

Looking for Their Dick Vermeil: How Prior Performance Influences the Selection Decision

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Abstract

When replacing an executive an organization is faced with the choice of either promoting someone internally or hiring an outsider. Prior research in the private sector supports the contention that poor performing organizations will be adaptive and seek an outsider in hopes of initiating change that will improve performance. Do public organizations behave similarly? We address this question in the context of public education and examine the superintendent hiring decisions in 491 school districts. We find that school boards make sophisticated assessments of the district's performance and these assessments influence their selection decisions.

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In 1976 the owner of the struggling Philadelphia Eagles football team decided to go outside, way outside the organization, and hire a college football coach to lead his team. The owner hoped that hiring someone from outside the organization would rejuvenate the program and improve performance. In this case it paid off; in four years Dick Vermeil led the Eagles to Super Bowl XV. There is a long history of struggling sports teams trying to recruit a coach from the outside in the hopes of improving performance. Do low performing public organizations try to adapt by hiring from the outside, in hopes of finding their own Dick Vermeil?

The decision of selecting from inside and outside candidates is a basic labor economics question (Lindbeck and Snower 1986, 2001). There is a perceived trade off in selecting from those who are familiar with the organization and those who may bring new and different expertise. We apply this internal or external trade off to how prior performance may influence the personnel decision to promote from within or hire from the outside. Previous research on this topic in the private sector argues that internal and external selection may be closely related with the prior performance of the organization (Cannella and Lubatkin 1993; Boeker and Goodstein 1993; Furtado and Karan 1990; Walsh and Seward 1990; Dalton and Kesner 1985). Far less is known about the behavior of public organizations. This question is important because research exploring the influence of managerial succession on public organization performance has found that public managerial change does influence organizational performance (Boyne and Dayha 2002, Carlson 1961; Hill 2005). In particular, Hill's (2005) findings demonstrate that

there is an immediate, negative effect on performance when the new executive comes from the outside.

This paper is one of the first to look at how prior organizational performance acts as a signal for the inside or outside selection decision of school superintendents. The principle source of data for this analysis is Texas school data from 1986-2002. Surveys of Texas school superintendents will be used to ascertain if the superintendent was promoted from within or hired from the outside. We use varying measures of performance to determine how prior performance of the district influences the decision to promote internally or hire externally. We expect that in an effort to adapt, poorly performing districts will be more likely to select an outside candidate. The districts may believe that an external hire will bring the necessary innovation to improve performance (Carlson 1961). On the other hand, high performing districts may be wary of change and promote an internal candidate.

Executive Hiring Decisions

Organizational and management theorists widely believe that poor performance increases the likelihood that a new chief executive will be selected from outside an organization because outsiders are perceived as more able than insiders to initiate and implement strategic changes (Furtado and Karan 1990; Vancil 1987; Walsh and Seward 1990; Cannella and Lubatkin 1993). All of these studies, however, examine successor choice within the private sector. It is unclear how this process may work in public organizations where personnel processes tend to be less flexible and performance criteria are often in dispute. To address this gap in the literature, we asked the question of

whether public organizations consider prior performance when making succession decisions.

Organizational theory research offers several viewpoints on the subject of executive succession. The inertial view argues that organizations, particularly large ones, tend to resist change and are likely to hire from the inside even when performance is poor (Goodstein and Boeker 1991; Miller 1991). Since outside succession involves greater change than inside succession, it is more likely to upset the prevailing norms and strategies of the organization and be potentially threatening to incumbents in top management (Brady and Helmich 1984). Given this, the organization will resist hiring a new executive from the outside, regardless of performance, to protect the status quo. Thus, the link between organization performance and outside selection is attenuated.

A second view of executive succession, the adaptive view, offers an alternative explanation. According to the adaptive view, organizations change or adapt in response to environmental challenges and executive selection decisions represent an important adaptation opportunity (Friedman and Singh 1989). Supporting this view is a large body of empirical evidence that poor performance increases the likelihood of a succession event (Coughlan and Schmidt 1985; Gilson 1989; Grusky 1963, 1964; James and Soref 1981; Puffer and Weintrop 1991). Consistent with the adaptive view is the belief that when performance is poor, those doing the hiring will favor outside candidates because outsiders are perceived as being more capable, than insiders, of implementing strategic change in the organization (Bibeault 1982; Faith, Higgins, and Tollison 1984; Grusky 1961; Walsh and Seward 1990). Given this, the adaptive view predicts that poor performing organizations will adapt and recruit from outside the organization.

