



Opinion Editorial

Educational Leadership
October 2008

How Might Performance Based Pay Move Us in the Direction of Excellence?

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Introduction - Strategies for School Improvement

America's public schools are facing many challenges both inside and outside of the classroom. Foremost among these is the challenge of increasing achievement levels for students across the continuum of ability and backgrounds. In response to this challenge, policy-makers and education officials have created numerous programs to raise the achievement levels for all students, particularly for disadvantaged students. Indeed, virtually every school official, education researcher, or interested person has a preferred remedy for our educational ills. These include instructional coaches, more time on task, smaller class sizes, extended school years, etc. Since we know what to do, many have argued, we could improve the achievement level of students across the country if we only had the political will. But here's the rub: there's little conclusive evidence that any of these strategies systematically lead to improved student performance or educational excellence.

Improving the Teaching Force

There is, however, one area in which we have good consistent evidence -- teachers impact student performance. Indeed, many researchers maintain that improving the quality of the nation's teaching workforce is the best policy intervention for raising student achievement (Goldhaber, 2002; Goldhaber & Brewer, 2000; Rivkin, Hanushek, & Kain, 2005; Sanders, Saxton, & Horn, 1997). To illustrate the importance of teacher quality, Director of the Institute of Education Sciences Russ Whitehurst reported that the fortunate student who has an effective teacher for three straight years will score more than 50 percentile points higher than his unlucky peer placed with an ineffective teacher for those same years. Whitehurst drew these conclusion from research conducted by Jordan, Mendro, and Weerasinghe (1997); Rowan (2002); and Sanders and Rivers (1996). So, how can researchers and policymakers increase the likelihood that students consistently have effective teachers in front of them? While a variety of options could be put in place, we contend that one of the most direct and easy influences is to change the compensation structure for educators.

How Are Teachers Currently Compensated?

The public school teacher single salary system, which operates in over 95 percent of all schools in America (Protsik, 1996), provides financial rewards based on a teacher's years of experience and degree attainment. The single salary system is based on the assumption that teaching ability improves with years of experience and with the attainment of a Master's degree. However, over the last two decades of research, many have argued that the benefits of teacher experience "plateau" after several years and additional degrees simply do not translate into enhanced student performance (e.g. Goldhaber, 2002). Thus, the current structure of teacher compensation is not likely to move the field forward in terms of encouraging student achievement.

Opinion Editorial



Further, and perhaps more problematic, there are perverse incentives built into the single salary system that might well exacerbate teacher shortages in key areas and encourage the best teachers to *exit* the system rather than stay around and work with high-need students. Since the current system includes no monetary rewards for effectiveness, many effective and experienced teachers seek more "compensation" through better working conditions, often choosing to leave "challenging" schools with disadvantaged students for more affluent schools serving advantaged students.

Within the current system, effective teachers might also seek to increase their compensation by exiting the classroom for an administrative position. Or worse, effective teachers may choose to leave the field of education entirely for other professions that have better systems of recognizing and rewarding good work. Either way, there are clearly aspects of our current system that encourage good teachers to do exactly the wrong thing -- *leave* the classroom!

Finally, the current system gives policymakers no freedom to address key shortage areas (such as we have in special education as well as in upper level math and science) by adjusting salaries upward for these particular groups. In the current structure, teachers in saturated areas are essentially overpaid, while teachers in critical shortage areas are underpaid. Given all of these problems with the current system, perhaps policymakers should give strong consideration to alternative forms of teacher compensation.

Policy Levers to Improve Teaching

Policymakers could modify salary structures in a few different ways to respond to the aforementioned problems. It is important to note here that, to create the needed changes, policymakers need to change the structure of pay and not just the magnitude of pay, as argued by some advocates for across-the-board raises. Such raises will not fix the problems inherent in a uniform salary structure described above. Rather, additional educational resources ought to be targeted to areas where they will generate the greatest benefits for our students.

One example of a targeted use of funds is the implementation of differential pay to teachers who are willing and able to teach in high-need areas (e.g. rural communities, inner city schools, etc.) or in high-need subjects (e.g. high school math and science, special education, etc.). This strategy would begin to address important shortages in the teaching corps, but might do little in retaining effective teachers who teach outside of these high-need areas.

