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This working paper was supported by the National Center on Performance Incentives, which is funded by the United States Department of Education’s Institute of Education Sciences (R30SA06034). This is a draft version of a paper that will be presented at a national conference, Performance Incentives; Their Growing Impact on American K-12 Education, in Nashville, Tennessee on February 28-29, 2008. The views expressed in this paper do not necessarily reflect those of sponsoring agencies or individuals acknowledged. Any errors remain the sole responsibility of the author.

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Collective Bargaining in Education and Pay for Performance

JANE HANNAWAY
ANDREW J. ROTHERHAM
Some reformers focus on improving skills through better training, both pre-service and in-service;\textsuperscript{4} others focus on teacher recruitment strategies.\textsuperscript{5} But the reform that has generated the most attention, and the most heat at the local, state, and national level, is giving teachers performance incentives. There are two theories of action that undergird this approach. One is that incentives matter and teachers would produce greater student learning (or at least put greater effort into producing student learning) if there were incentives or rewards for doing so. The second is that because current compensation policies generally do not significantly differentiate among teachers based on characteristics other than longevity of service and courses taken, introducing compensation-based ways of recognizing and rewarding performance could make teaching a more attractive career option. Both approaches also assume that rewarding performance might also put to better use funds now in the traditional compensation system, which rewards teachers for characteristics (such as certification and experience) that are at best weakly related to teacher effectiveness.

Almost every area of policy -- from tax policy to health and environmental policy -- uses incentives of some form to promote desired ends. In education, they are strongly resisted. One reason for resistance is simply that accountability based on performance is relatively new to education. Traditionally, educational accountability was based on

\textsuperscript{4} See, for example, Hill (2007) for review of research on the effects of different forms of professional development on teacher effectiveness.

\textsuperscript{5} Boyd, Lankford, Loeb Rockoff and Wyckoff (2007), for example, show the likely student achievement effect of hiring teachers with different qualifications and assigning them to high poverty schools is reducing the achievement gap. The teachers were mainly teachers from the New Teacher Project and Teach for America who had, for example, higher SAT and other test scores. Research has shown, however, that traditional teacher characteristics that affect pay, such as certification, years of experience (beyond the first few years), and holding a master’s degree, have little relationship to teacher effectiveness. See, for example, Kane, Rockoff and Staiger, 2006.
inputs: counts of students, teachers, class size, etc. School level accountability began to emerge in a few states in the late 1980s and 1990s; nationally, however, No Child Left Behind (NCLB) established school level accountability only in 2001. According to the law, schools that persistently do not perform face consequences. Not surprisingly, these policies met with considerable push-back from the education establishment when they were introduced, as they continue to face substantial opposition today.

When performance accountability is focused on teachers, the issues become magnified and the dynamics intensify. Teacher-based performance incentives fundamentally change the name of the game for teachers: measured student achievement gains become the focal point of human resource management strategies. Doing this in a way that is effective, fair to teachers, and defensible is a complicated task, as we discuss later. But teachers have a powerful guardian to protect their interests: teachers unions.6

Teachers unions gained purchase in American education in the 1960s largely by piggybacking on the precepts of industrial unions, focusing principally on protecting their members from unreasonable management demands and emphasizing “bread and butter issues.” Today, in many states, collective bargaining between unions and management largely determines the rules governing the education workplace - schools. Union resistance to differentiation of its members, especially on the basis of performance, is consistent with bargaining for the collective. But growing demands for accountability and improved performance in education, along with large new databases that link tested

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6 Interestingly, when observed across states with mandatory and non-mandatory collective bargaining statutes, these laws are seen to have only modest effects on negotiated contracts and, in turn, on teacher practice in the classroom. For a discussion of these variations, see Hess and Kelly (2006).
student performance to individual teachers, are presenting challenges to the unions’ positions because ways to measure performance that are defensible, effective, and fair are realistic possibilities in public policy.

