

*The Washington Post*

# Why merit pay for teachers sounds good — but isn't

By [Valerie Strauss](#) October 10, 2011

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By Esther Quintero

The current teacher salary scale has come under increasing fire in the modern school reform area — and not without reason. Systems where people are treated more or less the same suffer from two basic problems. There will always be “free riders,” and relatedly, others may feel their contributions are not sufficiently recognized. So what are good alternatives? Based on decades worth of economic and psychological research, measures such as [merit pay](#) are *not* the answer.

Although individual [pay for performance](#) (or merit pay) is a widespread practice among U.S. businesses, the research on its effectiveness shows it to be of limited utility (see [here](#), [here](#), [here](#), and [here](#)), mostly because it is easy for its benefits to be swamped by unintended consequences.

Indeed, psychological research indicates that a focus on financial rewards may serve to (a) reduce intrinsic motivation, (b) heighten

stress to the point that it impairs performance, and (c) promote a [narrow focus](#) reducing how well people do in all dimensions except the one being measured.

In 1971, a research psychologist named [Edward Deci](#) published a [paper](#) which concluded that while verbal reinforcement and positive feedback tends to strengthen intrinsic motivation, monetary rewards tend to weaken it.

In 1999, Deci and his colleagues published a meta-analysis of 128 studies (see [here](#)), again concluding that when people do things in exchange for external rewards, their intrinsic motivation tends to diminish. Once a certain activity is associated with a tangible reward, such as money, people will be less inclined to participate in the task when the reward is not present. Deci concluded that extrinsic rewards make it harder for people to sustain self-motivation.

Similarly, behavioral economist [Dan Ariely](#) and colleagues have shown that the introduction of extrinsic rewards cause an individual's "decision frame" to shift from a social to a monetary orientation (see [here](#)).

In a separate study, Ariely also demonstrated that financial rewards can dilute the signaling value of pro-social behavior (see [here](#)), to the extent that the presence of extrinsic incentives make it harder to tell if someone is motivated by a desire "to do good or to do well."

Research demonstrates that simply activating the idea of money in somebody's head can, by itself, reduce that person's pro-social behavior in subsequent and unrelated situations. For example, researchers Vohs, Mead and Goode (2008) showed that making money salient can later make someone less likely to perform pro-social tasks, such as helping a stranger pick up pencils that have dropped. (see [here](#)).

So, in a way, a focus on money can mark the end of (social) innocence because we may not always be able to distinguish which of our actions have to do with intrinsic motivation and which are rooted in the expectation of external rewards. Still it's quite clear that these two sources of behavior do exist, are quite distinct from each other, and speak different languages that should not be mistaken.

If you bought flowers for a friend, you would be insulted if she handed you a \$20 bill to show her gratitude; it is understood that money should not be mentioned (let alone offered) to obtain more of the things people do for joy or for love. In much the same way, some educators view performance pay as the kind of trespass or intrusion that is transforming the way we understand and talk about the practice of teaching.

What *else* happens when monetary incentives are brought in? As it happens, there is also now a growing body of applied educational research to suggest that the answer is: not much.

Empirical studies conducted in [Nashville](#), [Chicago](#), and [New York City](#) and elsewhere have concluded that performance pay for teachers has little or no effect on their students' test scores. So, essentially, these large and expensive experiments reveal what (inexpensive) experiments in other disciplines have been telling us for about 40 years.

I would think about this often if I was in charge of policy design and implementation. I would suspect that this trend toward quantification and measurement reflects and assumes too simplistic a view of human motivation. And I hope that it would make me want to see people as they are rather than as rational choice theory *simplifies* them to be.

While rationality may be a useful assumption in economic theory, it should not become a straightjacket in policy.

Teaching and learning have much more to do with dedication, creativity, and commitment than bonuses, incentives, and perks. Some might still say that the labor market behavior of teachers and potential teachers can still obey the laws of market economics. Absolutely. But by changing the rules (i.e., bonuses) we are changing the game (i.e., education) and the players (i.e., teachers).

There is no doubt educators need to be paid fairly. And I am not suggesting that some creative thinking and experimentation in teacher compensation isn't warranted.

That said, do we want our teachers to be the kind of people who would freely help pick up those pencils or the kind who would only help if you pay them extra? The real question is, "Do we want our educators to be motivated primarily by market norms or by social norms?"

We probably can't have it both ways .