In addition to differential pay, policymakers might consider merit pay, which could serve as a tool of both recruitment and retention of effective teachers. The theory of action supporting the concept of merit pay is straightforward. Merit pay programs are intended to positively impact the teaching corps in two ways -- through motivational impacts and compositional impacts. First, proponents contend that the possibility of earning financial rewards based on increased student achievement will motivate current teachers to focus their efforts on student achievement in the measured subjects through innovation and additional effort.

Opinion Editorial



Second, proponents of this strategy hypothesize that merit pay programs would draw a more talented pool of candidates into the profession. If the profession were to reward effectiveness through financial incentives, individuals confident that they would do well under a pay for performance scheme would be more likely to enter the profession. In such a merit-based scheme, the most effective teachers would consistently earn large bonuses and ineffective teachers would earn smaller bonuses; the result would be a natural selection whereby more effective teachers remain and their less effective peers leave. This process could lead to a systematic change of the teacher workforce.

How Might "Merit" be Determined?

With these two theoretical advantages in mind, policymakers and education officials must create a system that defines "merit", meaning when and to whom bonuses should be provided. To be clear, there is no single merit pay plan. Rather, merit pay plans can and should be tailored to each individual situation. In creating merit programs, a variety of inputs or outputs can be rewarded, including teacher characteristics, teacher behaviors, and/or student achievement. In fact, existing merit pay plans, that have been designed and implemented in various ways, have been subject to evaluation. While the research base in this area is small and growing, the evidence does suggest that compensation plans which reward teachers for student performance do appear to lead to improved performance for students. However, the research literature also highlights the opposition these plans often meet and the negative feelings that teachers sometimes share about merit pay.

So, how might a school leader build a plan that capitalizes on the potential benefits of merit pay in terms of enhanced student achievement, while simultaneously minimizing the potential negative consequences of teacher discord? Here, we draw from our experience over the last several years as evaluators of the Achievement Challenge Pilot Project (ACPP) merit pay program in Little Rock, Arkansas and as advisors to several school districts and policymakers considering the implementation of merit-based compensation reforms.

Achievement Challenge Pilot Project: Details and Results

The Achievement Challenge Pilot Project was implemented at several elementary schools in Little Rock, starting in the 2004-05 school year. Teacher merit, in this plan, was determined exclusively by student achievement gains based on the achievement exams (the nationally-normed Stanford Achievement Test) taken during the first month and last month of the school year. The "learning gain" for each student was based on the difference in normal curve equivalent (NCE) scores from the fall exam and the spring exam; merit bonuses for classroom teachers were based on these learning gains for all students in their classrooms. Merit bonuses for administration, supplementary teachers, and other staff were based on the learning gains of the school as a whole (see Barnett, Ritter, Winters, & Greene, 2007 for more details on the program and the payouts).

Opinion Editorial



After two years of evaluating the ACPP, we found that the program led to gains of approximately seven percentile points for students in mathematics, reading, and language. We also found that teachers reported increased satisfaction with their salaries without increased negative competition. Perhaps most importantly, survey respondents indicated that student performance improved, which indicates that teachers witnessed measurable academic improvement for their students before knowing test results. While the ACPP was not designed perfectly, the program exhibited several characteristics that we believe will foster success in a performance-based bonus program. Thus, based on our work with the ACPP and our reading of the literature in this area, we conclude by presenting our thoughts on the components of a performance-based pay system that has the potential to be effective.

Characteristics of a Successful Program

While there is clearly no single correct way to devise an effective performance pay scheme, there are definitely bad choices that program developers might make and characteristics of programs that are more likely to create good incentives for teachers and school leaders. Indeed, not all merit pay plans are created equal and the devil is, in fact, in the details. So, how should merit pay plans be designed to encourage excellence in student performance by recruiting and retaining effective teachers. We suggest the four following characteristics as a starting point in developing a performance pay plan.

1. Merit Pay Plans Should be Straightforward

One of the key criticisms of merit pay plans is that teachers often view them as based on "secret formulas" and have no idea why they were awarded or not. If this intervention intends to influence the motivation of classroom teachers, it certainly must be clear what the teachers are motivated to do! Thus, for a merit pay plan to be successful, it must be based on a payout scheme that can be understood by teachers so that they can figure out what types of behaviors and outcomes will be rewarded.