The purpose of this paper is to examine the interplay between the emerging policy focus on teacher performance incentives and the response of teachers’ unions. We focus first on the policy shift itself. Without an understanding of the nature of the teacher’s job and its tradition, it is difficult to understand the tug-of-war both for and against performance incentives. We then examine the extent to which, and the ways in which, teachers unions are responding to demands for increased accountability and the possible consequences of this relationship for shaping policy and practice.

**Traditional mechanisms of control**

Teachers traditionally have carried out their work with little formal control over what they do. This is in marked contrast to most other organizations that employ a variety of mechanisms to direct the work behavior of their members. These include: 1) specifying and regulating tasks, say, through detailed procedures, as is common in medical practice and for airline pilots; 2) directly monitoring and supervising what employees do, common in much office and craft-type work; and 3) examining output, such as sales numbers and the publication records of professors.

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7 In the 1980s organization theorists, including James March, Karl Weick and John Meyer, focused on this aspect of education organizations, sometimes labeling them as “loosely-coupled systems” and analyzing them as “institutional organizations” that were structured to correspond to external expectations rather than the internal coordination and control of tasks.
To some extent, these three mechanisms are substitutes for each other. So, for example, in situations where output control is not exercised, perhaps because output is difficult or costly to measure, high levels of supervision or procedural control might be present. Similarly, if output is relatively easy to measure and monitoring behavior costly, as in the case of sales, output measurement might be the primary control mechanism.

Education has typically employed relatively weak controls, of any sort, over teacher classroom practice. No doubt part of the reason is that most forms of control have been costly to institute or do not provide a good fit with the nature of education work. For example, teaching involves complex and highly variable tasks; one-size-fits-all procedures to guide instruction do not work. Good teachers continuously adjust their instructional and management strategies in the classroom as they gauge student response and understanding. In addition, classroom to classroom differences and school to school differences affecting instruction can be substantial.

Monitoring and directly supervising teachers might make sense, but the cost is exceedingly high. Teachers work behind classroom doors and are not readily observable. There are simply too many teachers in too many separate classrooms to monitor them in any effective way. And, output control based on student test performance, until recently, has not been possible largely because the appropriate data have not been available.

For sure, the school accountability policies of the last decade have increased all forms of control on teachers with measurable effects on instructional behavior, for better or
worse. But an examination of recent data suggests that, even with presumed increases, teachers retain considerable discretion over their day to day work. Below, Table 1 shows that the vast majority of teachers reported in the *Schools and Staffing Survey (SASS)* in 2003-2004 that they had ‘moderate’ or ‘a great deal’ of control over all key aspects of their work. Over 90 percent reported that they had at least moderate control over teaching techniques, evaluating students, disciplining students and assigning homework. More than two-thirds reported a similar level of control over selecting course content, and more than a majority reported control over instructional materials.

### Table 1. Teacher Control over Work

<table>
<thead>
<tr>
<th></th>
<th>Novice Teachers (≤ 3 yrs. exp.)</th>
<th>Experienced Teachers (&gt; 3 yrs. exp.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No control / minor (%)</td>
<td>Moderate / great deal (%)</td>
</tr>
<tr>
<td>Selecting instructional materials</td>
<td>46.7</td>
<td>53.3</td>
</tr>
<tr>
<td>Selecting course content</td>
<td>32.3</td>
<td>67.7</td>
</tr>
<tr>
<td>Selecting teaching techniques</td>
<td>5.3</td>
<td>94.7</td>
</tr>
<tr>
<td>Evaluating students</td>
<td>5.2</td>
<td>94.8</td>
</tr>
<tr>
<td>Disciplining students</td>
<td>8.1</td>
<td>91.9</td>
</tr>
<tr>
<td>Assigning homework</td>
<td>4.7</td>
<td>95.3</td>
</tr>
</tbody>
</table>

*Respondents (teachers) were asked, “How much control do you have in your classroom at this school over the [areas above] of your planning and teaching?” Responses were scaled from 1 to 4 corresponding to “no control”, “minor control”, “moderate control”, and “a great deal of control”, respectively. Source: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Public Teacher Questionnaire,” 2003-2004.*

What may surprise many about these findings, especially those not familiar with education, is that novice and experienced teachers report generally similar levels of control over their work, suggesting that discretion comes with the job, not with