Furthermore, during periods of good performance, an insider will be preferred because they are viewed as less likely to disrupt the ongoing organizational processes (Carroll 1984; Grusky 1961; Kotin and Sharif 1967).

However, empirical support for the adaptive view in the literature on executive succession has been limited, in spite of its intuitive rationale. Several studies have reported no evidence, statistical or descriptive, to suggest that poor performance leads to outside selection (Friedman and Singh 1989; Furtado and Karan 1990; Dalton and Kesner 1985). Citing limited empirical support for the adaptive view of executive succession, researchers posited a third view. The contingency view argues that the relationship between performance and selection decisions is not direct, but rather is moderated by numerous sociopolitical factors (Boeker and Goodstein 1993; Cannella and Lubatkin 1993). Cannella and Lubatkin (1993) find that poor performance by itself does not trigger an outside selection. Both the presence of an heir apparent and the incumbent's ability to influence the selection process weaken the link between performance and outside selection. Similarly, Boeker and Goodstein (1993) conclude that performance influences successor selection; however board composition, firm ownership, and ownership concentration moderate that relationship. The extant literature offers three possible hypotheses about the link between performance and selection decisions, all based on studies from the private sector. We are interested in the strategy – adaptive, inertial, or contingency – that public organizations, specifically school districts in Texas, will follow when selecting new executives.

The Case of Superintendent Selection in Texas

Although, school districts are the most common public organizations in the United States, they have some distinct characteristics. School districts are highly decentralized organizations as most of the authority lies in the district with limited intervention from the state in day-to-day matters. The lack of legislative control by the state means that the superintendents enjoy a high level of discretion and can create an organization that supports his or her goals. Superintendents can hire subordinates (the central office staff, principals, vice-principals, and teachers) who reflect and support his or her objectives. In addition, the superintendent can choose which external actors he or she will network with and to what degree. Superintendents can also affect the learning environment of students by mandating the adoption of specific educational reforms. The list of possible reforms is endless, and the reforms can be tailored to suit the needs of the students and to meet the goals of the superintendent. Finally, superintendents can acquire more resources for their districts. While most of these resources come from public budgets, superintendents do raise private money and some resources are intangible – for example, the good will of local business leaders or the support of parent groups. All of these factors can influence the performance of the district and can expand the authority and discretion of the superintendent.

The market for school superintendents differs from that of many other public agency heads. The market can be characterized as competitive with virtually full information; that is, all positions are announced and individuals know the salary of the previous superintendent and the salaries in similar-sized districts. With few exceptionsⁱ, school superintendents are drawn from the ranks of those employed in public schools. Given this, the school-district managerial talent is mobile within the state (as to some

degree across states). While some superintendents remain for extended periods in one district, most move among several districts as they pursue their career. Most of the time, positions are filled after open searches, often conducted with the assistance of a search firm. Superintendents seeking to move will have access to the characteristics and performance record of the school district. Similarly, the hiring district will have extensive information about how the candidate's current district (or school if they decide to hire a principal) has performed, and assessments of the candidate's management abilities. This high level of information can ease some of the district's uncertainty when considering hiring an outsider.

Interest in hiring an outsider, however, might conflict with the inertial nature of school districts. School districts tend to be highly autoregressive systems that change only slowly over time. Studies of school districts consistently show that prior performance is the best predictor of future performance. At first glance, we might expect school districts to be inertial in the selection decisions and to choose a superintendent from within the organization, regardless of performance. Indeed some have criticized public schools as too bureaucratic and rule bound to change (see Chubb and Moe 2001). However, the saliency and visibility of the performance measures of schools may push districts out of their "inertial box" and cause them to be more adaptive.

Performance measurement for public organizations flourishes in public education. The proliferation of report cards on schools and their performance along with elaborate accountability systems has generated a situation where substantial information exists for the public and policy makers to judge the performance of schools and school districts. In Texas, the locus of this study, an elaborate accountability system based on state required

tests has been in place since the mid-1980s. Such an accountability systems and the resulting publicity about performance makes it difficult for a poor performing school to escape notice. School boards are subject to substantial pressure by citizens to hold superintendents and schools accountable for their performance on the mandate tests. Much like wins and losses for sports teams, standardized tests provide a metric for individuals to judge how well these organizations are performing.