2. Merit Pay Plans Should be Based On Student Improvement, not Attainment

As is evident by the recent move at the U.S. Department of Education to allow states the flexibility to employ "growth" models in average yearly progress calculations, there is a growing consensus that any indicators of school or teacher effectiveness should be based on student growth rather than on absolute levels of student performance. It seems obvious than any plan that determines merit by absolute achievement levels will create the perverse incentive for teachers to leave behind students in low-performing schools or classrooms and seek placement in high-performing schools or classrooms. This is one of the key concerns raised by opponents of merit pay, but it can easily be addressed by rewarding educators for improvement.



Opinion Editorial

3. Merit Pay Plans Should Intentionally Foster Collaboration in Schools

Another fairly common criticism is that poorly-designed merit pay plans might create unhealthy competition among teachers within a school. Indeed, this is a legitimate concern with any plan that divides a "fixed" amount of reward dollars to a set number of teachers deemed meritorious. This is problematic, of course, because the receipt of an award by one teacher necessarily lessens the likelihood of his or her peers earning an award. It is clear that a "zero-sum" game such as this can discourage collaboration.

Therefore, we recommend that merit pay plans address this concern for collaboration in two ways. First, plans should allocate awards to teachers based on the extent to which they meet their goals, regardless of how their peer teachers perform. This will be a challenge for school accountants, who must budget for the possibility that all teachers earn the maximum award. Nonetheless, this situation is far better than one that pits teachers against each other.

Second, successful merit pay plans should include a reward component based on school-wide student improvement. That is to say, the principal, aides, counselors, and support staff all contribute in varying degrees of responsibility to the education of students even though they may not have students directly in their charge. It makes sense that the rewards for these individuals should be based on school-wide measures of improvement in student achievement. Moreover, the merit "score" for classroom teachers with tested students should be based, in part, on school-wide student achievement growth. In this type of plan, a classroom teacher not only has an incentive to improve the achievement of students in her classroom, but also to improve the achievement of all students in the school. Thus, negative competition is avoided and positive collaboration is encouraged.

4. Merit Pay Plans Should Incorporate Substantial Financial Awards

Finally, successful merit pay plans should attach significant bonuses for accomplishing goals. As such, education officials cannot expect teachers to change their behavior for the proverbial peanut bonus. The primary failure of low-paying plans is that teachers simply do not believe the perceived additional work is worth the potential pay. Thus, plans without significant bonuses are unlikely to provide the necessary motivation.

Concluding Thoughts

As policymakers and education officials consider ways to recruit, retain, and reward effective public school teachers, they may well consider the implementation of a merit pay program. In the past, school leaders may have not even considered the use of merit pay because of a belief that there is no way to do this reform well. In fact, our experience suggests that policymakers can devise plans that are acceptable and indeed attractive to teachers. Most importantly, it is possible to devise plans that create the appropriate incentives for teachers to focus on student learning growth.

Opinion Editorial



It is important here for us to make explicit an unstated but critical premise of our argument: the objective of a performance-based pay program is to improve teacher focus on student achievement and thus enhance student achievement. The goal is not to create a salary scale that is "fair" to all teachers. In fact, it is nearly certain that any system we would devise would be imperfect and would sometimes provide higher bonuses to less effective teachers and lower bonuses to more effective teachers. Ultimately, the key question is: does the system encourage teachers to focus on increasing student achievement in key areas and encourage those teachers who are effective to remain in the field? If so, this is the type of system we would want, even if it is not perfectly fair (however defined) to all teachers. We must remember that schools are in the business of fairly serving students, not equally paying teachers!

Furthermore, it is not at all clear that the current uniform pay scale is fair or just, to teachers or to students. Indeed, there are good reasons to believe that the current system unfairly underpays effective teachers and (more importantly) unfairly treats disadvantaged students by placing less effective teachers in their classrooms. For all of these reasons, educational leaders should immediately seek policies that address these critically important problems, and we believe that merit pay is one such solution.

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Opinion Editorial



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