Monetary incentives and performance evaluations do not profoundly affect teacher motivation, but principles drawn from research can make them better motivators of effective teaching.

The currently popular proposals for performance-based pay in education are often tied to the idea of a career ladder that teachers can climb to attain higher pay and higher status. There is little evidence, however, that relating teacher salaries to performance is an effective motivator. Most observers find the problems in implementing merit pay virtually unsolvable (Johnson, 1985), most districts that have tried it have abandoned it (Porwoll, 1979), and where it does seem to work, it is largely innocuous (Cohen and Murnane, 1985).

Although it is too early to know whether the new career ladder plans will have the positive consequences their advocates predict, it is possible to draw principles from research on incentive systems and performance evaluation that could be used to design programs, or to estimate the probability that current plans will enhance teacher effectiveness. Before turning to these design principles, it may be useful to review the range of needs teachers may seek to satisfy through their work.

What Teachers Want from Their Work
Career ladders are aimed primarily at motivating teachers to work harder at being effective. Ideally, an incentive plan should provide as many motivators as possible and enhance, or at least not reduce, the rewards teachers get from teaching without the plan. Almost every study of teacher motivation, job satisfaction, or attrition concludes that the most important thing teachers want from their work is intrinsic satisfaction derived from contributions made to student achievement. Other needs teachers want to satisfy are similar to those valued by most other workers: self-esteem based on awareness of one’s expertise, recognition by peers and relevant others of professional competence, economic benefits, opportunities for self-direction, positive social interactions with peers and supervisors, protection from the arbitrary exercise of authority that might threaten job security or advancement possibilities, and opportunities for professional growth and development (Hawley and Rosenholtz, 1984; Rosenholtz and Smylie, 1984). Teachers neither rank pay particularly high as a source of motivation (Rosenholtz and Smylie, 1984) nor value upward mobility as much as they used to (Falk and others, 1981; Roberson and others, 1983).

It is important to note that pay does not seem to compensate workers for the unsatisfactory aspects of their jobs. For example, if people seek challenge in their jobs, a pay raise will not make them value challenge any less (Gupton and Quinn, 1973). Thus, career ladder plans are not likely to neutralize the aspects of teaching that cause many teachers to leave the profession or invest less energy in it.

If teacher salaries, potential earnings, or career advancement opportunities were substantially greater than they have been, the type of person attracted to teaching might change, increasing the motivational value of pay. However, studies of other professions and jobs suggest that it is unlikely that career ladders would significantly change the relative impact of monetary incentives on teacher behavior.

The conclusions we should draw, therefore, are not that teachers’ pay is adequate or that career ladders will not be motivating. Rather, the point is that career ladders will have little long-term effect on teacher effort and effectiveness unless they provide teachers what they want most from teaching: rewards for making a difference in the lives of children.

Putting Teacher Effort in Perspective
Teachers bring to their work a “readiness to teach” composed of certain values, qualities, knowledge and competencies, and energy or effort. They apply these predispositions and resources to available technologies (such as curriculums, learning materials, and instructional strategies) to produce student learning. Teachers’ ability and willingness to use the technologies are shaped by the conditions under which they must work, including the ethos or culture of the school, the degree of student heterogeneity, the relationships among teachers and between teachers and principals, and
the time available to teach.

Teaching is the product of interactions among teacher characteristics and capabilities, available technology, and school conditions. Just as teachers have different levels of readiness, students also come to school each day with different levels of readiness to learn (capabilities plus motivation). The resulting interaction between teaching and student readiness to learn produces student learning. This series of interactions comes full circle in that what students learn (at least what teachers believe students learn) significantly influences teachers' readiness to teach.

This picture of teachers' roles in producing student learning has at least three implications for any effort to link incentives to teacher effectiveness:

1. Many factors affect student achievement, and teachers can control few of them.

2. Teachers' motivation is only one factor in their contribution to student learning.

3. Motivating teachers without changing other conditions that affect teaching will not only limit the effect of incentives, but may cause frustration and alienation.

Principles for Designing Career Ladder Plans

From the idea that teachers have many needs to which incentive plans should be responsive and from the proposition that teacher effort is a small part of effective teaching follows the notion that career ladder plans should be designed to meet as many different needs as possible, increase teacher competence, and facilitate effective instruction. The 11 principles outlined below should lead to these three types of outcome.

**Principle 1.** Economic rewards for high performance should be significant. A common criticism of many merit pay plans is that the monetary rewards they give for superior performance are trivial (Porwoll, 1979). Small awards provide limited incentives to undertake risks and expend the energy to achieve new levels of competence, but how large an award needs to be to motivate cannot be determined from available research.

