

# Performance Incentives for Teachers and Administrators

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Testimony before the

SENATE SELECT COMMITTEE ON EDUCATION REFORM & PUBLIC SCHOOL FINANCE  
TEXAS STATE SENATE

February 27, 2006

Senator Shapiro and members of the Senate Select Committee, I am very pleased to be with you today. I want to provide some of the insights coming from research on Texas achievement done at the UTD Texas Schools Project. These point to some opportunities during the upcoming legislative session for improving Texas schools.

The State of Texas should be proud of its schools and of the policies that exist. The early development of a thorough accountability system has helped to improve the achievement of students, particularly minority and disadvantaged students. This policy leadership has received national recognition.

Now is the time to take the next steps – to push all students farther. Texas can with some further improvements establish itself as a “high skill state.”

But in my judgment the current system will not take Texas there. The policies that led to improvements over the past decade appear to be hitting a plateau.

From research into student achievement, the only way to real improvement from here is through improvements in teacher quality. Those improvements, however, are unlikely to happen without thoughtful and innovative policy changes. And, those improvements could be thwarted by the wrong kinds of new policies.

Let me begin with some facts about schools and teacher quality that have come out of our recent research at UTD.<sup>1</sup> Because we have been able to trace performance of Texas students since 1993, we have been able to ascertain what aspects of schools lead to more or less gain in student achievement.

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<sup>1</sup> The Texas Schools Project at the University of Texas at Dallas brings together individual level data from multiple Texas state agencies, school districts, as well as other sources to support independent, high-quality academic research to improve academic achievement, increase transitions to and success in postsecondary education, and improve labor market outcomes of students in Texas and nation. This testimony builds directly on two studies of teacher quality (“Teachers, Schools, and Academic Achievement” and “The Market for Teacher Quality”) that can be found at <http://www.utdallas.edu/research/tsp/Index.htm>. Other work includes evaluations of charter schools, analyses of Texas affirmative action policies, and investigation of the AP program and other aspects of math education.

The basic conclusions are easy to state:

- The most significant school factor that systematically affects student achievement is teacher quality.
- Teacher quality cannot be judged reliably by the usual measures: degrees, experience, or even certification.
- Very large variations in teacher quality occur within each school, including both those typically rated as “good” schools and those rated as “bad” schools.
- Finally, the differences between a good and a bad teacher can have decisive impacts on student outcomes and cannot be ignored.

There are various ways to describe the importance of teachers. Let me try two summaries of existing research. First, many people argue that we must accept the fact that it is impossible to make up for family background differences. The experience here in Texas shows this is dead wrong. If a disadvantaged student (identified by being on free or reduced lunch) had a good teacher instead of an average teacher for three to four years in a row, the achievement gains would more than make up for the typical disadvantage from the family. Second, from analysis of just poor kids in a Northern urban district, we find that the difference in student outcomes between having a good and a bad teacher is a full grade level equivalent over a single year school year: the good teacher gets gains of 1½ years, the bad teacher ½ year. Clearly such differences can dramatically affect student outcomes and lives and are large enough to impact on their communities and the state as whole.

Improving performance of Texas schools can only be done in my opinion by ensuring that there are more of the good teachers and fewer of the bad ones. But there is where the policy rub comes in. Research at the Texas Schools Project and elsewhere has repeatedly shown that these differences in teacher quality are unrelated the amount of graduate education the teacher has or even to whether the teacher is fully certified. Typically the first year or two of experience is important for the teacher, but after that there is no relationship between added experience and student achievement.

Common ideas about how to identify what makes a good teacher simply do not hold up in the data, making it very difficult to think of regulating better teachers. In fact, the current regulations surrounding certification may actually do harm, because they limit the people who can enter teaching but provide no apparent student gains. It also wastes resources by encouraging aspiring and current teachers to invest in unproductive ways.

*If you want to improve student achievement, you must concentrate your attention on student achievement.*

In place of attempting to regulate the schools into improvement, the obvious alternative is providing incentives to those within the system. In simplest terms, teachers and administrators must be rewarded for improvements in student achievement, and those who do better should receive more rewards than those who do worse. We want to stabilize the teacher force with high quality teachers.

For this reason, I strongly support the policy instincts of the Senate Select Committee on Education under Chair Florence Shapiro and the comparable House committee under Chair Kent Grusendorf. The State can take a real leadership position by instituting performance incentives into teacher and administrator compensation.

The most important issue is the single salary structure, which rewards all teachers with a given level of experience and teacher education the same. As commonly found throughout the state, it does not serve to improve teacher quality or to deal with shortage situations in general. We know that there are shortages of high quality science and math teachers, special education teachers, and bilingual teachers. We also know that there are shortages of high quality teachers in general and across the curriculum.

