indicator of merit; however, many argue that the teacher is not the sole influence on student achievement, and that prior teachers and factors such as family also have a major influence.

If objective measurements such as test scores are used, how are factors such as economic advantage, parental involvement, available resources in

WE CAN USE REGRESSION ANALYSIS TO IDENTIFY TEACHER EFFECTIVENESS

It is clear that it would be unfair to reward teachers for the achievement levels of their students. Obviously, some teachers have more privileged students (more able students, or students with greater support from home) which means that their students would score at higher levels than students in other classrooms, even if those teachers were as good or better than the teacher of the more privileged kids. Thus, it is generally agreed that teacher assessment based on gains rather than levels is fairer. In effect, after controlling for where students start (pretest), we can attribute part of where they end up (post test) to the effectiveness of their teachers. Thus, a teacher is responsible for the gain demonstrated by students during the year they were in his or her class (i.e., where a student ends up), controlling for where the student starts (based on the pretest), and for factors other than the teacher that are hypothesized to impact the student's ability to learn during the year.

One of the factors affecting ability to learn may be a student's previous teachers. Assume two students begin the fifth grade with the same pretest score. If one student has been taught how to learn, how to study more effectively, and how to take tests, and the other has been taught less of each of these, part of the credit for gains in the fifth grade probably should go to teachers in earlier grades. Although some of this "prior teacher effect" is taken care of by controlling for pretest scores, some additional effect of prior teachers may not be accounted for. Clearly, it is desirable to include effects of prior teachers in the model. However, if such data are not available, or available only at a prohibitive cost, this does not invalidate the regression model.

the community, emotional well-being of the students, basic intelligence of the child and/or family members, and a zillion other influences on the students' abilities to learn taken into account?

Teachers are very wary of pay-for-performance programs because they have no control over student mobility, language proficiency and class-size, factors that greatly effect student performance. (Denver Classroom Teachers Association, 1999)

The weight of "improved student learning" must realistically reflect the reality of the learning achievement/attainment levels of students which are NOT teacher-controllable; i.e., ability (cognitive domain), attitude and interest (affective domain), classroom factors (limited supplies, restrictive environment, size of classes, time, etc.). Also, some of our best teachers have been given some of the most difficult students and some of the lowest-achieving students... and many of them work with them lovingly and willingly. But progress is very different when your work is with these populations... How does one evaluate these?

I have seen excellent students that do not achieve because of the people that they are scheduled with. Students have likes and dislikes. They have free will. Students are not machine parts to be assembled by a skilled technician.

All classes are not equal. Some AP classes will get 100 percent passing while others only half will pass even though the teacher is doing the same in both. Some courses motivate student interest more than others do.

In many schools the turnover of students is astronomical! One of the schools in Kalamazoo has experienced at times an 85 percent turnover during the year. How does one evaluate student progress when the end of the year presents a completely different group of students to be evaluated? How does one evaluate the "hand one is dealt," i.e., strong, effective teachers are often assigned the most challenging students and/or situations? How do you measure student achievement and teacher effectiveness in classrooms or schools that are "revolving doors" for students such as near military bases? While in the classroom, I always had an influx of new students at the beginning of the second semester or when the retention for the next year notices went out. The parents were hoping the student records didn't follow! Those students who I would have for perhaps eight weeks would be tested on standardized tests in my room along with the ones I had had all year, and how does one separate what a former teacher's influence/teaching and mine have been?

This is no different than any other omitted factor. Empirical work in the social sciences is not exact. We never can explain completely the variance in one factor (here, gains in test scores) by differences in other factors. Thus, we consider the R-squared statistic to determine the percentage of variance explained. Obviously, the higher the percentage explained, the better, but it would be wrong to ignore analyses because one hundred percent of the variance in what we are trying to explain is not accounted for in the model. We also need to look at the statistical significance of each explanatory variable to see whether there is a relationship between that variable (for example, having a particular teacher or not) and the outcome being considered (for example, gain in test scores). If we find a significant relationship between having a particular teacher and test score growth, that would lead us to give some credit to that teacher for her students' score growth.

That conclusion would be weakened if other possible explanatory variables had been omitted from the model. Let's assume that one group of teachers had statistically significant positive relationships to student test score gains and another group of teachers had negative relationships. We might conclude that the first group of teachers was more effective. But consider an additional fact: students in the first group of teachers had wealthy, well-educated parents and students in the second group came from poverty and had illiterate parents. If measures of family wealth or parental education are included in the model, then we could conclude that teacher effects were demonstrated after considering family background. However, if these family background measures were not in the model, we would not know whether the observed teacher effect were real or if they were merely reflecting the effects of family characteristics. Thus, it is important to include as many explanatory variables as possible. Possible biases or misleading results due to omitted variables must be considered, as well. For example, if some students in a fifth-grade class have had excellent teachers in earlier years, and some have had poor teaching, if the fifth-grade teacher was shown to have a positive effect, she could be considered an effective teacher. There would be bias only if the apparently more effective teacher had students who regularly had effective teachers earlier. Assuming we can include measures of at least most of the categories of factors that could affect test score gains, the regression models can be valuable evidence on teacher quality.