**Principle 2.** Teachers should be required to continuously demonstrate high performance to retain higher levels of pay and status. The most influential theorist of motivation is probably Abraham Maslow, who believed that a need that is met ceases to motivate or, at least, is superseded by other needs. Thus, once a teacher (or any worker) has derived money and status from a given increase in pay, this incentive diminishes in importance as
a motivator. Further, resources to fund an incentive will always be limited, and if those who receive the incentive do not have much chance of losing it, its access by others will be constrained.

**Principle 3:** Awards should not be based on competition among teachers. A basic element of motivation theory is that incentives must be considered attainable (Vroom, 1966). Awards based on comparisons among individuals or limited in number will be viewed by many workers, especially those needing the most improvement, as beyond their reach. Moreover, competitive awards will discourage peer interaction and social approval, both important to effective teaching (Robenholtz and Smylie, 1984). This does not mean that teachers should not compete against set criteria. The distinction here is akin to the difference between a golfer's effort to beat par, a standard set by agreed-upon conventions, and match play, in which a golfer competes directly with another individual.

**Principle 4:** Predetermined quotas should not constrain the probability of receiving performance-based pay. It follows from Principle 3 that quota systems would discourage cooperation among teachers. As Thompson and Dalton (1970, p. 156) have argued, closed rewards systems focus on competition, and a high proportion of workers may believe that their prospects of receiving an award are remote no matter how hard they try to improve their performance. Another likely consequence of closed rewards systems, or quotas, is that they may force meaningless distinctions in the performance of winners and near winners, thus undermining the credibility of the evaluation system.

**Principle 5:** The criteria against which performance is measured, and the goals they manifest, should be clear. This principle seems obvious, but it is not easy to implement. Schools typically have multiple and diffuse goals. These goals may vary from school to school and from district to district, thus districtwide or statewide assessment systems may not fit some school or district priorities. Even within schools, different educators have different goals and achieve them in different ways (special educators, vocational specialists, and science teachers, for example).

The solution to these problems seems to be some mix of general and situational criteria against which teachers are measured. This will cause a vexing but not unproductive tension between the desire to localize and contextualize decision criteria and the desire to centralize and standardize them to permit comparisons, avoid subjectivity, and invoke accountability.

**Principle 6:** Assessment measures and processes should be seen as fair and predictable. Teachers who have experienced performance-based pay often feel that the plan was administered unfairly (Forwoll, 1979). No doubt many evaluation systems have been primitive and subjectively applied. Moreover, fair or not, teachers who do not receive the incentive are likely to seek explanations outside their own performance. This human propensity is the inevitable consequence of the fact that most workers, especially professionals, have higher estimates of their abilities than do their supervisors (Meyer, 1975).

There is no way to satisfy everyone that teacher performance measures and their administration are fair and predictable. Some guidelines likely to increase the perceived legitimacy and reliability of performance evaluations are:

1. The behavior assessed should include all of the behavior to be influenced. In other words, what gets measured gets done.
2. Multiple ways of assessing the same phenomena help validate performance measures and deal with the potential frailties of evaluators.
3. The measures of the behavior or outcome assessed should reflect the period for which the rewards are made; past performance and future promise should be discounted entirely.
4. Several checks within the assessment period are better than just one or two measurements.

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5. Evaluators should be allowed some discretion in the weight they assign to different measures when aggregating the information collected. Such discretion may be considered arbitrary, but imperfect measures (all we presently have) do not deserve excessive respect.

6. Teacher performance measures should focus on teaching processes rather than teaching outcomes.

The last point has caused considerable controversy. Many legislators and citizens define teachers' competence by their ability to increase student test scores. Student gain scores have several limitations as measures of teacher competence (see Soar and Soar, 1984). The standardized tests seldom match the content of the curriculum. Student gain scores are affected by factors over which teachers have no control (including previous teachers, home environment, and peer values), and there is no reliable formula we can use to statistically adjust these factors. Focusing on student gain scores will not only cause teachers to teach to the test (inevitably narrowing and diluting the substance of what is taught), but it will also encourage emphasis on test-taking itself as a higher-order skill. Further, knowing that Teacher A "produces" higher gain scores than Teacher B tells us nothing about the two teachers' strengths and weaknesses and gives us no indication of how to improve Teacher B's performance.

Enough knowledge is now available on effective teaching to develop tentative process criteria for evaluating teacher performance; several states and localities already have done this or are doing it now. These measures can and should be assessed against student gain scores by independently sampling teachers and classrooms.

