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## Career Paths of School Administrators in North Carolina

Insights from an Analysis  
of State Data

SUSAN M. GATES, CASSANDRA GUARINO,  
LUCRECIA SANTIBAÑEZ, ABIGAIL BROWN,  
BONNIE GHOSH-DASTIDAR,  
CATHERINE H. CHUNG

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1700 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138  
1200 South Hayes Street, Arlington, VA 22202-5050  
201 North Craig Street, Suite 202, Pittsburgh, PA 15213-1516  
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## **SUMMARY**

According to anecdotal reports, schools in the United States are having difficulty recruiting and hiring school administrators, and the reigning perception has been that the difficulty stems from a general shortage of people qualified to be school administrators. This perception was called into question recently by three studies based on empirical information on administrative careers.

These studies, all of which were summarized in a Policy Brief by the Wallace Foundation (2003), suggest that the supply of nominally qualified (e.g., certified) individuals available to serve as school administrators is indeed adequate, but that the practices of human resources departments in schools and districts may be preventing schools from selecting the best candidates. By juxtaposing the conventional wisdom against the empirical realities, the studies reflect the importance of using empirical data where possible to monitor and better understand the labor market for school administrators.

In this report, we further develop this understanding of the careers of school administrators through an in-depth analysis of administrative data from the state of North Carolina. We describe in detail what state-level administrative data can reveal about the careers of school administrators in the state, what the data cannot reveal, and how further research and data collection might be directed to build on the advantages of systematic administrative data in order to provide a better understanding of the relationship between administrative career paths and learning outcomes for students.

An analysis of career paths sheds light on several questions of interest to states and districts. Public sector organizations often place value on the racial/ethnic and gender composition of their workforce. And many districts are working to ensure gender and racial/ethnic diversity among school administrators and to eliminate inequities in promotion rates to administrative positions. As a result, state and district policymakers may be interested in whether trends affecting school administrators with respect to racial/ethnic and

gender composition reflect progress toward statewide or local objectives. Policymakers at the state and local levels are also concerned about turnover among school administrators, a concern based on the belief that high levels of turnover deny schools the leadership stability they need to succeed. Career path analyses make it possible to investigate important trends in the level of administrative turnover, and to look at whether particular types of schools are facing substantially higher turnover than other schools are.

With the passage of the federal No Child Left Behind Act and state-level educational accountability initiatives, states and districts became very concerned about school quality, as measured by student achievement for all subpopulations of students. In attempting to improve school quality, districts and states need information about which characteristics of administrators best promote improved achievement for all students. With better data, analyses of administrators' career paths might ultimately help inform this key policy issue, as well.

Previous work by the RAND Corporation (Gates, Ringel, and Santibañez, 2003) provided a national overview of the careers of school administrators based on available national data. However, because national data are cross-sectional and typically cover only a sample of the education workforce, they cannot support a true analysis of career paths. It is possible to examine how the population of school administrators changes over time and how the characteristics of administrators are related to school characteristics, but it is not possible to consider transitions into and out of different positions or to compare those who move into administration with those who do not. Administrative data, on the other hand, are systematically collected, which means it is possible to track individuals over time and across schools and districts, and to cover the entire workforce of public professional educators and administrators. These data support rigorous and comprehensive longitudinal analyses on careers, career paths, and turnover.

This report presents an approach for using administrative data for career path analyses, as well as the results from applying such analyses to the North Carolina data. The first of our four research

objectives was to provide a descriptive overview of current and former North Carolina school administrators and their careers. Our descriptive analysis examined trends over time for the demographic characteristics of school principals, assistant principals, other administrators, and superintendents. We then focused on school principals and superintendents, examining the positions these individuals had held previously. Finally, we examined the positions held by first-time principals in the years following their move to the principalship.

Our second research objective was to identify characteristics of the individual and the school in which he or she works that are related to whether that individual transitions to a principalship or superintendency. We used a longitudinal event history modeling approach to examine the educators' decision to become an administrator.

Our third research objective was to identify characteristics associated with principal mobility and attrition, which is addressed using an event history approach similar to that used for the second objective. Our fourth objective was to consider how state administrative data might be used to help policymakers better understand the link between school administrators and student learning.

#### **DESCRIPTIVE OVERVIEW REVEALS THAT CHARACTERISTICS OF NORTH CAROLINA SCHOOL ADMINISTRATORS HAVE CHANGED AS THEIR NUMBERS HAVE INCREASED**

Our analysis revealed that the number of school administrators in North Carolina has grown substantially, but not primarily as a result of increases in the numbers of principals and superintendents. Between 1987 and 2001, the total number of school administrators grew by 61 percent (compared to 46 percent for teachers), but this growth was not evenly distributed across administrative positions. We found that while the number of other administrators more than doubled and the number of assistant principals increased by 71 percent, the number of school principals increased by a modest 11 percent and the number of superintendents actually declined by 16 percent.

It is important to note, however, that we found no evidence that this growth in the number of positions--which translates into demand for school administrators--ran up against a limited supply of candidates. Our analyses revealed no clear time trend in terms of the

probability that educators in North Carolina transition from teaching to the principalship.

As of 2000, women made up a majority of other administrators, assistant principals, and first-time principals, and were 29 percent of superintendents. In spite of steady growth, however, the proportion of female administrators remained below the proportion of female teachers (81 percent). When we focused specifically on principals, we saw steady growth in female representation between 1990 and 2000: In 1990, only 26 percent of North Carolina principals were female, but by 2000, nearly half (46.6 percent) were. The trend of increasing female representation in the principalship was evident at each grade level, although the proportion of women principals in elementary schools was over twice as large as that in high schools. We found that women principals were a majority (58 percent) in elementary schools, but were at 41 percent in middle schools, 35 percent in combined-grade schools, and 24 percent in high schools.