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8 See, for example, Shepard and Dougherty (1991); Romberg, Zarinia and Williams (1989); Hamilton, Berends, and Stecher (2005); Koretz and Hamilton (2003) and Hannaway and Hamilton (2007) for review.
experience on the job as it does in many other occupations. It is a part of being a teacher, again for better or for worse, and it begins on day one.\(^9\)

Even apart from teachers’ union influence in education, changing the expected boundaries of discretion among actors in any organization is fraught with friction. Discretionary boundaries define legitimate or acceptable organizational behavior for different positions.\(^{10}\) They are part of the employment contract between employees and their organization, whether explicit or implicit. Not surprisingly, changing these terms tends to be resisted in any organization, as we are seeing with teachers. The implicit contract with new teachers, however, may be different from the contract with veteran teachers; that is, in the era of data and accountability, novice teachers may not register administrators’ discretion as encroaching upon their own, compared to their more veteran counterparts.\(^{11}\)

What makes change even more difficult in the case of teachers is that discretionary boundaries have become formalized in institutional structures. An analysis of the terms of collective bargaining agreements in the country’s 50 largest school districts, collected by the National Council on Teacher Quality (NCTQ), shows that only 42 percent of these districts require observation of tenured teachers once a year and 20 percent require it only

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\(^9\) See, for example, Kardos and Johnson (2007)

\(^{10}\) These ideas are central to the thinking of Chester Barnard (1938) and Herbert Simon (1960) who recognized that organizational actors defend the boundaries. Chester Barnard referred to the area within the boundaries as the “zone of acceptance”, the area in which employees agree to accept organizational authority. Anything outside the zone is illegitimate and resisted.

\(^{11}\) Interestingly, a majority (55%) of new teachers (< 5 years exp) in a Public Agenda survey have more favorable views about new compensation schemes for teachers than veteran (>20 years) teachers (33%). In addition, they are more likely to think that tenure and documentation requirements make it too difficult for principals to fire anyone but the very worst teachers (41% versus 30%) (Farkas, Johnson and Duffett, 2003).
once every 3 or more years. For untenured teachers, who (as we have seen above) have considerable discretion, required observation is shockingly low. Only about a quarter of the districts require observation 2-3 times a year; the others require it less and over 20 percent have no requirement. (See Table 2).

It is not uncommon for provisions like this to appear in state law rather than teachers’ contracts. However, in this case, Education Week reports that while 43 states require formal evaluations, in only 12 states is that evaluation at least annual and in only 12 states is it linked to student achievement.\textsuperscript{12} At the district level, required enforcement is similarly absent. In a recent analysis of Midwest school districts using a representative sample, more than 60 percent of districts did not name specific criteria to be evaluated and less than 10 percent indicated what kind of training was required of evaluators.\textsuperscript{13} While some schools and districts may observe more often than required, they only have the “right” to observe as often as is codified in their agreement and most unions monitor compliance with negotiated terms. At a minimum, the agreements reflect and reinforce a strong culture of teacher autonomy.

\textsuperscript{12} Olson (2008). Also see Toch and Rothman (2008) for further discussion of teacher evaluation. \textsuperscript{13} Brandt et al. (2007)
If we consider these observations in terms of instructional time in the classroom, they appear trivial. For example, consider the school district that requires the greatest amount of time for teacher observation for a tenured teacher: once a year for 45 minutes. This means that a tenured teacher would be observed for 0.08 percent of the time spent teaching in a year. An untenured teacher would be observed a total of 135 minutes a year or 0.23 percent of teaching time. The likelihood that these observations are representative is slim, not only because of the small amount of observation time, but also because teaching is a complex activity with considerable variation, and is unlikely to be captured reliably with a short snapshot.