Principle 7: Evaluation, monitoring, and feedback should be frequent. Teachers value knowing that they can help students learn and develop, but they cannot acquire such knowledge without evidence that what they do makes a difference. In their review of research on teacher motivation, Rosenholtz and Smylie (1984) concluded that the frequency with which teachers are evaluated and feedback provided is correlated with teachers' confidence in their supervisor's evaluation, their satisfaction with their work, and student achievement. However, not all of the evaluations and feedback are necessary for the formal summative evaluation to implement career ladders.

Principle 8: Summative and formative evaluations should embody the same criteria and standards, but should be administered independently. Some merit pay experiments fail because of tension between teachers and principals over evaluations. Similarly, performance appraisals by other teachers with whom teachers work regularly often cause conflict and competition (Porwoll, 1979). Yet, performance evaluations provide opportunities for feedback that can motivate and direct efforts to improve professional skills. Many observers believe that performance evaluators who decide about monetary rewards, advancement, or retention cannot also provide support for professional growth because the employee whose work is being judged will not disclose personal weaknesses and will resent negative evaluations. Under these circumstances, the supervisor may avoid more negative ratings and, at the same time, be concerned about whether a supportive relationship with an employee who needs help will jeopardize objectivity and cause employees who need less help to think that the supervisor is playing favorites. To implement this principle, evaluations for rewards and status should be performed by outside observers and judges.

Principle 9: Inservice training or staff development should be an integral part of the career ladder system and should be focused toward improving teachers' chances to earn higher pay and status. Providing teachers with information that they are falling short of performance goals without the support they need to reach those goals invites alienation and frustration. Unfortunately, most school systems invest little in inservice training, and what they do invest usually is not well-spent.
Career ladder plans can provide the impetus for improving inservice training. The evaluation system necessary for their implementation should provide evidence of teacher needs and motivate teachers to improve. Further, it should identify teachers who can serve as models and peer tutors, thus enriching a school or district's professional development resources.

**Principle 10: Differences in rewards allocated should sometimes lead to differences in roles and responsibilities.** Studies of performance-based pay in private industry often reveal that the rewards place social pressures on high achievers because their high performance is seen as increasing the expectations management has of others. One way to address this is by creating different roles for each rank, but it is unclear whether differentiation of responsibilities and functions is essential to a career ladder's success. (Colleges and universities do not create different roles for each rank, and great differences in pay are found within professional ranks.) In any case, the roles to be filled by those who move up the career ladder should be well-defined, and the implications of serving the needs now served by those who will become "master teachers" should receive more attention.

**Principle 11: Teachers should help design and assess the plan.** Career ladders, like any innovation, are likely to be most effective if those they affect understand them and believe in their benefits. Career ladder plans will find greater acceptance among teachers if teachers can help design and redesign them (Cohen and Murnane, 1985).

### A New Incentive for Improvement

Increasing the quality of teaching is the most promising strategy for educational reform, but there are ways other than performance-based pay to improve schools, many of which will help teachers succeed. It follows that a career ladder plan, by itself, is a limited strategy for school improvement. On the other hand, career ladders may reduce teacher dissatisfaction with merit pay, and advancement opportunities through career ladders are an incentive school systems have not previously had available. As Lortie (1975) has pointed out, teaching traditionally has offered little opportunity for upward mobility, which may create more concern for one's present condition than for future development. Most teachers apparently are dissatisfied with this absence of opportunity for promotion and changes in duties (Lowther and others, 1984).

To successfully implement career ladders, we must employ other mechanisms that will increase teachers' competence and motivation and create conditions that will facilitate effective teaching. These conditions, coupled with performance-based pay's economic and advancement incentives, may significantly enhance the prospects for improving the educational productivity of schools. Gaining approval for and implementing such a comprehensive approach to educational reform is, of course, no small matter.

While properly implemented career ladders are a promising reform, there are land mines buried all around, and the outcome could be explosive. One problem we have not yet discussed may be critical: To minimize subjectivity and ensure reliability in evaluations, most career ladder plans measure teacher performance of specified behaviors. To avoid arbitrary assessments, teachers are insisting on greater specificity, which may result in the routinization and mechanization of teaching. If teachers are divested of opportunities to be adaptive and inventive, not only will talented people leave or refuse to enter the profession, but teaching will not be responsive to the enormous variety of student needs and talents. The way out of this conundrum for teachers and policymakers is to trust peer review and discretionary evaluation. Although the process is fraught with the probability of error, the alternative is bureaucratisation and banality.

### References


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