RAND EDUCATION

The Careers of Public School Administrators

Policy Implications from an Analysis of State-Level Data

Abstract

Who is leading our nation's schools? Analyses of state data on the career paths of school administrators in North Carolina, Illinois, and New York have shed light on several key policy issues related to the supply of administrators: progress toward workforce diversity goals, whether promotion of teachers from different gender and racial/ethnic groups is equitable, and turnover and retention for administrators. This research offers a model for future data collection efforts aimed at providing a systematic understanding not only of school administrators' careers, but of their quality as well.

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Over one-half of the states in the nation collect statewide administrative data that can support a systematic analysis of the careers of teachers and administrators. These data provide information on every individual who works in a professional capacity in the state education system. By linking information across years, state databases can explain, for example, exactly when a teacher transitions to being a principal, the number of years of experience possessed at the time of transition, and the characteristics of the individual's school(s) before and after the transition. These data also allow a comparison to be made between the many teachers who do not transition to administration and those who do. School districts and state governments can use these data to meet such workforce goals as gender and racial/ethnic diversity and equity in promotion.

As useful as available data are for helping states track and understand the career paths of actual or would-be school administrators, they reveal little about a matter of increasing importance to policymakers and the public: the characteristics of administrators that promote improved student achievement. But, of course, these state data are not collected for that purpose. They do, however, provide a strong foundation on which to build future data collection efforts to improve our understanding of administrative careers and administrator quality.

What Existing State Data Can Explain

Two new RAND Corporation studies and related research conducted at the State University of New York (SUNY), Albany, make use of state data to provide policymakers with insights into the nature of school administrators' careers. These three states represent broad variation in terms of market conditions, state-level school finance policies, and population trends; and they all have a variety of urban, suburban, and rural schools and districts. All three require school administrators to have a master's degree for the standard certification, as is true of the vast majority of states (see national overview study by Gates, Ringel, and Santibañez [2003]). In terms of how their compensation compares with that of the rest of the states and Washington, D.C., New York principals are among the most highly paid in the country, Illinois principals are fairly well paid, and North Carolina principals are poorly paid.

The RAND and SUNY studies use state data for North Carolina, Illinois, and New York to address several questions of potential interest to state and local governments. For example:

- Is the state (or a particular district) making progress toward workforce diversity goals?
- Are teachers from different gender and racial/ethnic groups being promoted on an equitable basis?
- What are the turnover rates for administrators? Are these rates increasing? Are they too high?

Are some districts (or schools) having a harder time than others retaining principals?

The research findings in the studies point both to positive trends and to areas of potential concern.

The gender gap is alive and well. The three state analyses reveal positive trends in the representation of women among school administrators, but they also reveal that the rates of promotion for men and women differ substantially. In 2000, over 70 percent of the teachers in each of the three states were female. Additionally, women make up a rapidly growing proportion of assistant principals, principals, other administrators, and superintendents in each state. Figure 1 shows how the percentages of female principals in Illinois and North Carolina have changed since 1988. As can be seen, by 2001, women had progressed to being just under half of all principals in Illinois and just over half of all principals in North Carolina.

But while the percentage of female administrators is on the rise, the proportion of female administrators still remains below that of female teachers. Moreover, the research indicates that, in each of the states analyzed, female teachers are less likely than their male counterparts to move to administrative positions (assistant principal, principal, and superintendent). These differences are most pronounced at the earliest stages of career transition, and are the greatest for teachers in elementary schools.

To understand career transitions, RAND researchers developed a model to calculate the probability of an individual moving from teacher to assistant principal and from assistant principal to principal. Figure 2 illustrates the results, by gender, for teachers and assistant principals in Illinois and North Carolina for 1987 to 2000.

The results suggest that the greatest barrier to female participation in school administration may exist at the point where an individual initially decides to switch from teaching to administration. As indicated by the graph on the left in Figure 2, men in Illinois were 2.5 times more likely than women to leave teaching to become assistant principals, and men in North Carolina were over 3 times more likely to do so. However, the graph on the right shows that, once promoted to assistant principal, women in Illinois were more likely than men to advance further up the administrative ladder, and women in North Carolina were equally as likely as men to do so. Results similar to these were also found for New York: Men were 30 percent more likely than women to be certified for an administrative position; but once certified, women were just as likely as men to become a principal.