A salary schedule that rewards just experience and graduate education fails to deal with these shortages. Simply increasing all teacher salaries does little or nothing to deal with shortages and could make improvement of the Texas teacher force more difficult.

Improvements in the quality of teacher force largely come from hiring better replacements for those who leave teaching or move away. Simply increasing salaries under the existing schedule would tend to cut down on departures – but that means decreasing all kinds of departures including those in surplus areas and those of lower quality. This movement will in general have no effect on overall quality, but it will cut down how rapidly any higher quality teachers can be hired.

But, isn't it true that the better teachers tend to leave schools? Isn't this particularly true in our most needy urban schools? The simple answer is "no." At the end of this testimony I have put in a graph summarizing the results of the most recent analysis of teacher quality that we have done at the UTD Texas Schools Project. This complicated plot provides the distribution of teachers in terms of the achievement gains of their students. The zero on the horizontal axis denotes the average teacher, and we see how far above and below the average other teachers are. The fact that the plot is higher in the center and lower at both means simply indicates that many teachers are clustered

near the center of the quality distribution and the numbers decline as the quality level gets either much better or much worse.

There are three things that are important in this figure. First, if you are a student and get a teacher in the right half of the distribution, you can expect to be much better off than a student who gets a teacher in the left half of the distribution. Second, this graph has two distributions on it – the distribution of quality of teachers who stay in their urban school system (solid line) and the distribution of those who quit teaching altogether (dashed line). Note that the distribution of those who stay is somewhat farther to the right, meaning that those who stay tend to be *better* than those who leave. Third, the vertical line shows the level of quality of teacher that I mentioned previously could close the achievement gap for free and reduced lunch students. The student would have to have a teacher to the right of this line in quality terms for three or four years – a plausible policy but one that takes effort. Another way to characterize that teacher quality line relates to performance gains by a student who starts in the middle of the state distribution. After having a quality teacher for a year, this student would move from the 50<sup>th</sup> percentile in the state to the 59<sup>th</sup> percentile.

The policy that we would like to have is one that disproportionately retains those in the right hand side of the distribution (and diminishes the likelihood of having those on the left hand side). But raising everybody's salary means that we give the same incentives to both the good and the bad teachers. The general improvement typical during the first or second year of experience is insufficient to overcome more basic issues of teacher quality.

Moreover, simply reducing teacher turnover without regard to quality is not a good policy. As the dashed line in the figure indicates, if we convinced all of the teachers currently leaving teaching to stay, teacher quality would actually decline.

Efforts to improve teacher quality pursue two basic approaches: regulatory solutions and performance incentives. Regulatory approaches include refining the requirements for teacher certification, establishing curricula and training standards for teacher training institutions, setting required amounts of professional development, and the like. These components have simply not been shown to be generally effective in the past, and there is little reason to believe that future refinements will be better.

Performance incentives instead concentrate on the thing we care about, student achievement.

The primary mechanism by which performance incentives work is improving the identification and retention of high quality teachers. It is not about getting the current teachers to work harder. I personally believe that most teachers work very hard. On the other hand, the current system does not attract and retain large enough proportions of very talented teachers. By offering recognition and substantial rewards for good performance, Texas could be put on a path of long term quality improvement.

Providing direct rewards to teachers based on student performance measures has been actively resisted across the nation. The result has been that we have little experience with how to design incentive pay programs. For that reason it is important to proceed with the view that developing the optimal incentive package is a process – and not something that will be done once and for all. In this regard, it is also important to establish a research and evaluation program that can inform future modifications. We

should learn from Houston and other districts that experiment with alternative compensation schemes. The capacity to do this needs attention, in part because access to school performance data has lately become very difficult. Nobody in the state, including the Texas Schools Project, currently has the capacity to evaluate such new programs.

I actually think that providing strong performance incentives for teachers and administrators has a basic fairness aspect. To me, it is very unfair to give a student a substandard teacher, because this will harm the student throughout his schooling and after. We now have the capacity to identify which teachers truly contribute to student gains and which do not. With effort, we can get even better at this. Providing rewards for doing a good job is not only natural for the adults but also is a matter of being fair to the students. Frequently when there is discussion of performance incentives, the discussion turns to various notions of fairness to the teachers and administrators – while completely ignoring fairness to the students.

The upcoming finance session provides an opportunity to move Texas schools forward. I urge you to seize on this opportunity. It is extremely important to recognize that school finance is the foundation of all school policy. If you take the position that finance is just raising and distributing funds and that policy comes elsewhere, you are likely to make school improvements more difficult and may even hurt schools. On the other hand, by establishing a powerful system of performance incentives for both teachers and administrators, Texas can resume its position of national leadership in school policy.

Thank you for giving me the opportunity to discuss these important issues with you today.

# Teacher Quality Distribution for Those Staying and Those Quitting Texas Public Schools

