Study Quantifies Individual Principals’ Contributions to Student Achievement Growth

Analysis of Texas data shows that students gain between two and seven months of additional learning in schools with effective principals

CAMBRIDGE, MA—While it is widely believed that good school principals have a positive impact on student achievement, there has been little systematic research to date on the effect of strong school leadership. Now a new study has found that highly effective principals raise the achievement of a typical student in their schools by between 0.05 and 0.21 standard deviations, the equivalent of between two and seven months of additional learning each school year. Ineffective principals lower achievement by the same amount.

“For student outcomes, greater attention to the selection and retention of high-quality principals would have a very high payoff,” note the authors, Gregory F. Branch, Eric A. Hanushek and Steven G. Rivkin. Their analysis, “School Leaders Matter,” will appear in the Winter, 2013 issue of Education Next and is now available online at www.educationnext.org.

Specifically, the authors measure how average gains in student achievement, adjusted for individual student and school characteristics, differ across principals—both in different schools and in the same school at different points in time. They found that a principal in the top 16 percent of the quality distribution will produce annual student gains that are at least 0.05 standard deviations higher than will an average principal for all students in their school, or roughly two additional months of learning. “The conservative estimates are somewhat smaller than those associated with having a highly effective teacher,” they state, “but teachers have a direct impact on only those students in their classroom, whereas differences in principal quality affect all students in a given school.”
In addition to examining principals’ impact on student achievement on standardized tests, the study explored patterns of change in the composition of schools’ teaching staff (reflecting the ability of effective principals to recruit and retain teaching talent), as well as the movement of principal talent across schools. Key findings include:

- Less-effective teachers are more likely to leave schools run by highly effective principals.

- Good principals are likely to make more personnel changes in grade levels where students are underperforming, supporting the belief that “improvement in teacher effectiveness provides an important channel through which principals can raise the quality of education.”

- Particularly in high-poverty schools, the most-effective and least-effective principals tend to leave schools, whereas principals of average ability tend to stay put.

- A substantial share of the ineffective principals in high-poverty schools tends to move on to take principal positions in other schools and districts, rather than leave the profession.

The authors also looked at the dynamics of the principal labor market, and noted that, constrained by salary inertia and the absence of good performance measures, the market does not effectively weed out principals who are least successful in raising student achievement. This is especially true in schools serving disadvantaged students.

The study examined 7,420 individual principals of Texas elementary and middle schools over the period 1995-2001 and made use of 28,147 annual principal observations. Student scores from grades 3 through 8 on the math portion of the Texas Assessment of Academic Skills (TAAS) were the focus of the study.

About the Authors
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