The analyses also reveal something surprising: The gender gap is larger in primary schools than in secondary schools. In all three states, women constitute an overwhelming majority of elementary teachers and a smaller majority of secondary school teachers. For example, in 2000, 94 percent of North Carolina's elementary teachers were female, compared with 63 percent of high school teachers, and this is while 58 percent of elementary principals were female, compared with 24 percent of high school principals. However, the difference in the probability of promotion for men versus women was found to be the largest for elementary school teachers and the smallest for high school teachers.

Figure 1
Percentage of Female Principals in Illinois and North Carolina, 1988–2001

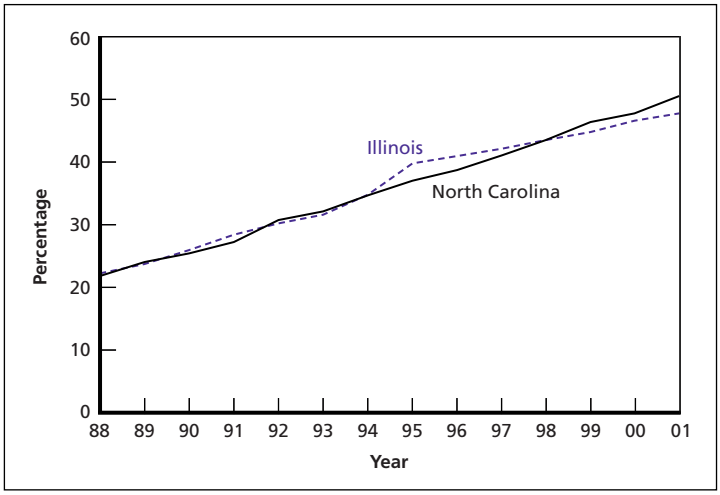
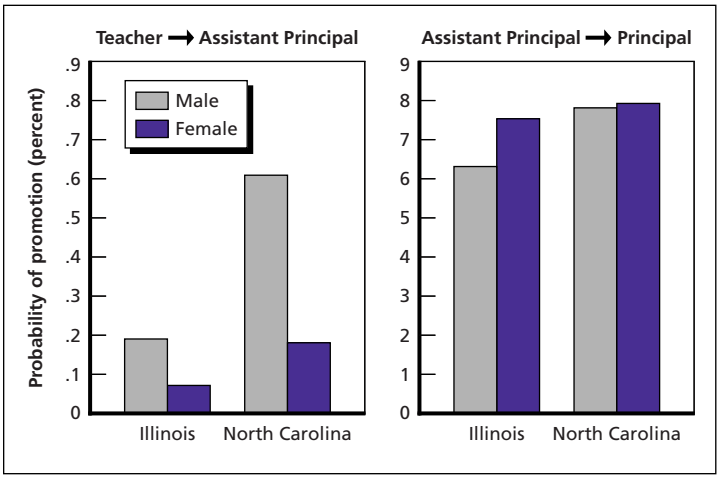


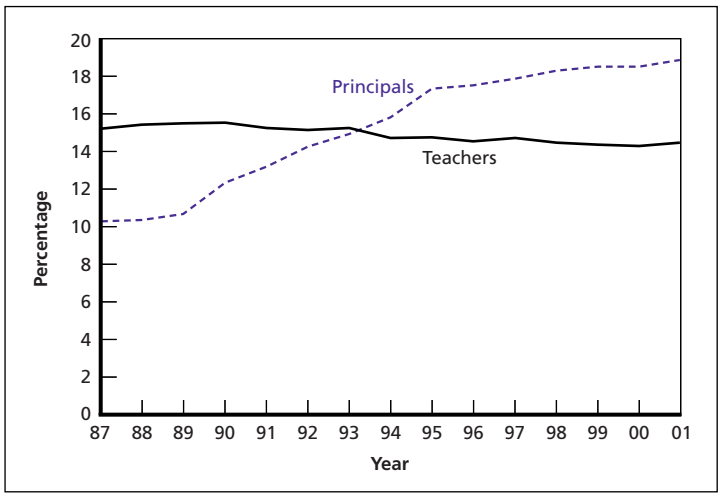
Figure 2
Probability of Promotion from Teacher to Assistant Principal and from Assistant Principal to Principal, 1987–2000, by State and Gender



The finding that women are not as likely as men to become administrators could mean that women are less likely to seek out administrative positions, or that schools and districts are less likely to hire women for such positions, or a combination of the two. No evidence was found favoring one explanation over another. The results do suggest, however, that early career mentoring or support for female educators might be an effective policy lever for encouraging gender parity in the transition to school administration.