Opponents say that performance-based compensation based on test scores would not include kindergarten or first-grade teachers, because testing does not occur in these grades. If performance-based compensation does not apply to kindergarten and first-grade teachers, the argument is that the best teachers would migrate to the higher grades, and the best teachers are needed at the lower grades.

(Administrators.net, 1999)

Performance-based compensation based on parental input is also seen as unfair, because established teachers might be very popular with parents but not very good teachers, and new teachers might be very good but unknown by parents.

(Administrators.net, 1999)

"Output-based" pay, or pay based on student performance, is seen as arbitrary—students transfer in and out of districts, educators take breaks for family or medical leave, and teachers team-teach, which makes it harder to determine where responsibility lies. Educators don't teach enough students each year to yield accurate predictions of future performance using traditional statistical methods. According to the executive director of the Tennessee Education Association, "You can't walk into a hospital and look at the mortality rates of heart patients and tell who's an excellent physician. Sometimes the best physicians also get most of the patients who are the worst off. So you have to look at each physician's practice, at his or her skills. Human systems are very difficult to pigeonhole." (Archer, 1999)

There may also be disagreements about what is important for students to learn. Pay for performance programs can be seen as encouraging administrators and teachers to cheat by manipulating statistics, or by teaching to the test. (Wilms & Chapleau, 1999) However, if "the test" is based upon what we want students to learn (e.g. state curriculum standards) then it would be good if teachers taught to the test. Others say that when performance-based compensation programs rely on student performance, students end up losing, because the curriculum is narrowed to include subjects that can be easily taught by drill and practice and are easily measured. (Wilms & Chapleau, 1999)

The education community must seriously study assessment and the ability to measure meaningful change in student performance. We agree that student test scores may be too narrow an indicator of how to evaluate a teacher. Further, we agree that as has been seen in California and New York, there are some reliability issues in standardized tests that need to be addressed. However, we also believe that academic standards can and should be set from which we can judge a teacher's performance. Most states have student standards. There is no reason why teacher standards cannot be developed as well. We need measurable characteristics of excellent teachers.

The final question is whether all equal gains on test scores are comparable. Is a one hundred point gain from 400 to 500 equal to a one hundred point gain from 700 to 800? Some argue that it is more difficult to effect a given point increase when students are already at high levels than when they are at low levels. Moreover, if the top score possible on a test is 800, it would be impossible for a teacher to get a 100 point gain for a student who initially scores 750 (this is known as a ceiling effect).

To address this problem, the gain score measure can be transformed in several ways. First, the absolute point gain could be divided by the pretest score to get a percent increase score. In that case, a gain of 40 points from a base of 400 and a gain of 70 points from the base of 700 would both equal a ten percent gain. Thus a 40 point gain at the low end would be considered equal to a 70 point gain for students considered to be "more able" at the start. A smaller absolute gain for less able students would be considered equivalent to a larger absolute gain for the more able.

Another way of adjusting for different starting points is to calculate the fraction of what is left to gain that is actually realized. The 40 points gained by the student starting at 400 reflects a gain of ten percent of what is left to be achieved (40 divided by the difference between original score and the maximum $(800-400=400)$). Yet the 70 point gain from the student starting at 700 is actually a gain of 70 percent of what is left to gain $(70/(800-700))$. In this case, the 70 gain is not equal to the 40 point gain, nor is it 75 percent higher $(70/40)$, but rather the 70 point gain is valued at seven times the 40 point gain because those last points are more difficult to achieve.

To summarize, regression models provide useful information in gain score analysis even if all possible explanatory variables are not included in the model. However, it is important to note which potentially significant factors are omitted from the model, and what possible biases that implies. In addition, a particular point gain may be reflecting different amounts of teacher effectiveness, depending upon where the student starts. There are ways to take this into account when constructing the variable to be explained.

We are not saying that student performance or achievement should be the only measure of teacher excellence. Indeed, we believe that teacher compensation should depend on teacher functions (tasks done and how well), teacher achievements (e.g. awards, relevant degrees), and teacher performance (as judged by experts), as well as on student achievement. Moreover, we do not define student achievement by test scores alone. Schools and teachers should identify multiple measures of student achievement if they wish (e.g. portfolio assessments and attendance). However, TAP does require that student achievement, however measured, be one aspect of teacher assessment.

Some teachers correctly point out the family and socioeconomic background characteristics of students have a major effect on student performance. It is not fair, they argue, to hold teachers accountable for current or past family circumstances that may have a strong effect on current student achievement. Moreover, in any particular year, a teacher may have been assigned a particularly difficult class, as compared, say, to another teacher down the hall. This is a legitimate concern, which is why the focus should be on student achievement gains. It is important to get benchmark data on student achievement at the beginning of the academic year. Student progress against these benchmarks should be continually evaluated. At the end of the year, similar data should be collected and compared to these initial benchmarks. To the extent that student test scores are used in the teacher assessment, they should be gains relative to the beginning of the year assessments. These gain scores are one measure of a teacher's "value-added."

It might be objected that there is a good deal of measurement error in individual test scores, hence they are a poor measure of teacher performance. While gain scores for any individual student may be a "noisy" statistical measure, the average of all a given teacher's students will be far less so (statisticians call this "the law of large numbers"). For example, suppose that the margin of error on an individual student's gain score is plus or minus ten percent. If a teacher has thirty students, then the margin of error of the gain score for the class will be just 1.8 percent.

