

BRIEF 8

APRIL 2010

Principal Effectiveness and Leadership in an Era of Accountability: What Research Says

Jennifer King Rice

For decades, principals have been recognized as important contributors to the effectiveness of schools. In an era of school accountability reform and shared decisionmaking and management in schools, leadership matters. Principals constitute the core of the leadership team in schools. We know from existing effective schools research that “effective principals influence a variety of school outcomes, including student achievement, through their recruitment and motivation of quality teachers, their ability to identify and articulate school vision and goals, their effective allocation of resources, and their development of organizational structures to support instruction and learning” (Hornig, Kalogrides, and Loeb 2009, 1).

While the importance of principals has long been recognized by educators and researchers, empirical studies on the effectiveness and distribution of principals have been undermined by the lack of data to study principals, their complex work, and their impact on school outcomes. In fact, “little systematic evidence exists about the quantitative importance of principals, making it difficult to sort through alternative policy proposals” (Branch, Hanushek, and Rivkin 2009, 2).

WHAT RESEARCH SAYS

Recent work by CALDER researchers has advanced our knowledge base on school leadership, and specifically principal effectiveness, by drawing on longitudinal state data to estimate the effects of principals for different kinds of schools and students. Taken together,

this work sheds some light on important issues related to school leadership and principal effectiveness.

- These studies provide evidence that the quality of a principal affects a range of school outcomes including teachers’ satisfaction and their decisions about where to work, parents’ perceptions about the schools their children attend, and, ultimately, the academic performance of the school.
- The evidence demonstrates that the school principal’s job is complex and multifaceted, and the effectiveness of principals depends on their level of experience, their sense of efficacy on particular kinds of tasks, and their allocation of time across daily responsibilities.
- Findings from this work also demonstrate that principals with the experience and skills found to be related to effectiveness are less likely to be working in high-poverty and low-achieving schools, raising equity concerns about the distribution of effective principals.

KEY FINDINGS ON PRINCIPAL EFFECTIVENESS

1 GOOD LEADERSHIP IS IMPORTANT TO TEACHERS, AND IT AFFECTS THEIR DECISIONS ABOUT WHERE TO WORK; MORE EFFECTIVE PRINCIPALS ARE ABLE TO STAFF SCHOOLS WITH MORE EFFECTIVE TEACHERS.

A study of teachers' perceptions of their working conditions in North Carolina demonstrates that working conditions are highly predictive of teachers' stated intentions to remain in or leave their schools (Ladd 2009). Of the five domains of working conditions identified—leadership, facilities, empowerment, professional development, and time policies—leadership emerges as the most salient dimension affecting teachers' plans to stay in or leave their schools. Teachers' perceptions of their working conditions, and leadership in particular, are also predictive of actual one-year departure rates and student achievement, but the predictive power is far lower than was found for planned departures.

This study quantitatively confirms earlier research that identifies leadership as a critical factor in teachers' decisions about where to work. By quantifying the effects in a multivariate model, this study shows the relative predictive value of leadership—greater than that of other working conditions and comparable to the impact of school demographics, such as the racial mix of the students—on teachers' planned and actual departure rates. The study also suggests that good leadership may be most important in retaining teachers in disadvantaged schools.

Principals clearly play a critical role in retaining teachers, but what is their impact on the overall quality of the teaching force at a school? Do good principals recruit and retain the most effective teachers? Do they develop or dismiss the least effective teachers? A study using six years of data from a large urban school district in Florida examines these questions (Beteille, Kalogrides, and Loeb 2009). This study measures principal effectiveness in school value added to student math and reading achievement during a principal's tenure.

Beteille and colleagues find that more effective principals are able to recruit and retain more effective teachers (in terms of their value added) and remove less effective teachers. They also find evidence, albeit weak, that teachers who work in schools with more effective principals improve more rapidly than their counterparts who work in schools with less effective principals. These findings underscore the important role of principals in realizing the staffing goals of schools through the recruitment, retention, and development of high-quality teachers.

2 EXPERIENCE IS A PREDICTOR OF PRINCIPAL EFFECTIVENESS.

So, we know that good leadership matters to teachers, but what is good leadership? What exactly makes an effective principal? Several CALDER studies provide evidence that one of the most important predictors of principal effectiveness is a principal's years of experience. One such study using data from New York City schools estimates the impact of principal characteristics on multiple measures of school performance including student achievement, student absences and suspensions, and teacher absences and turnover (Clark, Martorell, and Rockoff 2009).