The administrative pipeline may not be well primed to increase the proportion of minority principals. The RAND studies found evidence that minority teachers in North Carolina and Illinois are more likely than their white counterparts to become assistant principals and principals. In both states, the proportion of minority administrators was actually higher than the proportion of

Figure 3
Percentage of Minority Teachers and Principals in Illinois, 1987–2001



minority teachers. Figure 3 shows the percentages of minority principals and teachers in Illinois from 1987 to 2001. The studies also found, however, that minorities in both states are underrepresented in the teaching pool relative to overall population, and that retention is lower for minority teachers.

If the supply of minority candidates for administrative positions is to be increased, greater attention must be paid to recruitment and retention of minority teachers in the public school system and/or to the recruitment of minority candidates from less traditional sources.

Levels of principal turnover vary by state, district. State data show variation in the levels of administrative turnover for different states. Turnover rates among school principals in Illinois and North Carolina were 14 and 18 percent per year, respectively, from 1987 to 2001. There was no evidence of a significant change in the turnover rate in either state in recent years.

In both North Carolina and Illinois, schools with a larger proportion of minority students had higher rates of principal turnover. However, the analyses also found that principals who were the same race/ethnicity as the largest racial/ethnic group in their school were less likely to leave. This finding suggests that schools with a high percentage of minority students might improve their leadership stability by hiring principals who are members of the same minority group. The underrepresentation of minorities in the teaching pool could make this a difficult strategy to implement, however.

When school size was controlled for, principals at middle and high schools were found to be more likely than principals at elementary schools to change schools. This suggests that there is more leadership stability at the elementary school level, which is consistent with findings from the national overview of school administrators provided in Gates, Ringel, and Santibañez (2003).

Principal turnover does not have to be viewed as necessarily bad, however. Schools may suffer when a good principal leaves, but they may benefit when an ineffective principal is removed. A recent report by Public Agenda (2003) suggests that turnover among principals may actually be inefficiently low. Indeed, relative to the turnover experienced in the private sector and even federal government organizations, the turnover observed among public school principals is low. However, the school accountability movement may change the situation by imposing more demands on principals, possibly resulting in higher turnover.

What the Data Do Not Reveal—And How That Might Shape Future Research and Data Collection Efforts

Current state data may be useful for analyzing career paths, but they are inadequate for addressing the full range of policy questions currently being asked about schools and administrators. This is particularly true for questions relating to quality of administrator performance, which have grown increasingly important with the push for educational accountability and the passage of the federal No Child Left Behind Act.

Policymakers can begin to address the broader issue of administrator quality by focusing specifically on the role of principals in contributing to student learning. Two tasks can support this effort: identify the characteristics of principals that potentially matter for student learning in particular contexts, and gather systematic information on those characteristics to test whether they do indeed matter.

Identify the characteristics of principals that potentially matter for student learning. Existing leadership standards offer a useful starting point:

- The Interstate School Leaders Licensure Consortium Standards for School Leaders (better known as the ISLLC Standards) offer a list of the kinds of knowledge, dispositions, and performance records that school leaders should possess or exhibit. These standards are based on expert opinion, experience, and theory.
- Empirical studies of the leadership characteristics that appear to have influenced student learning in specific contexts are a useful resource. See, for example, Purkey and Smith (1983); Teske and Schneider (1999); Bryk, Lee, and Smith (1989); and Waters, Marzano, and McNulty (2003).
- More-generic leadership characteristics may prove useful—for example, those identified by the Center for Creative Leadership (available on-line at http://www.ccl.org/CCLCommerce/assessments/overview.aspx?CatalogID=Assessments&CategoryID=Overview(Overview)) and by the Gallup Organization (available on-line at http://www.gallup.com/content/default.asp?ci=1435).

