



Struggling Schools, Principals, and Teachers

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This testimony before the Legislative Finance Committee of the New Mexico Legislature discusses the educational attainment of students in New Mexico and the research containing the development of human capital through education.

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I very much appreciate the opportunity to talk with you today. In my mind, this is an important time for New Mexico and for the Nation.

New Mexico faces some clear challenges. The demographics of the school population imply that, relative to the rest of the nation, the state faces more difficult educational problems. When this is combined with the small and widely-dispersed school districts, extra difficulties are added. The problems are not unique, just more severe.

I do not need to spend much time recounting where New Mexico stands in the overall performance distribution, but I think it is important to have a larger perspective – because the stakes are very high. According to the most recent National Assessment of Educational Progress (NAEP), New Mexico students ranked 45th among the states. Figure 1 vividly shows this.

Perhaps more dramatic than the ranking is the actual position in the distribution. The average 8th grader from New Mexico would place at the 40th percentile of the national distribution. In other words, 60 percent of the nation has more skills when it comes time to enter the labor market. If compared against what Massachusetts (the highest achieving state) has shown is possible, the average New Mexican student falls at the 25th percentile. Now you might think that there are many differences between New Mexico and Massachusetts, but the average New Mexican student also falls at just the 32nd percentile of students in Colorado.

Let's reintroduce the issue of demographics. This does have an impact, but it is not everything. New Mexico would rank 34th in the nation terms of scores of white students – placing the average at the 46th percentile of the nation or the 34th percentile of Massachusetts. But the better performance of the white population does not erase the fact that New Mexico

has the population that it does, and the schools – perhaps having to work harder – still have an obligation of developing all of its students to be competitive in the 21st Century.

Finally, in terms of a larger perspective, it is possible to put New Mexico into its position in the world. New Mexico no longer competes with just Arizona or Texas but in fact must face the competition of the world. In terms of math performance, the average student in New Mexico would fall between the average student in Serbia and the average student in Turkey – hardly the place where New Mexico would like to compete.

The state of schools is frankly not just a New Mexico problem. It is a national problem. Our highest performing state (Massachusetts) would only rank 8th in the world – roughly at the same place as Canada. If the whole nation could get to the level of Canada, history suggests that our economy would grow noticeably faster. The growth would mean that the average paycheck for all workers in the U.S. would rise by 20 percent each and every year for the remainder of the 21st Century.

This projection reflects a simple fact: The economic well-being of New Mexico and of the United States rests on the skills of its population, its human capital if you will.

Paul Peterson, Ludger Woessmann, and I recently put this analysis together in a short book – *Endangering Prosperity: A Global View of the American School*.¹ And the conclusion is perhaps best summarized in the Foreword by Lawrence Summers, former Secretary of the Treasury and former President of Harvard University:

¹ Eric A. Hanushek, Paul E. Peterson, and Ludger Woessmann. 2013. *Endangering Prosperity: A Global View of the American School*. Washington, D.C.: Brookings Institution Press.

In an agricultural economy nothing is more important than the quality of the land being farmed. In an industrial economy, nothing is more important than the quality of the business organizations involved in production. And in a knowledge economy nothing is more important than the cognitive quality of those who produce goods and services.

At this point, however, I want to emphasize that there is real hope for improvement. When we look across the nation, we see that a number of states have indeed shown that improvement is possible. Over the past two decades, Maryland, Delaware, Florida, and Massachusetts have all improved student outcomes at a rate that would – if duplicated in the nation – bring the U.S. up to near the top of the international distribution. Simply put, we have examples of widespread improvements in outcomes that can dramatically change the economic future not only of individuals with these new skills but also of the nation as a whole. Unfortunately, New Mexico has not been on this same improvement path, ranking no better than 32nd in the nation in terms of achievement gains over the past 20 years.

Let me return to the topic of struggling schools. In reality this has many of the overall themes highlighted in the previous citation from Larry Summers.

Despite intense attention to the problems of struggling schools, the whole nation has labored under the challenges of lifting underperforming schools. There has been a wide variety of proposed solutions to the poorly performing schools, but they have yet to pay off systematically.

I highlight one aspect that comes through clearly. Improving schools is closely related to improving the human capital of the people in the schools. It is the skill of the principal and of the teachers that consistently comes through in assessing the quality of schools.

While I will come back to teachers, I want to begin with a discussion of principals. I think attention to the quality of principals and school leadership has been insufficient. Of course, there are tales of the great principal who inspires students and teachers alike. There are similar tales of the horrid principal who depresses the school and of the buffoon who is laughably inept. And, it is conventional to give lip service to the importance of leadership. Yet until recently, there was not much systematic research on the range of impacts of principals, on how this interacts with the overall performance of schools, or on what lies behind these effects.

Some recent work that I have done with Gregory Branch and Steven Rivkin assesses the impact of different principals on the students in their schools in Texas.² This work has been followed by related studies in other locales. The result is a new appreciation for the powerful impacts of school leaders.