Just as the "law of large numbers" tells us that changes in the mean of a class are measured with less error than changes in the scores of individual students, it also suggests that it is good to use multiple, independent, indicators of a teacher's performance. For example, suppose that test score gains correctly identify superior teachers 80 percent of the time. Suppose that classroom assessments by supervisors correctly identify superior teachers 75 percent of the time, and parent surveys identify superior teaching 70 percent of the time. Then a teacher assessment based on all three indicators would correctly identify a superior teacher over 98 percent of the time. In other words, multiple "noisy" indicators of teacher quality can add up to very accurate overall assessments.

5. When you reward teachers for student achievement, nobody wants to teach certain kids in certain communities.

How can different levels of student learning be compared? Some teachers have very difficult classes where even the smallest advances are monumental, whereas others have self-motivated, bright students.

Teachers tend to seek to avoid these areas now for other reasons like safety. If student achievement is measured in a value-added sense, teachers may prefer to work where scores are initially lower because they have a lot more room for improvement. It may be easier to move from the 20th percentile to the 40th than from the 90th to the 95th.

Many have pointed out that teachers have no control over what happens to students outside of the classroom. The National Commission on Teaching and America's Future has research showing the home environment is responsible for 49 percent of the factors influencing student achievement. Teachers do not want to be financially punished for having students who don't succeed. (Guinta, 1999)

According to some, performance-based compensation would increase the trend of the most difficult students being put in the newest teacher's classrooms. (Administrators.net, 1999) Opponents say that some teachers might even try to "game" the system by telling students likely to do poorly on the tests to stay home on test day.

Focusing on gains rather than levels of academic achievement should take us a long way in alleviating this concern. However, it may be that gains, say, from the 20th to the 40th percentile are in fact harder to achieve than those from the 60th to 80th percentile. As schools become smarter organizations and begin to use classroom gain scores more effectively, it will soon become apparent where it is easier or harder to achieve gains. Also, state education agencies should assist in developing such information as well. This data would allow schools to establish reasonable "norms" for gain scores based on the starting point of the class.

A somewhat analogous situation occurs with student evaluations of faculty in universities. Student evaluations are regularly used to evaluate faculty for the purposes of performance-based compensation and promotion (as well as other types of teaching rewards). Faculty committees and department chairs are well aware that the means of these scores vary systematically with respect to factors which are not directly under the control of the instructor, e.g., large lecture versus small class, required versus elective, lower versus upper undergraduate or graduate, more or less quantitative subject matter. Hence they "norm" these scores when assessing faculty. For example, Professor X is teaching Intermediate Microeconomics, a notoriously unpopular course required of finance and accounting majors. Over the years the mean evaluation for this course is below that of other upper-level undergraduate courses. Thus, Professor X's seemingly low score, as compared to the department mean, may be above the historical average for the course.

6. Bias and Favoritism

Some have pointed out that the several quick visits most principals pay classrooms during the school year aren't enough to show who is doing good teaching. Performance-based compensation is seen as having more to do with getting along with the principal than anything else. "Good teaching is not the same thing as being willing to take extra bus duty or prompt in getting paperwork back to the central office." (Shanker, 1995)

Promotion will be based on personality, politics, religion, friendships, who has done the administration's bidding etc. Would lead to teachers "brown nosing" administrators in charge of judging their performance. Some ineffective people who "get along" may receive merit increases, while some highly effective teachers who do not get along will not.

Performance-based compensation for teachers would only strengthen the good old boy network. Since the talented teachers are often considered to be the ones rocking the boat, they are not usually members of the good old boys club. Therefore they would not be the teachers earning the performance-based compensation.

However, if the principal is also rewarded based on student achievement, he or she will have incentives to reward true merit.

How would anyone be able to assure teachers that the determination of who gets performance-based compensation would not be based on some form of "you scratch my back and I'll scratch yours?" Even when the determining group is a group of peers, many people would worry that their "buddies" would be considered more favorably than others.

I don't believe that performance-based compensation will ever be equal or done on a fair basis. Just too many cliques in the system and jealousy will cause friendships to be on hold and colleagues to stop sharing. This is not what we need in education today. We need people working together to achieve a common goal. WELL EDUCATED CHILDREN!

In the San Marino (CA) schools, there was performance-based compensation from the 1950s to the 1970s. It ended when an outstanding teacher, who did not receive performance-based compensation, went to the public records and posted at the schools the names of all those receiving performance-based compensation. All the coaches were receiving performance-based compensation while many teachers who did outstanding work were not receiving. Personalities and favoritism will always cloud teacher pay.

Many principals and teachers do not have unconditional positive regard for all the people they are associated with. Often the schools have administrators who act and react like teenagers. This is not a good thing when people must be evaluated on their effort, creativity, and love of students NOT their looks and personality. Many people in the schools where the administrators are like military personnel and intimidate anyone who tries to be creative and work outside the dots (who would be candidates for extra benefits) find their lives always being condemned for being creative, working in groups, looking for new ways to motivate classes and teachers who have everyone in little straight lines, no noise, no excitement, little education are the ones who will be rewarded.