Measuring School District Performance

One of the difficulties in testing the link between prior performance and the selection decision is deciding what constitutes organizational performance. Most of the succession literature focuses on some level of return, be it profitability of the organization (Dalton and Kesner 1985; Friedman and Singh 1989) or winning percentages in sports teams (Grusky 1963; Pfeffer and Davis-Blake 1986). Measuring performance in public organizations, however, is often more difficult. In public education, the publication of *A Nation at Risk* in 1983 triggered a series of reforms that emphasized among other things the use of standardized tests to evaluate schools. Although most scholars of education (see Smith 2003) feel there are serious limits to standardized tests, they have been widely endorsed by policy makers and citizens. The result is a bottom line performance indicator similar to profit for private sector organization.

Texas has been in the forefront of states in creating a performance and accountability system for public education. The state requires all students in grades 3rd thru 8th and 11 to take standardized reading, writing, and mathematics exams each year. The grade 11 exam is a high-stakes test, and students are required to pass it to receive a high school diploma from the state of Texas. The results of this test, the Texas

Assessment of Academic Skills (TAAS), are highly salient to the district, superintendent, and public in general.ⁱⁱ The results are front page news, and superintendents are often evaluated, not only by the school board, but also implicitly by the community, on the outcomes of this test. The test scores are also used to rank districts and serve as the most visible indicator of performance used to assess the quality of schools.

While using TAAS scores to evaluate school districts and superintendents is a reasonable strategy, it is also a somewhat naïve one. Using raw scores advantages wealthy suburban districts that are likely to score well regardless of the quality of education the students receive. A more sophisticated view of performance would try to determine the value added by the school given the type of students and the resources that it had. One way to do this is to control for variables that are associated with higher test scores via an education production function.

A large body of literature identifies two sets of environmental variables that have been shown to effect performance on the TAAS test – one set for the task difficulty (or constraints) facing the organization and another for the organizational resources. Task difficulty reflects the truism that some students are easier to educate than others. The literature consistently finds that poverty and race are correlated with greater education challenges (Jencks and Phillips 1998). Poverty and race are associated both with the lack of educational resources in the home and additional factors (e.g., single-family households) that affect student learning. The relationship between resources and student performance is controversial (Hanushek 1996; Hedges and Greenwald 1996). Recent research generally shows that additional resources are associated with higher student performance (Evans, Murray, and Schwab 1997; Wenglinsky 1997).

Here the strategy of analysis is to take variables measuring each of the factors that should influence the school district's performance on the TAAS test and use them to predict the actual "all pass rate" on the TAAS test. The residual from this equation – that is, the portion of performance not accounted for by the constraints and resources of a district – will identify the districts that perform on this crucial measure of performance above or below the expectation given their environment (for a similar residuals-based measure see Meier and O'Toole 2002). The residual, therefore, can be treated as a more sophisticated measure of high or low performance because it adjusts for how difficult or how easy it is to educate children. We refer to those school districts that exceed regression based expectation as "high achievers." This measure can contain some error because the residual contains all those unobserved factors not captured in the model as well as an assessment of high and low performance. The effect of this measurement error, however, will attenuate any relationships between a performance measure and selection decisions (Bollen 1989, pp. 159-167; Carmines and Zeller 1979). The measurement error, as a result, creates a bias in favor of null findings.

Identifying the High-Achievers

To generate the residuals-based measure of districts performing above expectations, given their constraints and resources, we use a model of performance common to the literature. For the analysis we use district data from the Texas Education Agency (TEA) for the years of 1986 to 2002 (see Meier and O'Toole 2001 for a complete description of the data set). Included in the analysis are the 490 districts that hired a superintendent between 1993 and 2002. The dependent variable is the percentage of

students in a district who passed all (reading, writing, and math) sections of the TAAS, or the “all pass rate.” The mean of this variable is 68 and the standard deviation is 15.

Five independent variablesⁱⁱⁱ are included in the model to capture the resources and constraints of a given district. The three measures of constraints are the percentage of black, Latino, and poor students (the last measured as the percentage of students eligible for free school-lunch programs). Each of these measures should be negatively related to student performance. Two measures of resources are included – average teacher salary and the student/teacher ratio. Average teacher salary should be positively related to student performance and class size should be negatively related to performance (small classes are a resource, large classes a constraint).