Let me say at the outset that it is difficult to extract the impact of the principal. Principals are not randomly assigned to schools but in fact reflect in part what the schools and parents look like. As a result, there is some uncertainty about the precise impact of principals. But even the most conservative estimates indicate that principals have a powerful impact.

The easiest way to assess the impact of different principals is to look what happens to student achievement when a principal leaves and is replaced by another person. To do this, we look at the value-added, or the independent impact of schools on the growth in achievement.

² Gregory F. Branch, Eric A. Hanushek, and Steven G. Rivkin. 2013. "School Leaders Matter: Measuring the impact of effective principals." *Education Next* 13, no. 1 (Winter): 62-69.

The objective of the analysis is to separate what schools contribute to student learning from all of the other influences of families, neighborhoods, or what have you. We can then look at whether the value-added of a school changes with a different principal.

While there is some uncertainty about the precise magnitude of effects in this analysis, some consistent and important findings emerge:

1. Principals have a big impact. The magnitude of variations in effectiveness across principals is roughly similar to what is found for individual teachers – except that the impact of the principal covers the entire school and not just a single classroom.
2. There is a bigger variation in the impact of principals in schools serving the most disadvantaged students. There is much less impact of different principals in the schools serving the most advantaged students.
3. The wider variation of effectiveness in disadvantaged schools may reflect that disadvantaged schools have a more difficult time attracting principals or are not as good at selecting the best from a pool of candidates. Or it may reflect the fact that a principal of any given skill level simply has more influence (good and bad) in schools with more demands for management.
4. A discouragingly large number of poor performing principals simply leave one school and move to another school. The market does not seem to be effective at weeding out the worst performers.

Going beyond the overall effectiveness of principals, the analyses of principal effectiveness have also attempted to look at factors related to their performance. Unfortunately, it looks

similar to what is found in teachers – background and characteristics are not closely related to performance.

Not being able to describe a good principal in a reliable manner leads to some policy dilemmas. If one cannot readily describe what is desired, it is hard to improve principals from regulation or certification.

Before discussing the implications of this further, it is important to consider why principals have such a powerful effect. This is actually an area of considerable current research. There is, however, strong evidence that one avenue of impact is the selection of effective teachers. Good principals find ways to keep the good teachers while moving the poorer teachers out.

This is of course the second half of concern about the human capital in schools. We now have overwhelming evidence about the importance of teacher quality. Simply put, no amount of altered curriculum, of smaller classes, of support staff will have much impact without effective teachers in the classroom.

Good teachers affect both the future income of students and the future health of the entire U.S. economy. In terms of student income, a teacher at the 75th percentile of the quality distribution will generate some \$400,000 in extra income (in present value terms) for her students when compared with an average teacher. Low performing teachers have a symmetrical negative effect on students when they work across their lifetimes.

It is useful to return to struggling schools. New Mexico, like every other state, has its share of schools that are not performing anywhere near what we would like. The way to correct these has been a subject of considerable discussion and policy debate. The federal government

has both given grants for improving these schools and set out alternative models indicating how to proceed.

To me, the answer lies completely in improving the human capital in the schools – ensuring that there is a highly effective principal surrounded by a group of highly effective teachers.

How do we do that? The first priority to me must be having an evaluation system that reliably identifies the good principals and teachers along with distinguishing the poor performers. We have not done this well in the past, but there are signs that we are now moving to do this much better.

Suffice it to say, the evaluation system must be keyed to the performance of students. More specifically, it must relate to the value added of the schools, the additions to learning that can be attributed to teachers and schools. Teachers and principals have broad roles, and the evaluation system must take these into account.

The use of value-added evaluation systems is controversial. Let me just say that nobody believes that value added systems should be the entire evaluation. Indeed, it is not even possible because of the limited range of testing. But, the preponderance of weight needs to go with student performance, and this can be introduced in a variety of ways.

We have of course had evaluation systems in most schools for a long time. What has been missing is the use of these for personnel decisions. We seldom use the evaluations to determine rewards or to make decisions about retention and continuation of personnel. As a result, we have little influence over the principals and teachers, and salaries tend to be unrelated to performance. Schools will not improve if we continue in this manner.

One final observation from the research is in order. We have had difficulty in describing what makes a good leader (or teacher). As a result, we need to change from a regulatory view – certification, course requirements, experience, and the like – to an observational view based on performance. This of course is a big step, but it recognizes that the prior approaches have been very unsuccessful.

I thank you for your time. I am very pleased that you are taking these issues on, because there is nothing more important for the future of the United States. It may sound a bit melodramatic, but I firmly believe that the Nation's future is completely dependent on improving the quality of our schools. For that reason, we must be willing to make significant changes in the way we run our schools.

Figure 1. NAEP 8th Grade Mathematics, 2011
40th Percentile of U.S. Distribution
25th Percentile of the Massachusetts Distribution