In this type of situation the question is always "What have you done for me lately?" I have seen excellent teachers that get sick with a protracted illness and suddenly become the low person on the principal's list of able teachers because they are not in school to defend themselves.

In 1984 the Gallup Poll asked teachers who should determine which teachers receive performance-based compensation. Sixty-three percent favored a committee of teachers, 57 percent favored the school principal, 42 percent would prefer a committee of outside educators and one in five teachers wanted the decision to be made by either students or parents. (Gallup, 1984)

No teacher is perfect. Everyone makes mistakes. At anytime, any administrator could make a case against any teacher. Isn't this the way it is in business?

I know the risk that educators would face if there were a change in administration once they have moved to a performance-based compensation system. That seems to be the rule in the new century.

Many administrators, who will have a major say in determining merit, were poor teachers and so, became administrators—they cannot recognize quality.

How does a teacher rate a colleague low and then have to see him every day? Even administrators want to be liked and often give satisfactory evaluations only for this reason.

I think objectivity is the main concern. Therefore, awarding performance-based compensation must be the result of more than just the principal's single evaluation. Certainly if one could involve peers, outside evaluators, etc. the program might be better accepted.

Teachers don't trust administrators to make decisions about who—or what—deserves performance-based compensation. There is a fear that performance-based compensation programs would give administrators the ability to reward teachers they consider to be performing well. Union members believe that might result in arbitrary decisions. (Education Week, 1999) Establishing pay based on "market-value" is not seen as a good way to determine pay scales because it can reflect race and sex bias. (NEA, 1999)

Even when teachers are co-evaluators, they may have been co-opted by the administration. Basically there will always be suspicion of evaluators. Even of master teachers.

Performance-based compensation is often seen by teachers as a chance to hammer schools, rather than to help schools improve. States are often seen as spending a lot of time developing rewards and sanctions and less time developing plans for school improvement. (Houtz, 1997)

In a good performance-based pay plan, there needs to be some level of control of the quality or standard of the "qualified" and objective adjudicators of educators, candidates for performance-based compensation. If not, it could easily become a political issue of influence and not of merit. In order to address this argument, we propose that a master teacher and the principal are both involved in the evaluation. We must make sure that master teachers who are still in the bargaining unit are allowed to evaluate other teachers. The perception of bias might also be alleviated with the inclusion of an external evaluator whenever a teacher is going from one rank to the next. The criteria for evaluation would be made clear and the process must be uniform.

Evaluations of employees are made in virtually every work environment; there is no reason to think that this can not occur in a public school. On the other hand, other examples of performance-based compensation that are suggested such as in the business community may not actually be performance-based compensation, because the reward has little to do with the work. The pay of CEOs may have little to do with profits.

To the extent that CEO compensation is in the form of stock options or based on company profits, as is often the case, the company performance does determine CEO pay.

Certainly, at every school, parents, students, administrators and the teachers themselves have a pretty accurate sense of which teachers are the best.

As suggested in the above discussion, teacher evaluations should be based on multiple, independent evaluations of teacher performance. Here is where "independent" becomes important. One dimension of independence should be independence from the opinions of a principal or supervisor. Thus, while a classroom evaluation based on observation by a principal or supervisor is potentially affected by subjective bias, other measures such as test score gains, student attendance or parental surveys are not. That is why it is important to have multiple, independent indicators.

Of course, "what's good for the goose is good for the gander." It is very important that principals and supervisors be held accountable for student performance as well. If principals are held accountable for student achievement gains in their building (e.g., through performance-based compensation and the threat of dismissal), they will have a strong incentive to make evaluations objectively. Principals who exhibit bias or favoritism (i.e., positive or negative appraisals which are not based on actual performance) will tend to be also weeded out in favor of those who do a more objective appraisal.

To the extent that these reforms take hold on a wide scale, good teachers who are underpaid can leave their current schools and go to schools in which their talents will be rewarded. Performance-based compensation will stimulate a market for superior teachers. Under the current system of seniority and credential-based pay, teachers who have accumulated seniority tend to be locked into districts. If pay is determined by performance-based promotions and annual evaluations, there will develop a lateral market for mentor, master and novice teachers. When teachers are able to document a track record of raising student achievement, their services will be valued in the market. Ultimately, one of the best protections against bias is the teacher's ability to "exit" a school with bad management. The best way to do this is to create a competitive market for high quality educators.

7. Performance-based compensation will take from teachers the ability to teach as they wish and as they do best. It just requires teachers to jump through hoops. It will make everyone teach and behave in the same way.

Performance-based compensation is simply a way to take away my freedom as a teacher to do the job I need to do for my students. We lost tenure in the state of Colorado in the 1980's and that was just the nose of the camel under the tent. State standards are now being used to impose the European instructional model of every student on the same page of the same text on the same day. My professional judgment is severely limited already: making me jump through hoops to get more pay would be demeaning.

At the end of the first year, it was my opinion that anyone who was willing to study the manual intensely and work hard at it, could achieve Level III. This did not necessarily mean that this person was a good

teacher/administrator. It only meant that this person understood the evaluation and prepared for it. One complaint from instructional staffs was that many teachers who achieved higher levels did not deserve it; and, many outstanding teachers did not achieve higher levels because they did not "play the game."