The analysis shows that among new principals, experience as an assistant principal in the existing school positively affects student test scores and suspension rates, though experience as a teacher in the school does not affect these outcomes. In addition, a principal's years of experience as a principal in any school has a positive impact on school performance measures, particularly math achievement and student absences. In contrast, the researchers find little relationship between these measures of school performance and a principal's education, training, or professional development activities.

Confirming these findings on the importance of principal experience, a study using Texas data finds that principals who remain in a school tend to be more effective in terms of student math achievement than those who move to other schools (Branch et al. 2009). The study also finds that the lowest-achieving schools are more likely than other schools to have principals who are in their first year at the school and are least likely to have principals with at least six years of experience in the school.

3 THE PRINCIPAL'S JOB IS COMPLEX AND MULTIDIMENSIONAL, AND THE EFFECTIVENESS OF PRINCIPALS DEPENDS, IN PART, ON THEIR SENSE OF EFFICACY ON PARTICULAR KINDS OF TASKS AND HOW THEY ALLOCATE THEIR TIME ACROSS DAILY RESPONSIBILITIES.

A study analyzing the work of principals in Florida finds that principals engage in over 40 different kinds of tasks daily (Hornig, Klasik, and Loeb 2009). They spend most of their time on activities in two categories: almost 30 percent is spent on administrative activities including student supervision, scheduling, and compliance issues; and just over 20 percent is spent on organizational management tasks including

personnel and budget matters. In contrast, less than 10 percent of principal time is spent on instructional-related activities such as classroom observations and professional development for teachers and staff.

The study finds that greater time spent on organizational management activities is associated with positive school outcomes measured by test score gains as well as teacher and parent assessments of educational climate. In contrast, time spent on day-to-day instructional activities (including coaching, observations of teachers, and evaluation) is marginally or not at all related to student performance, and often has a negative relationship with teacher satisfaction and teachers' and parents' perceptions of instructional climate.

A related study shows that it's not just the allocation of time, but also principals' sense of their effectiveness at these various kinds of tasks that makes them effective (Grissom and Loeb 2009). Again, organizational management emerges among the various roles and responsibilities as the key predictor of principal effectiveness using measures derived from multiple constituents and on multiple dimensions. In contrast, few positive (and some negative) relationships are found between school outcomes and the other four dimensions of task effectiveness. Particularly noteworthy here is the absence of a positive relationship between principal efficacy in instructional management and school outcomes.

These findings do not necessarily contradict the body of research arguing for principals as instructional leaders, but this new evidence does help nuance that argument by broadening the definition of instructional leadership to include organizational management skills. The authors conclude that "principals devoting significant time and energy to becoming instructional leaders in their schools are unlikely to see improvement unless they increase their capacity for organizational management as well. Effective instructional leadership combines an understanding of the instructional needs of the school with an ability to target resources where they are needed, hire the best available teachers, provide teachers with the opportunities they need to improve, and keep the school running smoothly" (Grissom and Loeb 2009, 32). This research suggests that greater attention should be given to organizational management skills in the preparation, hiring, and ongoing professional development of principals.

4 PRINCIPALS' SUBJECTIVE EVALUATIONS OF TEACHERS MAY OFFER VALUABLE INFORMATION ON TEACHER PERFORMANCE BEYOND WHAT CAN BE CAPTURED BY STUDENT TEST SCORES ALONE.

Personnel decisions have always been a major component of principals' work, and the responsibility for evaluating teachers has grown more important with the increasing use of standards-based assessments of teachers as a part of accountability systems and alternative compensation plans. But how good are principals at assessing teacher performance, and what do they consider in their assessments? A study of one school district in Florida demonstrates that, controlling for observed teacher characteristics, principals' subjective ratings of teacher performance are predictive of teacher effectiveness, as measured by their value added to student achievement in math and reading (Harris and Sass 2009). This relationship is stronger for math than for reading, and it is more apparent at the elementary school level than at the secondary school level.

While multiple factors contribute to principals' overall ratings of teachers (including teachers' interpersonal skills, their motivation and enthusiasm, and their ability to work well with others), two factors surface as most influential: teachers' ability to raise test scores and their intelligence, knowledge, and teaching skill. However, only the intelligence/knowledge/teaching-skill factor is associated with a teacher's value added.

