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PEABODY COLLEGE

NATIONAL CENTER ON  
Performance Incentives

College of Education &  
Human Development

# Teacher Compensation Reform: Context, Status, and Direction

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Presentation prepared for *2010 Convention of the Council for Exceptional Children*

April 23, 2010  
Nashville, Tennessee



# Outline

1. Past and present practices
2. Research on pay for performance programs
3. Challenges for special education



# 1. Past and Present Teacher Compensation Practices



## 1.1. Grade-Based Compensation Model

- Paid teachers according to the level of schooling taught. Some systems had a small “merit pay” component.
- Late-19<sup>th</sup> / early-20<sup>th</sup> century to 1940s.
- White males more frequently paid more than nonwhite male teachers, and female teachers.
- Social push for equality brought about pay system that standardized pay practices regardless of race, gender, or grade-level taught. Also eliminated “merit pay” component.



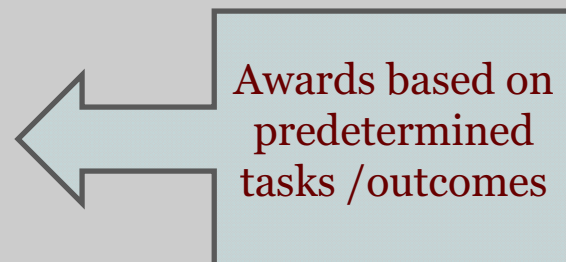
## 1.2. Single Salary Schedule

- Provides salary increments according to a teacher's years of experience and number of college credits/units or degrees earned.
- First adopted in 1921, the single salary schedule leveled the playing field among teachers. Highly predictable, it also eased annual salary negotiations between school boards and teacher unions.
- By 1950 more than 95 percent of public schools adopted single salary schedule.
- Today, 96 percent of public school districts pay teachers according to the single salary schedule.



## 1.3. Differentiated Compensation Plans

- Efforts to reform single salary schedule have emerged in virtually every decade since the 1950s.
- Types of reforms can be classified into a handful of categories.
  - Pay for performance / merit pay
  - Knowledge- and skill-based pay
  - Career ladders
- Hard-to-staff subjects
- Hard-to-staff schools
- Recruitment and retention awards



*Note:* See handout on Types of Teacher Compensation Reform.

*Source:* Springer, M.G. (2009). *Performance Incentives: Their Growing Impact on American K-12 Education*. Washington, DC: Brookings Institution Press.



## 1.4. Why Pay for Performance?

- Many contend pay for performance is an ideal alternative to single salary schedule.
  - Motivation
  - Selection or compositional effect
  - Align interest and goals
- Sturdy and influential base of stakeholders opposes teacher pay for performance.
  - Crowding-out of intrinsic rewards
  - Lack appropriate measures and technical capacity
  - Empirical evidence is inconclusive



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## **2. Research on Teacher Pay for Performance Programs**



## 2. Summary of Research

- Direct evaluation literature is slender, the most rigorous studies come from abroad.
- Literature reports generally positive effects, but not sufficiently robust to prescribe how systems should be designed (e.g., optimal size of bonuses, mix of individual and group incentives, etc).
- Studies have focused primarily on short-run motivational effects, with very little attention on compositional effect.
- Most rigorous evidence comes from abroad.

## 2.1. Prior Research

Program (country / yr.)	Design	Sample	Treatment	Results
<b>APRESt</b> (India / 2006-08)	RCT	500 sch. 68k stud.	Teacher	+ high-stakes test (.16 to 0.19 std. dev.). + low-stakes test (0.11 to 0.18 std. dev.).
			School	+ test-prep, freq. assigned homework, help outside class, focused on low-perf. students.
			2 input txs. (para-prof. or block grant)	teacher tx. > school tx. school tx. > both input txs. both input txs = control.
<b>Christelijk Steuenf. Incentive</b> (Kenya / 98-99)	RCT	100 sch. 1k tch. 51k stud.	School	+ high-stakes test. +/- low-stakes test (coached test-taking skills).
				+/- tch. attend., inst. practices, and freq. hw. + freq. out-of-school test-prep.
<b>School Perf. Prog.</b> (Israel / 94-97)	RD	62 sch.	School	+ test score
				+ total credit hrs. earned, science credit hrs. earned, and percent. stud. taking matriculation exam.
<b>Teacher Incentive</b> (Israel / 2001)	RD	27 sch. 4k stud.	Teacher	+ exit exam credits earned in mathematics (18 percent) and reading (17 percent)

Note: RCT = randomized, controlled trial; RD = regression discontinuity.

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## 2.2. Summary of Current Research

- A handful of rigorous evaluations have been launched in U.S. since 2006, but many more are needed.
- Studies evaluate the impact of program on student achievement, teacher attitudes, teacher behavior, institutional/organizational dynamics, cost-effectiveness, etc.
- Need to begin comparing different performance pay models (e.g., individual vs. team awards; small vs. large bonuses; single vs. multiple performance metrics).
- Continue to identify and advance different measures of teacher performance.