I began the Career Ladder process but after my first observation, it was clear to me that this was just about playing a "game" for three select days. In observing how some teachers were manipulating the system to teach three lessons the way they perceived the process wanted them taught (not necessarily how they indeed taught in their classrooms) or listening to teachers in the process describe the "jumping through the hoops" motions or "playing the game," I decided my time was better spent teaching and meeting the needs of my students.

We all march to the beat of our own drummer and teach as we feel is best for our current group of students. If your evaluator isn't "in step with your beat" or methodology, how can one be appropriately assessed?

There is just so much time and energy left in the day for teachers and for me, what I invest my time in MUST be beneficial to my students, to my professional growth, and to my school community. If it is just jumping through hoops or going through the motions, I have no time for it!

One teacher presented a different perspective:

The system I have taught in for many years developed a career ladder about ten years ago. I feel it has been an effective one and provides the opportunities to "do your thing" in addition to what you are expected to do in the classroom. The first level has the usual salary steps and a regular teaching certificate. The next level is the master teacher level. It requires a state master teacher certificate and a certain number of points on your evaluation. The evaluation system seems to be a fair one, and if you are "worth your salt," you should be at this level anyway. The master teacher activities are based on classroom activities, and you must share them with other teachers beyond your support team. For this position you get \$3000 per year. The top level is the career level teacher which gains an additional \$4000 per year. For this you need a higher evaluation, and you do a presentation before a panel of career teachers and several administrators. To keep this position you do activities beyond the classroom that help fulfill the needs of the school district.

Very few professionals can work "as they wish." All face some sanctions or constraints. Surgeons who become highly creative and stray too far from professional norms face the possibility of malpractice lawsuits and revocation of their licenses. A less severe, but very potent sanction is loss of business. A trial lawyer who enjoys quoting Latin to juries may lose more cases and find himself short of clients. Ultimately, teachers, along with all public employees, are accountable to the taxpayers and cannot work "as they wish."

Merit or performance-based pay does make teachers "jump through hoops," as does any evaluation. The columns of current salary schedules, which reward education credentials (BA+15, MA, MA+15, etc.) also make teachers jump through hoops. The point is to select hoops that are more closely tied to student achievement gains.

Performance-based compensation will not make everyone teach and behave in the same way. An assessment that focuses on student achievement, for example, does not require any particular style of teaching. Teachers may, in fact, gain more freedom to innovate than is the case in many public school districts currently, since the focus would be on outcomes and not process.

8. Performance-based compensation programs reward the top 15-20 percent of performers without making any effort to improve all teachers.

First, if there is a program it must be open to all, not limited to ten percent or some artificial percentage to limit cost. It should not be apportioned throughout the faculty, one for languages, one in social studies, etc. A single department might have all excellent, deserving teachers. It should not depend upon some artificial minimum number of years of experience; there are some great teachers with three years of experience, some take six, etc. to develop their skills. It should not be just a reward for hanging around.

The real question should be how do you get people out of the classroom who should not be there, thus creating a teaching force where all deserve performance-based compensation and then pay all teachers salaries that begin in the mid- to high-thirties and end in the seventy- to eighty-thousand range. Shouldn't we all be excellent? Or shouldn't we all at least be trying to be?

If everyone is made a master teacher, no one is judged more effective than others. This is just not true. It is idealistic. Maybe just a way to get all teachers more pay.

The fact that the quality of teachers has declined over recent years is a testament to the current system not attracting high quality individuals into the classroom. A system in which the best can be rewarded may in turn attract the best. The TAP model also addresses this issue by allowing for all levels of teachers at all schools. Under the current system, a particular school in a district may have all of the "good" teachers while another school has none. Under TAP, master and mentor teachers will be distributed among all schools. The model will work best when teachers can opt out of the TAP system by moving to other schools, and when certified mentor or master teachers can move to schools that need them if there are no slots at their current school.

Performance-based compensation need not be limited to a fixed percentage of the workforce. As indicated in an earlier example, supervisors may choose to designate a portion of funds available for pay increases as a merit pool. For example, if four percent of payroll is available for raises, then two percent might be distributed across-the-board and two percent held aside for merit. All teachers would receive a merit or performance assessment and this would guide allocation of merit. Suppose that, on the basis of this assessment, teachers are put into one of five categories (with no fixed percentage of the workforce in any of the five categories). The next issue is how large a gap to establish between the tiers. Teachers in the lowest tier may receive zero performance-based compensation whereas those in the top might receive six percent. Or the gap may be more compressed, say, .5 percent up to four percent. In either case, it is incorrect to say that the reward just goes to the top performers "without making any effort to improve all teachers." Better performance yields more pay, whether a teacher is moving from tier one to two, or tier four to the top. Such a merit scheme gives incentives for all teachers to improve.

9. The costs of implementing a performance-based compensation system are very large.

One element that concerns me is finding funds to provide this performance-based compensation. Where does it come from? In my district, money is always an issue. Paper is rationed because there is not enough money in the budget to adequately provide all the schools. How can a district justify paying teachers performance-based compensation when there is not even enough money to purchase enough paper? I'd give up any performance-based compensation in order to have enough paper.

But would you give up across-the-board raises?