<table>
<thead>
<tr>
<th></th>
<th>Tenured Teachers</th>
<th>Untenured Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
</tr>
<tr>
<td>2 –3 times per year</td>
<td>0 (0)</td>
<td>14 (28)</td>
</tr>
<tr>
<td>1 time per year</td>
<td>21 (42)</td>
<td>24 (48)</td>
</tr>
<tr>
<td>Every 2 years</td>
<td>8 (16)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Every 3 years or more</td>
<td>10 (20)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Not stated</td>
<td>11 (22)</td>
<td>11 (22)</td>
</tr>
</tbody>
</table>

Given the lack of credible information about the behavior of teachers in the classroom, it should probably not be surprising that negative evaluations of teachers are rare. A study of Chicago Public Schools by the New Teacher Project, a nonprofit organization that partners with school districts to recruit and train high quality teachers, analyzed 36,000 teacher ratings from 2003 to 2006 and found that only 0.3 percent of teachers were rated as unsatisfactory. Only 5 percent of schools assigned any unsatisfactory ratings over the three year period. Perhaps even more surprising, 79 percent of failing schools did not issue even a single unsatisfactory rating.15

The lack of information about and control over teacher behavior and quality are of serious consequence. Teachers generally receive tenure after only two years in the classroom; few are weeded out. Rooting out a weak teacher after that point is difficult. They may well be in for life.

In sum, procedural and supervisory mechanisms of organizational control over teachers are weak. What about output control, the focus of this paper?

**Performance Incentives**

Performance incentives, a form of output control, are front and center in current policy debates. They have been considered before in education and rejected.16

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16 Murnane and Cohen (1986)
But things are different this time around. For one, the costs of instituting a reasonably credible system have gone down dramatically. Today, information on student performance is frequently and systematically collected as a consequence of school accountability policies. And, increasingly, student information can be linked to teachers. Such a link is one of the essential data system characteristics promoted by the Data Quality Campaign, a national effort to improve data collection and utilization in education.\textsuperscript{17} Unfortunately, today, while 46 states now assign a unique identifier to each teacher to help track data, only 12 states match teacher data with data about student performance.\textsuperscript{18}

In addition, the demand for instructional quality has never been higher. When you combine these conditions with the fact that alternative means of control - procedural control and monitoring or supervision - are weak, maybe with reason, output control in the form of performance incentives emerges as a particularly attractive strategy for reformers. But that sets up a battle between the teachers’ unions and reformers, especially when the focus is on the performance of individual teachers. For instance, in response to a recently announced pilot program by the New York City Department of Education to estimate the value-added to student test performance by 2500 individual teachers in 140 schools as a way to explore strategies for using this data, UFT President Randi Weingarten wrote, “The United Federation of Teachers will fight this on all grounds – educational, legal and moral.”\textsuperscript{19}

\textsuperscript{17} For more information, see http://www.dataqualitycampaign.org/.
\textsuperscript{18} Olson (2008)
\textsuperscript{19} UFT (2008). For a discussion of the pilot program, see Medina (2008).
Apart from protecting their members’ “boundaries of discretion” reflexively, unions have legitimate concerns about control based on performance measured by student test gains.

First, a large fraction of teachers, about half, could not be part of a performance based incentive system. They teach non-tested subjects, such as art or specialized subjects, or they teach at the high school level where value-added measurement is not well-suited.\textsuperscript{20}

Second, performance incentives may lead to unwanted instructional distortions. For example, teachers could focus on lower level skills, if they are the focus of tests, at the expense of higher order thinking skills. A subject bias might also emerge with teachers focusing on tested subjects at the expense of, say, social studies or the arts that are not tested, but valued in society.\textsuperscript{21}

Third, if incentives were designed to reward individual teachers and any threat of scarcity existed, cooperation and coordination among teachers in a school (a condition most analysts consider to be associated with effective schools),\textsuperscript{22} could be reduced.

Fourth are issues of fairness that are associated with the technical characteristics of measuring and estimating the value added by teachers. How accurate are the measures? Do they effectively account for the characteristics of students assigned to a teacher?\textsuperscript{23} Do they effectively take into account school conditions? What about unusual testing

\textsuperscript{20} Clotfelter, Ladd and Vigdor (2007)
\textsuperscript{21} See Hannaway and Hamilton (2007) for review.
\textsuperscript{22} Little (1993)
\textsuperscript{23} See Rothstein (2007), for example.
conditions? A common example is a “barking dog” outside the classroom distracting students during testing and resulting in lower test scores for which the teacher is held responsible.