With the exception of the superintendency, where the proportion of those who were white declined from 87 to 81 percent between 1990 and 2000, we found only slight changes in the proportion of white school administrators in North Carolina. In 1990, 22 percent of North Carolina principals were racial or ethnic minorities; by 2000, 24 percent were.

**CAREER PATH ANALYSIS REVEALS THAT GENDER AND RACIAL/ETHNIC COMPOSITION REMAINS A CONCERN**

As mentioned earlier, public sector organizations often place value on the racial/ethnic and gender composition of their workforce. Specifically, governments often strive to ensure that the composition of their workforce reflects the composition of the population as a whole, and that the composition of management in government organizations reflects that of the government workforce as a whole. Despite the gains described above, the results of our multivariate analysis of career transitions raise some important concerns for policymakers on both scores.

First, we found that the gender gap is alive and well. Our analysis revealed that, across the board, females in the North Carolina public school system are less likely than males to advance to



administrative positions. When we controlled for other characteristics, men were still four times more likely than women to become principals directly (that is, without first serving as an assistant principal), and over three times more likely to become assistant principals. However, we also found that conditional on having become an assistant principal, there was little difference between men and women in terms of the probability of becoming a principal. This suggests that the source of the gender differential may lie at the point at which the individual makes the initial decision to move from teaching into administration. In addition, the results of our analysis also suggest that the gender gap is not a problem specific to high schools. Despite the stronger female representation among elementary school principals mentioned above, we found that women in middle and high schools are actually more likely than those in elementary schools to become principals or assistant principals. In other words, gender differences in the teaching pools at the elementary and high school level appear to be driving the differences in representation in school administration. Women make up 94 percent of elementary school teachers, compared with 63 percent of high school teachers. What this gender gap in the transition to administrative positions is caused by, we do not know. It could stem from differences between men and women in their preference for administrative careers, from gender-based discrimination in promotion, or from a combination of the two; our analysis did not allow us to identify a cause.

We also found that the administrative pipeline may not be well primed to sustain increases in the proportion of minority principals. Overall, our analyses suggest that educators in the North Carolina public school system who are African-American are slightly more likely to leave the system than those who are not African-American. In other words, retention is lower for minority teachers. Additionally, African-Americans are over two times more likely than non-African-Americans to become principals. At a time when the proportion of students who are minority is increasing, the pool from which minority administrators are drawn may be declining.

**PRINCIPAL TURNOVER IS FAIRLY HIGH IN NORTH CAROLINA AND IS GREATER FOR SCHOOLS SERVING HIGH-MINORITY STUDENT POPULATIONS**

Our descriptive analysis of individuals entering the principalship for the first time in the late 1980s and early 1990s suggests a fairly high degree of leadership instability in North Carolina schools. After six years, just under half (48 percent) of first-time, or new principals, were still principals in the state of North Carolina. And even among those who remained principals, a majority had moved to other schools: 18 percent remained in the same school, 8 percent became principals in a different district, and 22 percent became principals in a different school in the same district. Fourteen percent of first-time principals had returned to teaching six years later, 12 percent had assumed some other administrative position, and 26 percent had left the North Carolina public school system.

Our multivariate analysis of principal turnover helps in understanding principal turnover in North Carolina. Over the timeframe 1987–2001, turnover among all school principals, viewed from the perspective of an individual school, was 18 percent per year. However, we found that only 2.4 percent of this turnover was due to principals leaving the system. Specifically, among the pool of principals in a given year, 82 percent were principals in the same school the next year, 9.4 percent had become principals in a different school, 5.8 percent were still in the North Carolina school system but in another position (e.g., had returned to teaching or taken another administrative position), and only 2.4 percent had left the system entirely.

We found that principals in schools with a larger proportion of minority students were more likely to change schools within the public school system and to leave the principalship but remain in the system. This suggests that schools serving higher proportions of minority students may have a harder time retaining principals. However, we also found that a principal who is the same race/ethnicity as the largest racial/ethnic group in the school is less likely to switch schools or to leave the principalship to take another position in the school system. This suggests that high-minority schools might improve their leadership stability by hiring principals who are of the same

racial/ethnicity group as the largest minority group at the school, although the demographic trends discussed earlier imply that this may be a difficult strategy to implement.

Of course, we must emphasize that turnover is not always bad. Turnover may reflect an employee deciding to leave an organization, or the organization deciding that the employee should leave, or both. The belief that administrative turnover is bad for public schools reflects an implicit assumption that all sitting principals are good at what they do and that schools therefore suffer when there is principal turnover. However, it may be the case that schools with higher turnover are simply better at ridding themselves of principals who do not work out. A recent report by Public Agenda (2003) suggests that turnover among principals may indeed be inefficiently low, but that the school accountability movement may be changing that. Until there are reliable measures of principal quality, it is impossible to conclude whether schools that experience higher administrative turnover are really at a disadvantage relative to those that have lower turnover.

**ADMINISTRATIVE DATA ARE SERIOUSLY LIMITED BY THEIR LACK OF DATA ON ADMINISTRATOR QUALITY**

Our research is perhaps most illustrative for what it cannot tell us about school administrators. Specifically, our research highlights the fact that administrative data provide little insight into the performance of school administrators. Ultimately, the issues of greatest interest to policymakers are whether the education system is promoting and retaining individuals who are effective administrators, and which individual characteristics (including career experiences) are associated with administrative effectiveness. This report provides recommendations for data collection efforts that could help researchers and policymakers begin to address these issues.