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# Social Science Theory and Performance-Based Teacher Pay

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NATIONAL CENTER ON  
Performance Incentives



# Why Performance-Based Pay?

- Public concern over student performance on state accountability tests and international comparisons
- Improve teacher and administrator productivity
- Recruit and retain more highly qualified teachers
- Many local school districts and states are presently considering new performance pay initiatives



# Historical Background

- After the release of *A Nation at Risk* (1983), local school districts viewed performance-related pay as a means to improve student outcomes and reform the single salary schedule
- These programs faced several challenges:
  - Identifying effective teachers
  - Measuring a teacher's contribution to student learning
  - Eliminating preferential treatment in evaluations
  - Standardizing assessment systems



# Historical Background

- Many performance pay programs failed to:
  - Devise strong financial incentives for good teachers
  - Receive the support of teacher unions
  - Create a valid and reliable evaluation process
  - Recalibrate program components and bring the policy initiative to scale
- Criticisms of the nation's first policy experiments in compensation reform have stigmatized the recent movement for performance pay



# Performance Monitoring

- Teacher performance is difficult to monitor because output is not readily measured in a valid, reliable, and fair manner (Murnane and Cohen, 1986)
- This concern may be less relevant as states and local school districts begin to develop longitudinal student-level data systems with the support of federal grants
- Policy analysts must carefully think about statistical reliability and robustness of value-added estimates



# Team Production

- Performance pay for individual teachers might reduce the motivation for professional cooperation and thus reduce, rather than increase, school performance
- The professional relationship between teachers and administrators might be destroyed if administrators are put in a position of rewarding individual teacher performance



# Team Production

- A performance bonus given to an entire team of teachers would not undermine team morale
- Rewards to an entire team, rather than to teachers on the basis of individual performance, may promote the conditions for a free-rider problem
- The performance incentive shrinks rapidly as the number of teachers in the team increases



# Team Production

- A different approach is rewarding teachers who satisfy an absolute standard, rather than on the basis of relative performance
- The National Center on Performance Incentives is conducting a randomized field experiment where teachers are judged against a standard based on the past performance of teachers in the district
- All teachers could be eligible for a bonus



# The Multi-Tasking Problem

- If worker performance has several dimensions, but only some are measured and rewarded, teachers may shift their work toward the measured activities
- A solution is diversifying the range of measures used to assess teacher performance
- Policies must be designed with a monitoring component to reduce the possibility of cheating or opportunistic behavior



# Payment for Input and Payment for Output

- Payment for output, rather than payment for input, is more likely to raise overall productivity
- District and school administrators are restricted by informational deficiencies when hiring new teachers and cannot align pay and performance over time
- A performance pay program will attract employees who are good at the primary activity to which incentives are attached and repel those who are not



# Payment for Input and Payment for Output

- Selection effects are a major factor in teacher labor markets with regard to teaching ability and wages
- Hoxby and Leigh (2003) find the migration of high-ability women out of the teaching profession was the result of wage compression and not the pull of non-teaching opportunities
- The selection argument may undermine Murnane and Cohen's (1986) critique of merit pay in the context of teacher recruitment and retention patterns



## Conclusion

- Theory can introduce a helpful set of arguments for consideration, but it provides only a limited base of knowledge about teacher performance-pay programs
- Educational researchers and policymakers must turn to field experimentation and independent appraisal to determine whether performance-based pay policies constitute an effective policy innovation for local schools in the United States



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