The results of this model appear in Table 1. The predictive ability of the model is good at 55 percent. All of the independent variables are in the predicted direction and statistically significant. The purpose of this part of the analysis is to identify the portion of the variance in performance not accounted for by the constraint and resources of a district. We can now identify the districts that perform on this crucial measure of performance above or below the expectation given their environment. We predict that districts that are high-achievers will be more likely to promote a superintendent successor from inside the organization. On the other hand, those districts performing below expectations will be more likely to look for a Dick Vermeil outside the organization.

(Table 1 about here)

Modeling Superintendent Selection

In order to examine the issue of how prior performance influences managerial succession decisions, this analysis combines survey data from public school districts in Texas with district data provided by the TEA for the years 1986 through 2002. The unit of analysis is a selection decision made by Texas school districts replacing their superintendents between 1993^{iv} and 2002. During this time period 490 hiring decisions were made. The dependent variable in our analysis is whether the school district hired from outside (coded 1) or chose to promote an internal candidate (coded 0). On the survey the superintendent is asked to report how long he or she has been employed by the district and how long they have been employed as superintendent. This variable is coded outside if superintendent reports working in the district for the same amount of time as they have been superintendent. In addition we allow for the fact that some superintendents may start out in interim positions in the district for a short period of time. Given this, we also code the variable as outside if there is less than one year difference between the time employed in the district and time employed as superintendent. In 316 (64 %) cases the school board chose to hire a superintendent from outside the district.

We also include class attendance^v in the model, allowing us to test the impact of an additional performance measure. The class attendance rate might be termed a bottom-end indicator of performance. High attendance rates are valued for two reasons. Students are unlikely to learn if they are not attending class and state aid is allocated to the school district based, in part, on average daily attendance. As a result, attendance is a good indicator of low-end performance by these organizations; the measure is the average percentage of students who are not absent.

Control Variables

In addition to the measure of high-achievers, we also included several control variables that may be related to the selection decisions of school districts. The literature on executive succession finds that several organizational characteristics influence selection decisions. A number of studies have documented that small firms are more likely to select outsider successors than large firms (Boeker and Goodstein 1993; Cannella and Lubatkin 1993; Dalton and Kesner 1983). The logic is that larger organizations will have larger internal pools of candidates and it is easier for them to find qualified successors internally. We include two measures of organization size as controls – total enrollment and per-student instructional spending. Following the literature, we expect enrollment to be negatively related to hiring from outside the district. The other measure, per-student instructional spending, is related to the level of monetary resources available to the district. The level of monetary resources available to the district is central to the ability to go outside when hiring. Since, districts often pay a premium to hire a superintendent from outside the district. Given this, we expect per-student instructional spending to be positively related with going outside.

Organizations looking to fill an executive position will be concerned with their current environment and in particular the stability of their human resources. To control for this we include three measures of stability of the human resources in a district. Teacher retention (measured as 100 – the percentage of teacher turnover), average years of teaching experience, and the percentage of teachers who are not certified are related to human resources within the district. It is our contention that a district will be more likely to hire from the outside, the more stable the human resources are within the district. Given this we expect greater teacher retention and experience to be positively related to

going outside to hire and an increase in non-certified teacher to be negatively related. The descriptive statistics for the variables used in our analysis are reported in Table 2.

(Table 2 about here)

Findings

The results from the model predicting the likelihood that a school district will select an outside candidate are reported in Table 3.^{vi} We are not surprised by the limited predictive power of our model. Any hiring decision involves a multitude of factors (e.g., lawsuits in the district, the presence of an heir apparent, the preferences of various school board members, and social networks) that can not be captured with the data. This point suggests that it should be more difficult to find statistical significance with the current specification. As predicted, the proposed measure of high-achieving districts is negative and significantly related to a school district's choice to go with an outside successor. This means the high-achieving districts, those districts performing above the expectations given their resources and constraints, will be less likely to hire an external candidate. Conversely, this means that poor performers are more likely to try to adapt and look outside. This variable also has the greatest substantive effect on the outcome in the model. Holding all other variables at their mean, a one standard deviation increase in the TAAS relative to the level of expected performance is associated with an increase in 7 percent increase in probability of hiring from the inside.

(Table 3 about here)

The other performance measure included in the model, attendance, is positively and significantly related to hiring an outside successor. We had hypothesized that both performance measures would be negatively related to going outside, so the direction of this coefficient is unexpected. It appears that districts that are meeting the minimum threshold of performance – getting students to show up for class – are more likely to hire an external candidate. Holding all other variables at their mean, a one standard deviation increase in the attendance rate would increase the probability of hiring a superintendent from outside the district by 5 percent.