The concerns are real,24 and should not be ignored, but they are not necessarily deal breakers. Below we review five well known teacher performance incentive plans that are active in the United States. We pay particular attention to how teachers unions have been involved in the design and operation of these programs, as well as how the details of the plans attempt to minimize the concerns explained above, among others.

**Current Performance Pay Plans**

The involvement of unions in performance pay plans is no doubt an important condition for their establishment; without it, reform is unlikely.25 In general, local affiliates have been more inclined to consider performance incentives than their national associations. The National Education Association (NEA) has been a more strident opponent of these measures than the American Federation of Teachers (AFT). For example, when the Democratic leadership in the House of Representatives said they planned to include pay for performance in the reauthorized NCLB legislation, Reg Weaver, the NEA President, responded directly and clearly:

> NEA will oppose any legislative proposal that mandates implementation of a pay for performance plan.26

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24 But there is insufficient evidence to conclude that they are truly serious.
25 Analysis by Goldhaber, Choi, DeArmond and Player (2005), using the *Schools and Staffing Survey*, suggests that districts with stronger unions are less likely than others to have compensation provisions that include incentives for “excellence in teaching.” Specifically, school districts without a collective bargaining agreement are about twice as likely to have elements of merit pay as school districts with an agreement, though the overall incidence is low (11% vs. 6%).
26 NEA (2007)
Official National Education Association policy offers a clear view of the organization’s stance:

The Association opposes providing additional compensation to attract and/or retain education employees in hard-to-recruit positions.

The Association also believes that local affiliates can best promote the economic welfare of all education employees, regardless of source of funding, by following the salary standards developed at the state and national levels.

The Association further believes that performance pay schedules, such as merit pay or any other system of compensation based on an evaluation of an education employee's performance, are inappropriate.27

In response to the growing interest in alternative compensation ideas, even amongst some of its members and affiliates, at its 2007 annual meeting the NEA added the following language as a nod to some differential pay initiatives that have emerged:

The compensation system may recognize and reward the additional knowledge and skills that education employees have acquired or may acquire over their careers.28

The AFT is somewhat more open, but with conditions.

Recognizing the limitations of the single salary system, the AFT is encouraging its locals to explore various teacher compensation systems based on local conditions. It is **not** recommending abandoning the traditional salary schedule. An adequate salary base for all teachers, labor-management collaboration based on mutual trust, and easy-to-understand procedures for awarding teachers additional compensation are among the conditions that must be part of any professional compensation system…The AFT supports such efforts, but wholeheartedly rejects any pay proposals that resemble the failed merit-pay plans that some have advocated.29

27 NEA (2007)
28 NEA (2007)
29 AFT (2008)
Table 3 shows the key characteristics of five teacher performance incentive plans. Most plans share four common elements: 1) Local teacher unions play a role in the design and implementation of each plan; 2) Plans have provisions that allow teachers, schools, or districts to elect to participate; 3) Multiple bases for evaluating performance pay are used; and 4) Substantial “off-the-books” or soft funding is available, in addition to hard money, for at least initiating the program. All these programs are truly “bonus” programs that result in additional compensation for teachers, at least in the beginning.

The most comprehensive, established, and well-known performance-based initiative is the Denver ProComp plan.⁴⁰ Denver’s Board of Education proposed a plan to the Denver Classroom Teachers Association (DCTA) and, after negotiations and concessions by the Board and the extensive involvement of local and national philanthropists, DCTA agreed to a pilot program.⁴¹ DCTA insisted that performance be based on objectives chosen by teachers, with the approval of their principals, rather than objectives identified by some authority. They also insisted that the pilot be evaluated by a third party, and that the final plan be submitted to DCTAs members for a general vote.