Still, I noticed that there would come a time when the number of advanced teachers at a site would be limited by space available and by finances, rather than by merit. That's one of my major concerns with performance-based compensation. What happens when teachers get the results in a class (measured by whatever inevitably political rubric emerges), yet are denied pay increases due to financial constraints?

The costs of implementing the Tennessee Career Ladder Program were tremendous.

One of the reasons voters are reluctant to put more money into education is because they have not seen student achievement improve. They see teachers demanding more money as a right. If they saw new money going only to highly productive teachers, they are more likely to be willing to provide more money.

Under current salary schedules, school districts incur major costs from one year to the next simply because teachers are one year older. A very large share of payroll is taken off the table each year simply to reward seniority. Similarly, school districts spend billions of dollars each year to reward the accumulation of academic course credits which may bear little relationship to current performance. For example, many teachers accumulate graduate credits in education administration but never become principals. They are, nonetheless, rewarded with pay increases on salary schedules even though these classes have little benefit for their current teaching assignments.

In order to make funds available for performance-based compensation, school districts could eliminate or "flatten" salary schedules. A merit pool would be created without any increase in total payroll costs.

Programs where there is a limited amount of money to be shared by a limited number of people can create situations where there is an incentive to hoard rather than share good ideas. "Why reveal a successful strategy for teaching a math topic to a competitor? Students end up being the losers." (Shanker, 1995) Others point out that small pilot programs to be expanded later incur resentment toward those few teachers selected to participate or to be given awards. (Ellis) Implementing performance-based compensation in certain schools and not others implies that the teachers in that school are not quality professionals. "It's insulting to make professionals continually prove their worth, and merit is such a fuzzy idea that it will be used unfairly." (Van Moorlehem, 1999)

10. Teachers should want to teach to serve kids, not for money. We want teachers who love teaching, and who are not in it for the money.

It seems to me that we already have performance-based compensation. We all receive a salary which enables us to at least partially care for ourselves and our families. Countrywide, it is far from equal. But we all benefit from the social payoff from our merit—a stable, functional society with educated and motivated citizens benefits us all. Given the difficulty of identifying "merit" in the classroom, knowing our "merit" has contributed may be the most tangible, equitable and gratifying performance-based compensation we can achieve!

I think our rewards as teachers come in other forms. It is great pay! I always felt that in some way I was getting "performance-based compensation" as my understanding of and practice of "education" evolved. Because of the way in which I was able to interact with the administrative echelon and also the community, and because my teaching approach seemed to serve my students well and connected us to the community and drew parents into our work, my life was enriched. My life and work as an educator taught me over the years to live in an undivided way, without artificial borders between my life and my work. With such an undivided way-of-being there was a great smoothing of the hills and valleys and it made life less stressful. I thought that was great "pay"...

Few of us are in the profession for pay.

Not many would dispute this. But the real question is who is **not** in the profession because of low pay?

We are called to teach and find it difficult to believe that we are being paid to do what we love doing. When someone institutes a set of criteria to determine our worthiness to receive more pay, they take away our freedom to do what is best for children. Look at the ways that teachers can supplement their salaries now: club sponsorship, coaching, becoming an administrator, moonlighting, etc. All these diminish the teacher's role in the classroom.

The real issue revolves around supplementing the salaries of teachers whose students learn more, not of teachers who coach, unless the latter falls under "more pay for more tasks."

With the building of a common vision to which every employee will commit to enhancing student performance, the growth of every student would take on more meaning. I believe teachers would reach out to their colleagues who are not connecting with kids or with the curriculum in an effective manner. I believe such a system would raise the credibility of our schools within the community as they too would know of the goals and the journey to attain the reward of improved student performance. Most importantly I believe this would happen not because of the desire for more money but because of the desire teachers have to serve kids in a united fashion.

Loving one's work and making money at it are not mutually exclusive. Many people thoroughly enjoy being lawyers, businesspeople, or Webmasters, yet still make large salaries. Presumably, most doctors like medicine and most airline pilots enjoy flying. Nonetheless, most doctors and pilots would not choose to practice their profession, and certainly not in the numbers required for satisfying consumer demand, in the absence of pay. Also, research has shown that extrinsic rewards (money) do not undermine intrinsic rewards (satisfaction) as a motivator.

Serving mankind and high pay are also not mutually exclusive. Many physicians do great work in preventing and curing illnesses but still earn handsome salaries. Indeed, the opportunity to earn profits is a major incentive for drug companies to push ahead to find new "miracle drugs." Might it be that the opportunity to earn high salaries might provide a similar incentive for teachers to do a better job and for others to enter the field?

We keep talking about giving teachers more status. Like it or not, in our society, there is a correlation—one might debate how strong a one—between earnings and status. When at least some teachers can afford the same homes, automobiles, colleges for their kids, and vacations as doctors and lawyers can, it is likely that teachers will be accorded the same status as members of these other professions receive.

In understanding how wage changes reallocate labor from one market to another, economists find it useful to distinguish between the average and marginal worker. While the average teacher may place a low weight on pay, the marginal teacher does not. Wage changes act to reallocate labor through their effect on the marginal worker. Suppose that the relative pay of accountants rises by ten percent. Many accounting majors would have majored in accounting even at the old (or even lower) rates of pay. Many English majors would never consider majoring in accounting even if the pay of accountants doubled. However, at the margin there are some potential entrants—former accountants, marketing majors, economics majors—who are sensitive to the relative pay difference. It is the latter who enter or leave the occupation in response to modest changes in relative pay.