What role should principals' subjective ratings play in the evaluation of teachers? How do principal assessments compare with credentials and value-added measures in predicting teacher productivity? Would teacher evaluations systems that use a combination of principal ratings and student test scores more accurately reflect teacher performance than ones that use test scores alone? The Florida study provides evidence to help answer these questions. The researchers find that principals' subjective evaluations of teacher performance are better predictors of a teacher's value added than traditional approaches to teacher compensation that focus on experience and formal education. The study also examines how principals' ratings of teachers compare with the use of prior value-added data to predict teacher effectiveness (value added), and finds that the relative performance of the two measures

varies directly with the number of years of prior value-added data available.

Using up to six years of prior value-added data, the test score measures definitively outperform principals' ratings in predicting future teacher value added. When only two prior years of test scores are available, the relative edge in the explanatory power of value-added data persists in math but is eliminated in reading. With only one year of prior value-added data, principals' ratings of teachers outperform value-added measures in predicting teacher effectiveness in both subjects. Teacher performance in reading is best predicted when both types of measures are used together: 9 percent of the variation in estimated teacher effectiveness is explained with up to six years of prior value-added data combined with principal evaluation. For math, up to 16 percent of the variation in estimated teacher effectiveness can be explained, either with six years of prior value-added data or with a combination of two years of prior value-added data coupled with principal evaluation.

Several conclusions follow from this study. One could conclude that multiple years of prior value-added data are superior to principal evaluation in predicting teacher effectiveness as measured by current value added. However, if multiple years of test score data are not available, multiple measures should be used to evaluate teachers. Further, these findings suggest that principal evaluation of teachers may offer broader information on teacher performance beyond the more narrow test score measures used to calculate value added. In other words, principal evaluations may capture important contributions of teachers beyond the math and reading test scores of their students. These might include contributions to collective school performance, to the school's climate and culture, or to the retention and development of other teachers in the school. In addition, teachers may contribute to broader student outcomes (e.g., enthusiasm, persistence, aspirations) that may not be captured in value-added measures in any given year. While these outcomes are more difficult to measure than student achievement in math and reading, they may be important components of teacher effectiveness that cannot be captured by test scores alone.

5 PRINCIPAL QUALITY IS MOST IMPORTANT IN HIGH-POVERTY AND LOW-PERFORMING SCHOOLS, BUT QUALITY PRINCIPALS ARE INEQUITABLY DISTRIBUTED ACROSS SCHOOLS: HIGH-POVERTY AND LOW PERFORMING SCHOOLS TEND TO HAVE LOWER-QUALITY PRINCIPALS.

A study of Texas data shows substantial variation in principal effectiveness, as measured by their value added to student math achievement (Branch et al. 2009). The variation in principal effectiveness is roughly twice as large in high-poverty and low-achieving schools, suggesting that principal skill is most important in schools serving the most disadvantaged students.

However, a number of CALDER studies reveals that the most disadvantaged schools are the least likely to have effective principals. A study using longitudinal data from a large Florida school district examines the distribution of principals across schools (Horng, Kalogrides et al. 2009). The authors conclude: "If consistent and experienced school leadership matters to student achievement, our research suggests that low-income students, students of color, and low-performing students are at a distinct disadvantage compared to their peers. These students are more likely to attend a school that has a first-year principal, a principal with less average experience, a temporary or interim principal, a principal without at least a master's degree, and a principal that went to a less selective college as compared to their more advantaged counterparts" (Horng, Kalogrides et al. 2009, 28). This study, along with the study using Texas data (Branch et al. 2009), concludes that principal mobility patterns parallel patterns found for teachers. Principals' job decisions, like those of teachers, are affected by the racial and achievement distribution of students in schools.

The Florida-based study that examines principals' efficacy in different skill areas also reports concerning disparities in the distribution of principals. Grissom and Loeb (2009, 33) find that "schools with highest levels of student poverty, particularly at the middle and high school levels, tended to be led by principals assessing themselves the lowest on the organizational management dimension. Instead, the district has hired principals into these schools who systematically are higher on the

instruction management dimension, a human resource decision we have noted is supported by earlier research but that shows no evidence here of improving school performance.”

There is, however, some good news among the findings on the distribution of principals coming from the Texas study. This study found that effective principals are likely to remain in their schools, even if those schools are characterized by high poverty or low achievement. So, “the common view that the best [principals] leave the most needy schools is not supported” by the evidence (Branch et al. 2009). While high-poverty and low-achieving schools may be most likely to have inexperienced principals, if the principals are effective they are likely to remain, even in high-poverty schools. If hiring practices emphasize getting high-quality principals into high-poverty and low-performing schools, then the evidence suggests that they will stay. These findings also suggest that policies that create conditions and target resources to help principals succeed in high-poverty and low-performing schools may be critical.