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⁴⁰ It is ironic that Denver was the first district in the country to establish a single salary schedule based on seniority in 1921 (Eberts, 2007).
⁴¹ It is worth noting that DCTA is an NEA affiliate, something that has caused headaches within the NEA. For a complete overview of the program, its inception, the role philanthropists played, and some of the politics see Goring, Teske, and Jupp (2007).
<table>
<thead>
<tr>
<th><strong>Scope and Administration</strong></th>
<th><strong>Denver, CO ProComp</strong></th>
<th><strong>New York, NY</strong></th>
<th><strong>Teacher Advancement Program (TAP)</strong></th>
<th><strong>Toledo, OH TRACS</strong></th>
<th><strong>Minnesota Q-Comp</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participation Option</strong></td>
<td>Teacher enrollment All schools</td>
<td>School invitation</td>
<td>School or district application</td>
<td>Teacher enrollment All schools</td>
<td>District application to state</td>
</tr>
<tr>
<td><strong>Participation Level</strong></td>
<td>Mandatory for new teachers Veterans opt-in</td>
<td>205 schools (~85% of invited schools agreed) ≥ 55% teacher agreement</td>
<td>Various schools/districts ≥ 75% teacher agreement</td>
<td>Districtwide All teachers &gt; 5 years exp. opt-in</td>
<td>39/336 districts 21/132 charter schools</td>
</tr>
<tr>
<td><strong>Union affiliation &amp; involvement</strong></td>
<td>NEA Planning and admin.</td>
<td>AFT Planning</td>
<td>Usually in CB agreement</td>
<td>AFT Planning and admin.</td>
<td>Applications require union approval</td>
</tr>
<tr>
<td><strong>Financing</strong></td>
<td>$25 million mill levy</td>
<td>$20 million private</td>
<td>Varies (federal, state)</td>
<td>$5 million TIF and $100,000 district funds</td>
<td>$86 million state aid and local levies</td>
</tr>
<tr>
<td><strong>Bonus recipient</strong></td>
<td>Individual teachers</td>
<td>School (individual bonuses set by school committee)</td>
<td>Individual teachers</td>
<td>School</td>
<td>Individual teachers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Incentive Structure</strong></th>
<th><strong>Knowledge / skill-based pay</strong></th>
<th><strong>Administrator evaluation pay</strong></th>
<th><strong>Student performance-based pay</strong></th>
<th><strong>Other components</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2% - professional development</strong></td>
<td>Career ladders (career, mentor and master teacher tracks)</td>
<td>Several times / year by trained evaluators</td>
<td>School-wide gains in test scores</td>
<td>Teachers develop goal-based professional development plans</td>
</tr>
<tr>
<td><strong>9% - grad. degree / NB cert.</strong></td>
<td>Required professional development</td>
<td></td>
<td>Value added growth at individual and school level</td>
<td>5% incr. for meeting self-selected objective; 10% incr. for curriculum development; 15 % incr. for high needs assignment</td>
</tr>
<tr>
<td><strong>$1,000 tuition reimbursement.</strong></td>
<td>Varying tracks for levels of responsibility (see Other components)</td>
<td></td>
<td>3 school goals: school report card, test scores, attendance $2000 for certif. / paraprof. staff if 3 met; $1000 if 2 met</td>
<td>Must “reform” steps &amp; lanes schedule</td>
</tr>
<tr>
<td><strong>3% - sch. admin. Evaluation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1% - meeting student objectives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3% - students’ test scores (for teachers)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2% - students’ test scores (for school)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

32 Recommended by TAP
The current plan that the membership approved after considerable debate and campaigning in 2004 is more comprehensive than the pilot. Teacher bonuses can stem a broad range of skills and performance. They include: 1) *skills* (2% of salary on professional development; 9% on National Board certification); 2) administrator evaluation (3%); 3) *student academic growth objectives* [objectives set by teacher and principal (1%), increases in test performance of a teacher’s students (3%), increases in test performance schoolwide (2%)]; and 4) *assignment* to hard-to-staff or hard-to-serve schools (3% each). These benefits, a mix of salary percentage increases and single-year bonuses, are tied to a negotiated index to ensure fairness.33