Many studies have shown that teacher turnover rates are sensitive to changes in relative pay. With a ten percent fall in relative pay, the average teacher may not consider quitting, however, there are some teachers, just on the verge of quitting at the old pay rate, who now quit as a result of the pay cut. The reverse holds with a relative pay increase. Some teachers on the verge of quitting decide to stay. The average teacher, as well as the average non-teacher, is not affected.

11. Performance-based compensation forces teachers to work harder to get more pay—but the extra pay is not sufficient for the extra work required.

"Professionalization" (raising salaries and creating expanded roles for teachers) is seen as adding to an already demanding schedule. Teachers now must become counselors, administrators and researchers. Often, teachers under these systems are given the authority to experiment with teaching and outreach but not given the time to prepare and evaluate the new methodology (i.e. extra training & extra time to plan). (Carvin)

Some teachers will exert more effort in order to earn performance-based compensation; others will not. Those who work harder have judged the monetary reward worth the effort. However, some educators may simply be gifted teachers and achieve higher gains for their students without any extra effort whatsoever. It is important to reward such individuals as we do gifted practitioners in other occupations. Under the single salary schedule, aside from seniority, the only way a gifted teacher can raise her pay is to accumulate academic credits. In other words, she needs to exert extra effort to earn an MA simply to demonstrate that she is a superior teacher. Of course, teachers who are not gifted teachers can readily earn MA's as well. Therein lies the problem.

This had led some to propose National Board Certification of superior teachers. Unfortunately, it has not yet been demonstrated that the National Board Certification process actually identifies teachers whose students have larger achievement gains (or that it is a cost-effective way to identify superior teachers). In addition, the National Board Certification process imposes a very costly time burden on teachers themselves, and, in fact, requires them to expend substantial amounts of time preparing portfolios and preparing for external assessments simply to demonstrate that they are gifted teachers. It may be that many highly talented teachers will find this cost too high and simply choose not to undergo the process.

True performance-based compensation simply rewards superior teachers for doing a good job. It does not require large investments of time from the teacher to demonstrate her superiority. College professors who are outstanding instructors are not expected to divert large amounts of time from their classroom or research preparing portfolios and taking external assessments to demonstrate their merit to others. On the contrary, their outstanding teaching is readily recognized and documented by their students, peers, and supervisors.

12. If the names of those who receive performance-based compensation are posted, parents might be upset if they disagree with the choices. Or they may be upset if their kids get teachers who did not receive performance-based compensation.

Parental satisfaction should be only one factor in merit judgments. This would make the former event unlikely. The latter case might present problems. In part, such problems would be ameliorated if merit were distributed in a more continuous fashion, as noted in section number eight above. In this case, no single group would be identified as getting performance-based compensation.

Opponents of performance-based pay point out that publicizing the names of award recipients creates embarrassment for those who don't make the list, "enmity between staff members, and lopsided class enrollments or possible legal action by parents demanding equal access to 'superior' teachers for their children. Strict confidentiality, on the other hand, can lead to rumors of favoritism." (Ellis)

Of course, evidence might become available as to which teachers earned the highest merit scores. However, this would put pressure on school administrators to hire and retain the best teachers. In the long run, both taxpayers and students benefit from empowering parents with this type of information, even if school administrators are inconvenienced as a result. Are we better off if information concerning superior doctors, dentists, and lawyers is

suppressed, even if all of us cannot avail ourselves of their services? Should we suppress information about inferior doctors, dentists and lawyers?

In the TAP model, all students are exposed to master and mentor teachers for some part of their school day. Thus, all kids benefit from having excellent teachers.

13. Risks of comparing the private, corporate, for-profit sector with education.

Can we really compare education to business? Teaching is not a business. It is a service profession. What good analogy can someone come up with to compare teaching to? Are we missionaries? What if someone decided to pay missionaries based on how many souls were brought to God? And how could you decide? By how many came down to the front at Altar Call or by how they lived their lives after their conversion?

It is not only difficult but it is "out of order" to compare education to a business. This is one of the critical issues that needs to be faced and dealt with in the continuing discussions of education—not only in the United States but elsewhere in the world as well. Our students, children and adults, are not widgets nor robots, and when one works with the human being one is in a completely different realm than when one works with other "natural resources." When one mechanizes or industrializes the process of education, or attempts to do so, the result is disastrous for the human persons involved: students AND teachers. In fact, to me it seems fundamental to the process of education (from the Latin which means "to lead forth") that the largest proportion of "success" cannot be measured or counted in the way in which some contemporary voices are demanding. Educating students cannot be equated with producing ball bearings!

Education, especially public education, cannot be compared to IBM or to most other businesses. If education was a business and profit was the motive, most public schools would quickly remove about 10-25 percent of the students on campus (the percentage depends on the population) because they simply were not "profitable" to work with. The "bottom line" for the company would look a lot better without them and they interfere with and reduce productivity. Unless my school is a big exception to the rule, those 10-25 percent seem to have a lot of rights to stay in our company, use our resources and reduce our effectiveness even if they aren't productive.