One of the control variables for human resource stability, teacher retention, was statistically significant and in the predicted direction. As expected the more stable the district's teaching staff the more likely the district is to hire a superintendent successor from outside the organization. Given the mean value of all other independent variables, a one standard deviation change in the teacher retention rate would increase the probability of going outside by 3 percent. The other two variables controlling for the stability of human resources – teacher experience and the percentage of non-certified teachers - fail to reach statistical significance.

Conclusions

In this study we test the hypothesis that poor performing public organizations will be adaptive in their executive hiring decisions and choose an outside replacement when a superintendent leaves. Support for our hypothesis is mixed. We find that high-achieving districts, those districts performing above the expectations, will be less likely to hire an external candidate. On the other hand, poor performing districts are more likely to try to

adapt and look outside. However, our expectations were not met by the other performance measure, attendance rate. In this case, it appears that districts that are meeting the minimum threshold of performance are more likely to hire a new superintendent from outside the district. In addition, we find that the stability of the district's human resources is also an important consideration when making a hiring decision. In districts with higher levels of stability, as measured by teacher retention, the school board is more willing to look outside the organization to find a new superintendent.

This research makes several important contributions to the literature on selection decisions. First, all of the previous research has studied the relationship between performance and selection decisions in the private sector; this study is the first to address this question in public organizations. Second, although we address this question in the context of public schools, this study could easily be extended to other public organizations where there is a clear executive and performance measures. This type of study would be particularly interesting in the context of local government and city manager hiring decisions. Third, since we have findings that the selection of a successor from outside the organization has an immediate negative effect on future performance (Hill 2005), it is important to understand the factors that influence the hiring decision.

The limitations of the dataset suggest some necessary caveats. Clearly, there are numerous factors that can influence a hiring decision. While we control for as many factors as possible given the data available, we recognize that these types of models are typically underspecified. An additional limitation of our study is that our analysis only

takes into account successful hires. It is likely that some districts may desire and even attempt to hire from outside their district, but fail to do so.

In conclusion, several future research avenues are suggested by our study. We would like to follow up on these 491 districts to see how the hiring decision we analyze here influences future performance in the district. Did the decision to hire from the outside pay off for the district? Next, we realize that not all outside hires are the same. Given this we would like to examine where the superintendent comes from – another school district or outside public education - and how this influences the hiring decision. Finally, we would also like to examine how the composition of the school board may moderate the relationship between performance and the selection decision.

References

- Bibeault, Donald B. (1982). *Corporate Turnaround: How Managers Turn Losers Into Winners*. McGraw-Hill.
- Boeker, Warren and Jerry Goodstien. (1993). "Performance and Successor Choice: The Moderating Effects of Governance and Ownership." *Academy of Management Journal* (36)1: 172-186.
- Bollen, Kenneth A. (1989). *Structural Equations with Latent Variables*. New York: John Wiley & Sons.
- Boyne, George A. and Jay Dahya. (2002). "Executive succession and the performance of Public organizations." *Public Administration* (80)1:179-200.
- Brady, Gene F. and Donald Helmich (1984). *Executive succession*. Englewood Cliffs, N.J.: Prentice-Hall.
- Cannella, Jr., Albert A. and Michael Lubatkin (1993). "Succession as a Sociopolitical Process: Internal Impediments to Outsider Selection". *The Academy of Management Journal* (36) 4:763-793
- Carlson, Richard O. (1961). "Succession and Performance among School Superintendents." *Administrative Science Quarterly* (6)2: 210-227.
- Carmines, Edward G., and Richard A. Zeller (1979). *Reliability and Validity Assessment*. Newbury Park, CA: Sage Publications.
- Carroll, Glenn R. (1984). "Dynamics of Publisher Succession in News Paper Organizations." *Administrative Science Quarterly* 29: 93-133.
- Chubb, John and Terry M. Moe. (2001). *Politics, Markets and America's Schools*. Washington DC: Brookings Institute.
- Coughlan, Anne T. and Ronald Schmidt. (1985). "Executive compensation, management Turnover, and firm performance: An empirical investigation." *Journal of Accounting and Economics*, (7): 43-66.
- Dalton, Dan R. and Idalene F. Kensner. (1983). "Inside/Outside Succession and Organizational Size: Pragmatics of Executive Replacement." *The Academy of Management Journal* (26)4: 736-742.
- Dalton, Dan R. and Idalene F. Kesner (1985). "Organizational Performance as an Antecedent of Inside/Outside Chief Executive Succession: An Empirical Assessment". *The Academy of Management Journal*, (28)4: 749-762.