# Does teacher merit pay work? A new study says yes.

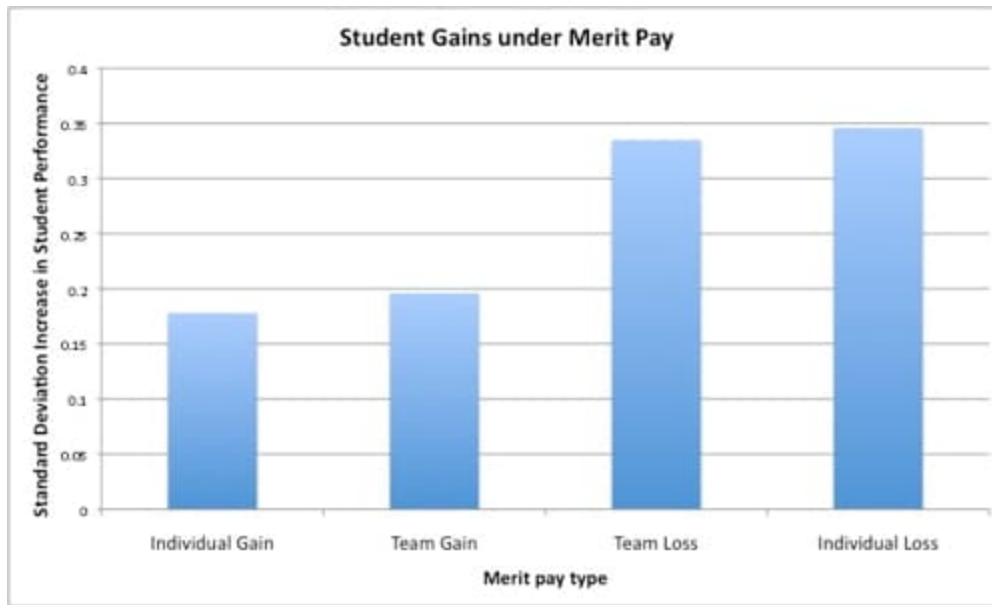
By Dylan Matthews July 23, 2012

*This post has been updated to mention earlier merit pay studies.*

There's very good evidence that teacher quality matters a lot in terms of student performance in school and success later on in life. The economist Raj Chetty of Harvard, for example, has [found](#) that students randomly placed with more experienced kindergarten teachers not only perform better on tests but earn more and save more for retirement as adults, are likelier to go to college, and go to better colleges than their peers with less experienced teachers. Eric Hanushek of Stanford [estimates](#) that a good teacher - defined as at the 84th percentile, or one standard deviation above the mean for you stats nerds - provides students with test scores associated with an increase of between \$22,000 and \$46,000 in lifetime earnings. Findings like these lead some to favor "merit pay" regimes that include student test scores as a determinant of teachers' salaries. This has met opposition from teachers' unions and [testing skeptics](#), who argue that it would result in teaching-to-the-test at the expense of actual learning. For a long time, the data has been mixed on merit pay. [Two studies](#) from Mathematica Policy Research in 2010 that found little benefit, while a [study](#) in Nashville found mild benefits for fifth graders but none for other students.

That has changed with the publication of a [new paper](#) (pdf) by Harvard's Roland Fryer, the University of Chicago's Steven Levitt (of *Freakonomics* fame) and John List, and UC San Diego's Sally Sadoff. The authors went into nine K-8 schools in Chicago Heights, a city 30 miles south of Chicago, and randomly selected teachers (who had to consent, which 93.75 percent did) to take part in a merit pay scheme. The students affected were overwhelmingly low-income, with 98 percent receiving free or subsidized lunches. Teachers in the experiment were offered \$80 per percentile improvement in student test scores, for a maximum reward of \$8,000, compared to a typical teacher salary of \$50,000.

The authors split teachers in the study into a control group, who were not offered any rewards, a "gain" group, which was promised rewards of up to \$8,000 at the end of the school year, and a "loss" group, which was given \$4,000 upfront and asked to pay back any rewards they did not earn. The idea behind the latter group was that loss aversion should motivate teachers to perform better than they would if they only stood to gain more money. Additionally, the gain and loss groups were split, with a "team" group being rewarded on the basis of theirs and fellow teachers' test scores, and the "individual" group being reward only on the basis of their own scores. The conclusion: it worked, and it worked almost twice as well when the money was given at the start and then taken away:



To get some idea of what the numbers on that graph might mean, using Hanushek's estimates, the testing gains of those of the "loss" group are associated with an increase in lifetime earnings of between \$37,180 and \$77,740, and those of the "gain" group with an increase of between \$20,350 and \$42,550. Interestingly enough, it didn't seem to matter much whether the pay was tied to the performance of a given teacher or to the team to which that teacher was assigned. This suggests that a merit pay regime need not pit teachers in a given school against each other to get results.