If you REALLY compare education to business, then you would have to pay teachers based on the performance of the students. But how do you judge that? I hope not on the many tests we are subjected to now. Since our "product" (the students) doesn't come to us pure and clear and free of past baggage, I don't think we have yet found a way to evaluate.

The mass of the current teaching profession is not ready to move to this arena. All of my peers in the business community must produce to be promoted or retained. To my knowledge education is the only profession that is so strongly based on a tenure basis. I have always believed strongly in "results pay."

Performance-based compensation is commonplace in other government and non-profit institutions, as well as in public and private higher education. However, it is worth noting that the private, for-profit sector of education is growing rapidly. Millions of parents are sending their children to for-profit tutoring firms such as Sylvan Learning Centers, which provide K-12 educational services. Sylvan also contracts with several hundred private and public schools to provide similar tutoring services within schools. School districts in many large cities have contracted with Sylvan to provide Title I services to disadvantaged students. Many for-profit firms such as Devry and the University of Phoenix provide post-secondary vocational training to businesses and individuals. Firms such as Edison and Beacon are managing charter and conventional public schools. This does not count the many firms that are springing up to provide Internet-based educational services. The burgeoning growth of this for-profit educational sector calls into question assertions that business practices in the private sector are incompatible with the provision of education services.

14. Performance-based compensation cannot be imposed from the outside.

If performance-based compensation is imposed on the schools from outside, rather from those in the trenches, it will be resisted. However, if we wait for the rank and file to impose it, it will never happen.

The details of how a performance-based plan will work as well as what share of pay will be based on group versus individual performance will need to be worked out by local school administrators. In all likelihood it will vary from school to school. It is appropriate, however, that pressure for accountability be imposed from the outside.

This does not mean that a performance-based pay scheme must bubble up from the ranks of teachers. These systems will have to be implemented by school administrators. It would probably be productive to have discussions with teachers during the planning and implementation stages of a performance-based pay plan (of course, such discussions are required in states with teacher collective bargaining laws). However, ultimately this is a matter of management rights. School administrators must have the authority to implement pay schemes which they see as representing the best interests of taxpayers, whether or not such schemes are popular with current teachers. Ultimately, some teachers may find performance-based compensation distasteful and leave teaching. They will be replaced by other teachers who find performance-based compensation less distasteful, or actually prefer working in an environment where effort and performance are recognized and rewarded.

15. People are too critical of education—it is actually doing fine, so why rock the boat by changing things?

One topic I've been pondering for a while is how critical our society is of our educational system(s).

Some questions I've had regarding this topic:

1) Why does the USA churn out phenomenal numbers of Nobel Prize winners? I believe Japan, which at one time was believed to have a far superior educational system than us, has not produced many if any.

Over the last 100 years, there have been 233 American Nobel prize winners. How many were educated in other countries? What about the other hundreds of millions of students?

- 2) *Why is our economy the envy of the world?*
- 3) *Why does our country continually show the world what entrepreneurship is all about?*
- 4) *If we start employing mass standardization at local, state and national level, will we destroy the essence of creativity that our country has come to represent?*

Part of me believes that one of the key reasons for our outstanding accomplishments is our somewhat "messy" approach to education. Our approach has allowed educators to pursue innovations. It has allowed educators to pursue their passions in given subject areas. It has not forced students to choose their direction in life by age 14 or so, which does happen in many countries. Every student receives a somewhat different education because they are exposed to different teachers that teach with a slightly different approach and emphasis. If we aim to create a standardized system, will we eliminate the vitality that we presently seem to take for granted? Speaking only for myself....if someone came into my class and mandated that I teach a given topic in biology in a certain manner and dedicate a certain number of days to that topic...I would most likely leave the profession. Being able to pursue my passions and share enthusiasm is a big part of what makes me an outstanding educator (I say that lightly, as I have to say it a lot to start believing it even a little).

I think public schools must just be the scapegoat for all that goes wrong with society. We have two private schools in my county; yet, the public school is almost always the county winner of STAR student contest, based on highest SAT score. People need someone to blame for everything that's wrong, and I think we've won that dubious honor right now.

Actually, international tests of mathematics find American children generally below-average as compared to children in other industrial nations. In addition, the test scores of urban black and Hispanic students are very low as compared to those of other socioeconomic groups. Dropout rates are also much higher. The income gap separating workers with low and high levels of educational attainment is at post-WWII highs. Careful statistical research finds rising labor market returns in relation to increased basic cognitive skills. Students who drop out of school or graduate with weak academic skills are likely to face a low and declining standard of living.

Conclusion

There are a number of serious objections to performance-based compensation for teachers. Many teachers are quite articulate in their arguments against such a system. However, it is the view of the authors that virtually all of the objections can be dealt with. In some cases, assumptions underlying the dislike of performance-based compensation must be challenged—other objections require some changes in the way schools operate.

Although the most vocal opponents are quick to point out failed efforts of the past, there are examples of long-standing cases where teachers are paid according to their tasks, efforts, achievements and performance. We are now beginning to see a few school districts where teacher pay depends, in part, upon what their students learn. We need to continue the experimenting. That will take courage on the part of teachers, administrators, school boards and parents. But the challenge seems worth the risk if the end product is greater student learning.

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