- Evans, William N., Sheila E. Murray and Robert M. Schwab. (1997). "Schoolhouses, Courthouses, and Statehouses after Serrano." *Journal of Policy Analysis and Management*, (16) 1: 10-31.
- Faith, Roger L., Higgins, Richard S., and Tollison, Robert D. (1984). "Managerial rents and outside recruitment in the Coasian firm." *American Economic Review*, (74): 660-672.
- Freidman, Stewart D. and Harbir Singh (1989). "CEO succession events and stockholder reaction: The influence of context and event context". *Academy of Management Journal*, 32, 718-744.
- Furtado, Eugene P.H. and Vijay Karan. (1990). "Causes, Consequences, and Shareholder Wealth Effects of Management Turnover: A Review of the Empirical Evidence." *Financial Management*, (19)2: 60-75.
- Gilson, Stuart C. (1989). "Management Turnover and Financial Distress". *Journal of Financial Economics*, (25): 241-262.
- Goodstein, Jerry and Warren Boeker (1991). "Turbulence at the Top: A New Perspective on Governance Structure Changes and Strategic Change". *The Academy of Management Journal*, (34)2: 306-330.
- Grusky, Oscar (1961). Corporate size, bureaucratization, and managerial succession. *The American Journal of Sociology*, 67(3), 261 - 269.
- Grusky, Oscar. (1963). "Managerial Succession and organizational effectiveness." *American Journal of Sociology* (69) 21-31.
- Grusky, Oscar. (1964). "Reply to Scapegoating in baseball." *American Journal of Sociology* (70): 72-76.
- Hanushek, Eric A. (1996). "A More Complete Picture of School Resource Policies." *Review of Educational Research*, (66)3: 397-409.
- Hedges, Larry V. and Rob Greenwald. (1996). "Have Times Changed? The Relation between School Resources and Student Performance", in *Does Money Matter* edited by Gary Burtless, Brookings Institution Press: Washington, D.C.
- Hill, Greg. 2005. "The Effects of Managerial Succession on Organizational Performance." *The Journal of Public Administration Research and Theory* 15:585-597.
- James, David R. and Michael Soref. (1981). "Profit Constraints on Managerial Autonomy: Managerial Theory and the Unmaking of the Corporation President," *American Sociological Review*, (46)1: 1-18.

- Jencks, Christopher and Meredith Phillips (1988). *The Black-White Test Score Gap*, Brookings Institute: Washington, D.C.
- Kotin, J. and M. Sharif. (1967). "Managerial Succession and Administrative Style." *Psychiatry*, 30: 237-248.
- Linbeck, Assar and Dennis J. Snower (1986). "Wage Setting, Unemployment, and Insider-Outsider Relations". *The American Economic Review* (76): 235-239.
- Linbeck, Assar and Dennis J. Snower (2001). "Insiders versus Outsiders". *The Journal of Economic Perspectives* (15): 165-188.
- Meier, Kenneth J. and Laurence .J. O'Toole.(2001). "Managerial Strategy and Behavior in Networks: A Model with Evidence from U.S. Public Education." *Journal of Public Administration Research and Theory* 11: 271-294.
- Meier, Kenneth J. and Laurence .J. O'Toole. (2002). "Public Management and Organizational Performance: The Effect of Managerial Quality." *Journal of Policy Analysis and Management* 21: 629-44.
- Miller, Danny. (1991). "Stale in the Saddle: CEO Tenure and the Match between Organization and Environment". *Management Science*, (37)1: 34-52.
- Pfeffer, Jeffery and Alison Davis-Blake. (1986). "Administrative Succession and Organizational Performance: How Administrator Experience Mediates the Succession Effect." *The Academy of Management Journal* (29)1: 72-83.
- Puffer, Sheila M. and Joseph B. Weintrop. (1991). "Corporate Performance and CEO Turnover: The Role of Performance Expectations." *Administrative Science Quarterly*, (36)1: 1-19.
- Smith, Kevin B. 2003. *The Ideology of Education*. Albany, NY: State University of New York Press.
- Vancil, R. (1987). *Passing the Baton: Managing the Process of CEO Succession*. Harvard Business School Press, Boston.
- Walsh, James P. and James K. Seward (1990). "On the Efficiency of Internal and External Corporate Control Mechanisms". *The Academy of Management Review*, Vol. (15)3: 421-458.
- Wenglinsky, Harold. (1997). "How Money Matters: The Effect of School District Spending on Academic Achievement." *Sociology of Education*, (70) 3 :221-237.

