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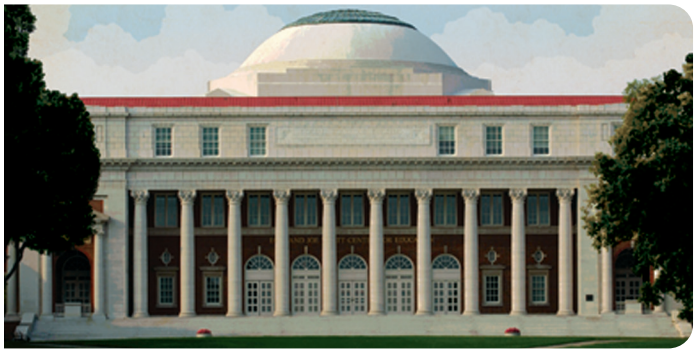
Research Brief



Teacher Performance Pay: A Review

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A comprehensive report from the National Center on Performance Incentives reviews the history of teacher pay policy in the United States and earlier cycles of interest in merit or performance-based pay, the various critiques of its use in K–12 education, and empirical research studies that are useful in considering its likely impact. The report from Michael J. Podgursky and Matthew G. Springer finds evidence of a recent upsurge of interest in incentive programs in many states and local school districts, but acknowledges the expanded use of performance pay in educational settings has been controversial. While performance pay incentives for teachers have generally been shown to increase the behavior or outcome being incentivized, the authors caution that policymakers must pay close attention to how student achievement and teacher effectiveness are defined and measured. Despite its challenges, the potential economic and academic benefits of pay for performance models in educational settings warrant continued experimentation and evaluation.

Performance Pay for Teachers in American Public K-12 Education

Data from a national survey in 2000 shows that close to 100% of traditional public school teachers are employed in school districts that make use of salary schedules in pay setting. Thus, roughly 3.1 million public school teachers from kindergarten through secondary level are paid largely on the basis of years of experience and education level – two variables weakly correlated with student outcomes.

Pay determination practices in most professional fields are related to an individual's performance on the job. A 1996 survey of 1,681 private firms revealed that 61% used performance-related compensation systems. A leading compensation textbook reported in 2005 that over three-fourths of exempt (non-hourly) employees in large firms are covered by merit pay systems based on outcomes. While incentives are common practice in private sector compensation plans, variable pay schemes linked to outcomes are less prominent in the public sector, particularly in education.

Yet interest in the use of performance pay models aimed at improving student outcomes throughout the public school system has grown in recent years. A few notable initiatives in districts and states across the nation, some of which are currently under evaluation, are: ProComp in Denver, the Governor's Educator Excellence Award Programs in Texas, Florida's Merit Award Program, Minnesota's Q-Comp, the Milken Family Foundation's Teacher Advancement Program (TAP), and the United States Department of Education's Teacher Incentive Fund (TIF).

Trends in Performance Pay for Teachers

Early research on pay for performance programs highlighted the difficulty of creating a reliable process for identifying effective teachers, measuring a teacher's value-added contribution, eliminating unprofessional preferential treatment during evaluation

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processes, and standardizing assessment systems across schools. Based on results from these short-lived initiatives, some argue that performance-pay plans fail because teaching is not a field that lends itself to performance compensation. Others believe such failings are not inevitable and point to a small but growing body of evidence supporting additional examination of the role of incentives in improving student achievement. The authors discuss three past-criticisms of performance pay that have continued to influence current policies, then proceed to share new perspectives on those arguments based on current practices. These criticisms and new perspectives are juxtaposed in Table 1 below.

While researchers have found substantial variation in teacher effects within local school districts, and even within schools, they also have consistently found that these effects are largely unrelated to measured teacher characteristics such as the type of teaching certificate held by the teacher, the teacher's level of education, licensing exam scores, and professional experience beyond the first two years of teaching.

Other Considerations

Some research suggests resource allocation practices maintained by the single salary schedule are not an efficient means of improving student performance. As teachers age and move up in levels of experience and education, school districts will find themselves devoting even larger expenditures to schedule-driven pay increases that are unlikely to have any significant effect on student achievement. In recognition of this concern, the authors raise two more important issues that buttress arguments for experimenting with teacher pay for performance: labor market selection and teaching hiring practices.

Labor market selection points to an important theme often ignored in education studies; that is, in the long run, a performance pay scheme tends to attract

Table 1. Traditional Arguments Versus New Perspectives

The "Nature of Teaching" Hypothesis		
Teacher performance is more difficult to monitor than performance in many other professions because output is not readily measured in a reliable, valid and fair manner.	vs.	While this argument had merit historically, its relevance may be waning given the major advances in data systems being put in place in states and districts.
Team Production		
The introduction of performance-related rewards at the individual teacher level might reduce incentives for the teachers to cooperate and, as a consequence, reduce school performance.	vs.	Criteria for judgment do not need to use a relative contribution standard for evaluation. Rather, teachers can be judged against a standard based on past performance of teachers in the district.
The Multi-Tasking Problem		
Multitasking arises as a problem when the performance of a worker has multiple dimensions, only some of which are measured and incentivized.	vs.	If test scores are used as the primary criteria, a potential concern is the placing of an inordinate weight on assessment measures, rather than other valuable learning activities. This effect could be mitigated by diversifying the measures used to evaluate teacher performance.

employees who prefer and prosper under it. The level of dispersion of teacher effectiveness found in large scale value-added studies suggests that substantial gains may be possible by using of performance pay as a teacher quality sorting mechanism. Thus, any policy that can retain and sustain the performance of teachers in the upper tail of the distribution possesses potential for substantial impact on student growth.

Hiring practices are a second area of concern. Due to a lack of complete and accurate information when hiring new teachers, principals are left to use noisy signals of "true" teacher effectiveness (e.g. years of experience, highest degree held, former employer recommendations). In most professions, these key informational deficiencies are ameliorated by future performance assessments and as pay raises become more closely tied to actual productivity. In education, however, the single-salary schedule and historical tenure regulations make it difficult to align pay and performance to align after hire. If only effective teachers have their contracts renewed, for example, then pay on the basis of seniority would tend to align pay and performance. While such a mechanism may work in the first years of employment, once tenure is earned, contract non-renewal can only be triggered by severe employee malfeasance.

Empirical Research

Podgursky and Springer note that economic theory can only take us so far in hypothesizing about the effect of performance pay. It is important to glean insight from empirical research. Accordingly, the authors review rigorous studies of performance pay programs that employ a conventional treatment and control design, with pre-treatment benchmark data on student performance for both groups.

The authors identify nine such evaluations, including four international studies (two in Israel, one in Kenya, and one in India) and five domestic studies (one in Arkansas, two in Dallas, one in Michigan, and one nationally representative sample). Seven of the nine incentive studies yielded positive student achievement effects, while two had mixed results. Though the studies have generally positive results and provide a strong case for further policy experimentation, more research is needed.

Conclusion

While the scholarly literature is not yet sufficiently robust to prescribe how systems should be designed, the generally positive findings suggest the need for future experiments and pilot programs by districts and states. In order to supplement current findings, it is critical that these programs be introduced in a manner amenable to effective evaluation and include substantial teacher bonuses as a means of gauging the motivation effect of the incentive value. Given the commitment of schools and districts to the existing salary schedule for teachers, support from outside sources such as foundations may help mitigate the financial exposure required to operate and evaluate experimental incentive initiatives.

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