## 2.2. Current Research

<b>Program</b> (location / year)	<b>Design</b>	<b>Sample</b>	<b>Treatment</b>	<b>Focus</b>	<b>Evaluator</b>
<b>POINT</b> (Nashville, TN / 2007 - 2009)	RCT	≈ 300 teachers	Teacher	Student outcomes Teacher attitudes / behavior Org. dynamics Cost-effectiveness	Nat. Ctr. on Performance Incentives (NCPI)
<b>Project on Team Incentives</b> (Rnd. Rock, TX 2009 - ?)	RCT	82 teams	Team (grade-level)		
<b>Project REAL</b> (Chicago, IL 2008 - 2011)	RCT	32 schools	Hybrid (teacher and school)	Student outcomes Teacher attitudes Teacher behavior	Mathematica Policy Research
<b>TEEG Prog.</b> (State of Texas 2007 - 09)	RD	≈ 2,500 schools	Mixed (teacher, team, and/or school)	Student outcomes	NCPI
<b>School-Wide Perf. Bonus Program</b> (New York City 2008 -10)	RCT	≈ 200 schools	School	Student outcomes Teacher attitudes / behavior Org. dynamics Teacher mobility	RAND/NCPI  Others?

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<b>Design Component</b>	<b>Types/Forms</b>	<b>Definition</b>
<b><i>Incentive Structure</i></b>	<ol style="list-style-type: none"> <li>1. Rank order tournament</li> <li>2. Fixed performance contract</li> </ol>	The scheme or mechanism that guides the allocation of awards in a pay for performance system. In some cases only a limited amount of employees can earn an award while in others any employee who meets a predetermined performance standard will receive an award.
<b><i>Unit of Accountability</i></b>	<ol style="list-style-type: none"> <li>1. Individual unit</li> <li>2. Team/group unit</li> <li>3. School unit</li> </ol>	The entity responsible for a measurable product or service whose performance on that measurable dimension determines bonus eligibility. The unit of accountability can be defined in a myriad of ways, including the individual teacher, a grade-level or departmental team of teachers, all employees within a school, or some combination thereof.
<b><i>Performance Measures</i></b>	<ol style="list-style-type: none"> <li>1. Inputs</li> <li>2. Processes</li> <li>3. Outputs</li> </ol>	The evaluation criteria for gauging employee performance, i.e., what should be evaluated, how appraisal criteria should be linked to rewards, and the measures and instruments that will assess performance.
<b><i>Standards and Thresholds</i></b>	<ol style="list-style-type: none"> <li>1. Linear models</li> <li>2. Limited linear models</li> <li>3. Threshold levels (i.e., Step function)</li> </ol>	Determines the required level of performance for a school, team of teachers, or individual teacher to secure a reward. Dictates the number of units that can earn a bonus as well as what scale or minimum standards these units must meet.
<b><i>Size of Bonus Award and Bonus Award Distribution</i></b>	<ol style="list-style-type: none"> <li>1. Egalitarian</li> <li>2. Hierarchical individualist</li> </ol>	The size of bonus, or payout level, refers to the amount of the total bonus award a school, team of teachers, or individual can earn. Distribution refers to the guidelines that determine the share of teachers that receive a bonus award and how bonuses vary among employees.
<b><i>Payout Frequency</i></b>	<ol style="list-style-type: none"> <li>1. Multiple times per year</li> <li>2. One time per year</li> </ol>	The rate of award distribution as well as the time interval between assessment of the incentivized activity and distribution of the performance award.



### **3. Challenges for Special Education**



## 3.1. Some Key Issues

- Few evaluation models have addressed the challenges associated with evaluating special education teachers and specialists.
- Literature related to the evaluation of special education teachers is limited.
- Special education teachers often evaluated using same instrument as general educators, and contractual agreements in many locations prevent modification of system for special educators.
- Lack of standardized assessment and, even if one exists, host of measurement-related issues (small n, does not address social/behavioral growth, co-teaching, accommodations, etc.).



## 3.2. Evaluating Special Education Teachers

- Goal-driven professional development
- Parent / supervisor evaluations
- Student evaluations
- Self-report measures
- Teacher portfolio
- Classroom artifacts
- Observation protocols
- Standardized assessments?



### Demand

- ↑ student enrollment vs. mainstreaming (impact may vary by context).
- Poor hiring practices, including cumbersome application process, layers of bureaucracy, inadequate customer service, late notification of vacancies, delayed job postings, late release of funding information.

### Supply

- Licensing requirements act as barrier.
- Very few high-quality teacher training programs / undergraduate institutions.

## Teaching Shortage Special Education

### Other Considerations

- School leaders and peers need to become better educated about special education.

### Retention

- Parent expectations – very demanding.
- Lack of leadership, particularly their understanding of special education issues.
- Safety issues.
- Transition to non-special education teaching position
- Lack of support (e.g., induction) and high quality PD opportunities.
- Professional isolation.



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# QUESTIONS



**Matthew G. Springer** is a research assistant professor of public policy and education at Peabody College of Vanderbilt University and director of the federally-funded National Center on Performance Incentives. Professor Springer's research interests involve educational policy issues, with a particular focus on the impact of policy on resource allocation decisions and student outcomes. His current research includes studies of the impact of incentive pay programs on student achievement and teacher selection; schools response to No Child Left Behind; and the impact of school finance litigation on resource distribution. Professor Springer's research is currently funded by the United States Department of Education's Institute of Education Sciences, Smith Richardson Foundation, Texas Education Agency, and New York City's Fund for Public Schools. He has also served on several advisory committees charged with designing alternative compensation systems for teachers and/or principals at the state and district level, and conducted analyses of school finance systems in Alaska, Kentucky, Missouri and South Carolina. He received a B.A. in education and psychology from Denison University and his Ph.D. in education finance and policy from Vanderbilt University.

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