Table 1 Determinants of School District Performance

Independent Variables	Slope	Error	t-score
Constraints			
Black Students (%)	-.24	.03	8.65***
Latino Students (%)	-.33	.04	7.48***
Low-Income Students (%)	-.07	.04	1.75*
Resources			
Teacher Salaries (k)	3.11	.15	20.88***
Class Size	-.95	.21	4.48***
Constant	1.59	5.28	
N	489		
R ²	0.55		
F	120.48		

N = 489 due to missing data.

*** denotes significance at better than 0.001 (one-tailed test)

** denotes significance at better than 0.01 (one-tailed test)

* denotes significance at better than 0.05 (one-tailed test)

Table 2 Descriptive Statistics

Variable	Mean	Standard Deviation	Minimum and Maximum
Inside or Outside Selection	.643	.48	1= Outside; 0= Inside
All Pass Rate	67.96	14.83	16.9% to 96.1%
Percent Black Students	8.60	12.12	0 to 84 %
Percent Latino Students	26.8	26.54	0 to 100%
Percent Low-Income Students	45.14	19.35	0 to 98.6%
Teacher Salaries	\$29,408	\$3,214	\$21,276 to \$38,425
Teacher/Student Ratio	13.38	2.45	4.8 to 18.6 students
Attendance Rate	95.8	.965	92 to 98.9%
Enrollment	3856	10283	25 to 157622
Per Student Instructional Spending	\$5,761	\$1,348	\$2459 to \$15711
Teacher Experience	11.47	2.19	4.3 to 18.7 years
Non-certified Teachers	4.03	5.12	0 to 43.6%
Teacher Retention	76.8	24.26	1.84 to 100

Table 3 Determinants of District Selection – Outside or Inside

Independent Variables	Slope	Error	t-score
High Achievers	-.03	.013	2.02*
Controls			
Attendance	.23	.131	1.73*
Enrollment	2.79	.00001	.27
Per-Student Instructional Spending	-.00003	.00008	.38
Teacher Retention	.007	.004	1.61*
Teacher Experience	-.069	.053	1.30
Non-Certified Teachers	-.030	.022	1.39
Constant	-20.46	12.35	
N	418		
Pseudo R ²	.02		

N = 418 due to missing data.

* denotes significance at better than 0.05 (one-tailed test)

ⁱ There are a few cases where school superintendents have come from outside public education, primarily in large urban school districts. John C. Fryer, Jr., the current superintendent of Duval County Florida, is a former Air Force General. Alan D. Bersin, superintendent in San Diego, is a former U.S. Attorney. Former Colorado Governor Roy Romer served as the superintendent in Los Angeles from 2000-2006. While there are several other cases, the number is not large. These of course would be cases where the districts went way outside the organization when selecting the successor. We do not identify these cases in this analysis, however, they would be an interesting avenue for future research.

ⁱⁱ The TAAS was replaced by the Texas Assessment of Knowledge and Skills (TAKS) in 2003.

ⁱⁱⁱ The independent variables in both models are measured in the year prior to the hiring of a new superintendent.

^{iv} We start in 1993 to insure that we have the performance data for the previous years in each district where a superintendent was replaced.

^v To check for multicollinearity in the model we examined the bivariate correlations and the variance inflation factors and no problems were detected. We were particularly concerned with the correlation between the all pass rate and class attendance. The variables are correlated at only .25 and attendance has a VIF of only 1.59.

^{vi} We also ran a model predicting outside selection using the all pass rate and attendance controlling for percent black students, percent Latino students, percent low-income students, teacher salaries, class size, enrollment, per-student instructional spending, teacher retention, teacher experience, and non-certified teachers. The substantive findings for this model are almost identical to the ones reported here. The all pass rate is negative and statistically significant (p <.10 one-tailed test). However, the attendance rate remains positive but is no longer significant.