If a teacher met all the bonus qualifications, it would mean a salary increase of 18 percent as well as bonuses of 8 percent. Not an insignificant amount. In Denver, according to Brad Jupp, then the chief DCTA negotiator who now works for the school district, the Board of Education offered “a trade-off our members couldn’t refuse”34. Note that only 17 percent of the salary increases would be based on the tested student achievement gains of the individual teacher, though if you combine teacher set objectives, test scores of teacher’s students, and schoolwide test score gains, the total increase amounts to a 22 percent bump in salary and a 2 percent bonus. Still, the relatively minimal connections between salary and outputs have led some observers to suggest Denver’s plan is not a true pay for performance system but rather a differentiated compensation plan.

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33 The components index for ProComp in 2007-2008 is $35,568.
34 Mead (2006)
During the pilot phase, 85 percent of teachers in a school had to agree to participate in order for the school to become part of the trial. Only 16 schools, less than 10 percent of the district, joined. When the full program took hold in 2004, with the terms described above, participation became mandatory for new teachers. In effect, teachers made a program participation choice by choosing to work in the district. Teachers already employed can still choose to opt into the program, but are not required to do so. For them, the standard salary schedule will remain in place until the last teacher covered by it retires or leaves the district. In the first year of the program, 28 percent of veterans opted in,\(^{35}\) and since then about another 10 percent have joined.\(^{36}\) Since there is no financial downside to opting into the program, the likely explanation for more veteran teachers not joining is a preservation of autonomy, a long standing norm among teachers, as well as lingering opposition to the program among many Denver teachers.\(^{37}\)

Other programs have provisions similar to Denver’s. For example, every plan has some version of election to participate. In New York’s pilot, high needs schools were invited to participate and at least 55 percent of teachers in the school have to agree by vote in order to accept the invitation. Eight-five percent of the invited schools joined. In TAP, schools or districts apply to become part of the program and 75 percent of teachers must agree. Districts apply to participate in Minnesota’s Q-Comp program and the union has to approve. In Toledo, all teachers with greater than 5 years of experience may apply to participate.

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\(^{35}\) DeGrow (2007)  
\(^{36}\) Phone interview with DPS official, February 6, 2008.  
\(^{37}\) Little (1990)
In order to hold teachers harmless, no doubt an essential condition for unions, financing for bonuses must be over and above existing resources. This is not easy to accomplish in education. As Brad Jupp explained: “Most school finance systems provide nothing but routine cost of living adjustments. If that is all a district and union have to work with, they're not going to have money to redistribute and make a new pay system.”

In Denver, foundations, including the Rose Community Foundation, the Broad Foundation and the Daniels Fund, paid what might be called the “switch costs” or “transition costs” by financing the pilot. The more permanent financing for ProComp comes from a $25 million levy passed by voter referendum with a 58% to 42% margin. The revenue which will build over time comes from a trust fund overseen by the eight members of the Denver Compensation Trust: three appointed by the district, three by the union, and two community members agreed to by the six others. Thus, the DCTA has significant control over how the funds are distributed in the long term. Eventually, the trust will become self-sustaining as older teachers retire and new teachers take jobs.

In New York City, private funding supports the pilot. And part of the “switch costs” was a deal with the union on a pension benefits provision the union had long sought. The federal Teacher Incentive Fund (TIF) grant program is providing start up for a number of new efforts, including TAP programs and the Toledo TRACS plan. In Minnesota, the funds come from the state. Working out the long term financing of bonus plans will be a challenge. A condition of TIF funding, for example, is that by year five of a grant, funds can only cover 75 percent of the incentive pay. Unions will no doubt watch carefully as

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38 Mead (2006)
these plans become institutionalized with on-going base revenues to ensure that there are no losers among their members.

Of course, one of the ways to deal with the “loser problem” is to make participation optional, as we have discussed above. Another way is to have multiple methods for meriting a bonus. As Table 3 shows, and as discussed above in the case of Denver, most plans include additional pay for a number of different skills and bases of performance. And when tested student performance is incorporated into the plan, it is more likely to be school based than teacher based. School based performance reduces some of the technical concerns about measuring achievement gains and also encourages teacher cooperation, but it allows for “free riders” and weakens individual incentives. Since there is more variation in teacher effectiveness (as measured by student gains) within schools than between schools, this is a serious concern.