Gather systematic information on those characteristics to test whether they do indeed matter. Systematic data must be collected on every principal within the state and/or the district (depending on the unit of analysis). To begin with:

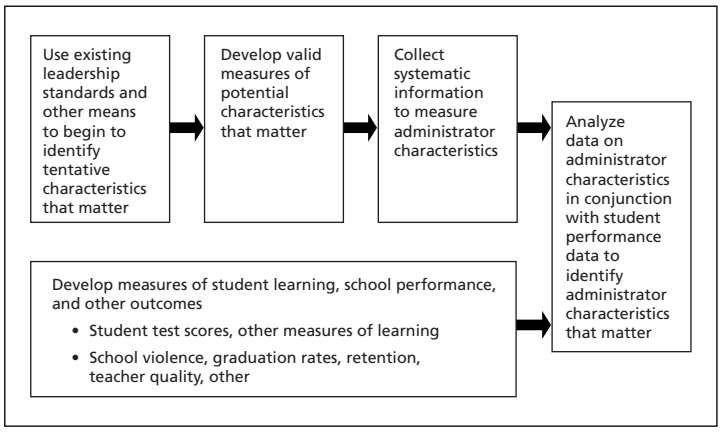
- In states where principals are required to undergo Educational Testing Service (ETS) school leadership assessments, their scores could be retained as part of the state data system.
- Similarly, states or districts that use a common evaluation tool for school principals could record the score in the state data system.

These systematic data on principal characteristics will need to be analyzed in conjunction with data on student outcomes in order to address the question of which characteristics matter in which contexts. Of course, student outcomes depend on many factors in addition to the characteristics and behaviors of the principal. However, if principal characteristics do matter, relationships between those characteristics and student outcomes should be evident in an analysis of the data. It is becoming quite common for student test score data to be collected over time at the school level, and even at the classroom level. Many large districts now are able to track individual students and link student scores to schools and classrooms. Hamilton (2002) argues that statewide data on student test scores that link students from year to year and to individual schools and classrooms should be collected. All of these data sources could be tapped to create a system capable of supporting a richer analysis of school administrators.

Figure 4 illustrates the process that could be used to identify the characteristics of principals that matter for student performance.

It should be remembered that the market for public school principals is highly constrained by state certification requirements. Since nearly all public school principals are certified, those people who make up the pool of available individuals will share a set of knowledge, skills, and abilities that the state certification boards deem important. But those same people may lack other knowledge, skills, and abilities that could be crucial for improving student performance but are not part of what the state boards consider. Ultimately, a better understanding of the knowledge, skills, and abilities that a successful school leader must have will require some experimentation or flexibility in the principal labor market.

Figure 4
A Process for Identifying Characteristics of Principals That Matter for Student Performance



Another point made in these studies is that the development of systematic data on administrator quality is a long-term process that must be approached with caution. The collection of additional information about administrator characteristics raises questions about how the information will be used (or even abused), particularly in drawing purely hypothetical or unsubstantiated correlations between administrator quality and other characteristics—for example, gender or race/ethnicity. These concerns are especially crucial given that there is no conclusive evidence at this point that having certain characteristics makes one more or less successful as a school leader than not having them does. As a result, it would be completely inappropriate for states, districts, or schools to use information on characteristics in employment decisions in the short run. ■

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This research brief describes work done for RAND Education and funded by the Wallace Foundation and is documented in *Career Paths of School Administrators in North Carolina: Insights from an Analysis of State Data,* by S. M. Gates, C. Guarino, L. Santibañez, and B. Ghosh-Dastidar, TR-129-EDU, 2004, 132 pp., available online at http://www.rand.org/publications/TR/TR129; and in *Career Paths of School Administrators in Illinois: Insights from an Analysis of State Data,* by J. Ringel, S. M. Gates, and B. Ghosh-Dastidar, TR-123-EDU, 2004, 132 pp., available online at http://www.rand.org/publications/TR/TR123. It also discusses findings from a study conducted at the State University of New York, Albany, documented in *Our Next Generation: School Leadership in New York State,* by R. H. Lankford, R. W. O'Connell, and J. H. Wyckoff, Albany, NY: New York State Education Department, 2003, available online at http://www.albany.edu/edfin/Our%20Next%20Generation.pdf. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**® is a registered trademark.