REFERENCES

- Beteille, Tara, Demetra Kalogrides, and Susanna Loeb. 2009. “Effective Schools: Managing the Recruitment, Development, and Retention of High-Quality Teachers.” CALDER Working Paper 37. Washington, DC: The Urban Institute.
- Branch, Gregory F., Eric A. Hanushek, and Steven G. Rivkin. 2009. “Estimating Principal Effectiveness.” CALDER Working Paper 32. Washington, DC: The Urban Institute.
- Clark, Damon, Paco Martorell, and Jonah E. Rockoff. 2009. “School Principals and School Performance.” CALDER Working Paper 38. Washington, DC: The Urban Institute.
- Grissom, Jason A., and Susanna Loeb. 2009. “Triangulating Principal Effectiveness: How Perspectives of Parents, Teachers, and Assistant Principals Identify the Central Importance of Managerial Skills.” CALDER Working Paper 35. Washington, DC: The Urban Institute.
- Harris, Douglas N., and Tim R. Sass. 2009. “What Makes for a Good Teacher and Who Can Tell?” CALDER Working Paper 30. Washington, DC: The Urban Institute.
- Horng, Eileen Lai, Demetra Kalogrides, and Susanna Loeb. 2009. “Principal Preferences and the Unequal Distribution of Principals across Schools.” CALDER Working Paper 36. Washington, DC: The Urban Institute.
- Horng, Eileen Lai, Daniel Klasik, and Susanna Loeb. 2009. “Principal Time-Use and School Effectiveness.” CALDER Working Paper 34. Washington, DC: The Urban Institute.
- Ladd, Helen F. 2009. “Teachers’ Perceptions of Their Working Conditions: How Predictive of Policy-Relevant Outcomes?” CALDER Working Paper 33. Washington, DC: The Urban Institute.

This research policy brief describes the work presented at the national conference of the National Center for Analysis of Longitudinal Data in Education Research (CALDER), *Principal Effectiveness and Leadership in an Era of Accountability: What Research Says*, in Washington, D.C., on December 11, 2009. More information on the conference is available at www.caldercenter.org.

ABOUT THE AUTHOR

Jennifer King Rice is a visiting fellow with the Urban Institute and professor in the department of education policy studies at the University of Maryland. As a national expert in education finance and policy, Dr. Rice consults with policy research organizations and has worked with the Maryland State Department of Education, the Maryland State Attorney General’s Office, the Texas State Legislature, and the U.S. Department of Education. She is a past president of the American Education Finance Association. Her current research focuses on how policies affect the ability of low-performing schools to hire and retain quality educators. She also examines alternative teacher compensation systems, National Board Certification for teachers, high-stakes accountability, and school reconstitution policies. Her full C.V. is available at www.caldercenter.org.

THE URBAN INSTITUTE
2100 M Street, N.W.
Washington, D.C. 20037



Phone: 202-833-7200
Fax: 202-467-5775
<http://www.urban.org>

National Center for Analysis of Longitudinal Data in Education Research

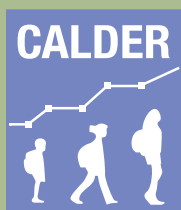
IN THIS ISSUE

Principal Effectiveness and Leadership in an Era of Accountability: What Research Says

To download this document, visit our web site,
<http://www.urban.org>.

For media inquiries, please contact
paffairs@urban.org.

National Center for Analysis of Longitudinal Data in Education Research



Nonprofit Org.
US Postage PAID
Easton, MD
Permit No. 8098

Return service requested

This research is part of the activities of the National Center for the Analysis of Longitudinal Data in Education Research (CALDER). CALDER is supported by Grant R305A060018 to the Urban Institute from the Institute of Education Sciences, U.S. Department of Education. More information on CALDER is available at <http://www.caldercenter.org>.

This research policy brief describes the work presented at the national conference of the National Center for Analysis of Longitudinal Data in Education Research (CALDER), Principal Effectiveness and Leadership in an Era of Accountability: What Research Says, in Washington, D.C., on December 11, 2009. More information on the conference is available at www.caldercenter.org.

The views expressed are those of the author and do not necessarily reflect the views of the Urban Institute, its board, its funders, or other authors in this series. Permission is granted for reproduction of this document, with attribution to the Urban Institute.