One of the strategies for dealing with the problem is to have high levels of school accountability in addition to school level rewards so that there is an incentive at the school level to encourage the high performers and sanction the low performers. This strategy is at the heart of the New York City plan where the principal, along with two union members, makes decisions regarding how to distribute the school bonus. Whether such distinctions are made remains to be seen. As one union chapter head wrote on the UFT website EdWize: “If we encouraged members in ‘schoolwide bonus’ schools to support equal distribution of the $, there would be no problem. But since we did not,
what are they going to look at? … many are good union people, and will try to divide equally anyhow.”39

Conclusion

Teachers have traditionally been able to carry out their work with very little external control over what they do in the classroom. In many ways, today’s large American public schools are often little more than a collection of one-room schoolhouses linked by common geography. Frustrated with the uneven and often insufficient performance of American public schools and armed with research indicating that teachers are the most important in-school factor affecting student achievement, policymakers are increasingly exploring ways to measure and exert leverage over what teachers actually do and the results they produce. Because of advances in technology and ongoing innovation, there are more avenues for doing this than in the past, but in addition to substantial political opposition, an intense debate persists over how to best apply these innovations. Here we have examined several ongoing initiatives as well as the general trends in the education field around this issue.

Teachers’ union leaders often resent that discussions of ideas like performance-pay quickly bring the conversation to teachers’ contracts and the role of teachers’ unions. But, the fact remains that these contracts, or similar arrangements, exert enormous leverage over what teachers do and how schools operate. And the teachers’ unions

39 EdWize (2008)
themselves are powerful players in education policymaking at the state and national level.\textsuperscript{40}

In 2004, Sandra Feldman, the late President of the American Federation of Teachers said, “To pay teachers a lot more, and a lot sooner in their careers, we would have to redesign the compensation system. Along with significantly raising pay across the board, on top of the current schedules, we would have to find a way to reward different roles, responsibilities, knowledge, skills and, yes, results.”\textsuperscript{41}

If that sounds forward-looking, that’s because it was and still is today. Despite a great deal of debate and some innovation, there is still more heat than light around performance-based pay or differentiated pay for teachers. Improvements in data, new initiatives, and even the support of some local teachers’ unions for innovating with teacher pay, have paradoxically raised the stakes for teachers’ unions in this debate. No longer can they easily stand on the rhetorical position that they’d support new ideas if only they were well-designed and fair. Such ideas are now within reach.

Teachers’ union leaders are thinking about these issues and recognize that younger teachers may want different things than veterans.\textsuperscript{42} Yet the dynamics of leading an organization mean that leaders are cross-pressured between demands for change, legitimate concerns about what is in the best interest of their members and the organization, and, as the Denver experience illustrates, disagreement within their ranks.

\textsuperscript{40} Hannaway and Rotherham (2006)
\textsuperscript{41} Feldman (2004)
\textsuperscript{42} Susan Moore Johnson et al (2007)
Reformers should bear these constraints in mind and at the same time recognize the limits of current approaches and technology. For instance, there are challenging technical questions embedded in ideas like value-added assessment. Yet challenging questions should not be used as a way to evade innovation or reform and teachers’ unions must engage more constructively in this conversation than they generally do today.

Finally, because the teachers’ unions are such important players and because contracts matter, the best path forward is for reformers to engage them in reform efforts whenever possible. Reflecting on the Denver experience, Phil Gonring (Senior Program Officer for Education at the Rose Community Foundation), says the worst thing other cities could do "is import ProComp, the best thing they could do is import the process" that led to the initiative.43

That is sound advice. Because this conversation is so new in education and novel ways of thinking about outputs, accountability, and evaluating the work product are still in their infancy, innovation and collaboration should be the order of the day. No one has figured out exactly what to do, but there is a clear and emergent consensus that something must be done to better incorporate results and performance into measures of teachers’ important work.


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