PRINCIPAL PERFORMANCE IN TEXAS: TOOLS FOR MEASURING EFFECTIVE SCHOOL LEADERSHIP

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EXECUTIVE SUMMARY

Since the passage of the No Child Left Behind Act of 2001 (NCLB), federal and state school accountability efforts have intensified. This Act monitors student performance by requiring that schools raise student scores on standardized tests and demonstrate Adequate Yearly Progress, or they risk losing federal funding.

In addition to measuring the performance of students, the education system has begun measuring the performance of educators. Some districts, including Houston ISD, have established pay-for-performance systems to promote teacher and administrator effectiveness (Texas Education Agency 2007; Mellon 2007; Houston Independent School District 2007).

As incentive-pay programs frequently recognize, principals are integral parts of schools and perform necessary and influential administrative functions. In order to discuss principal performance and introduce accountability into the system, we need a language to describe what it means for a principal to be effective.

This analysis, therefore, provides a set of practical tools that educators and policy-makers can use to define and measure the effectiveness of principals. According to the literature, such performance measures should be objective, easily understood, and immune to manipulation (Hatry 1999). We also wanted to provide measures that were easily replicable in Texas and feasible given data, cost, and time constraints. Most studies and current practices primarily use student performance to judge principal effectiveness, but Meier and O’Toole (2002) note in their acclaimed study of Texas superintendents that using a single, simple measure is more likely to produce biased results. We advocate a multi-dimensional approach that includes but is not limited to student performance.

Methodology and Indicator Analysis

This analysis provides a set of practical tools that educators and policy-makers can use to define and measure the effectiveness of principals. We focus on three dimensions: student performance, teacher retention, and financial management. Data is derived from the Texas Education Agency (TEA) to develop a total of seven specific indicators to measure success in these three areas for Texas public schools (excluding charter schools). These performance evaluation tools are then applied to principals in Texas and patterns of principal effectiveness are reported on a statewide basis.

Student Performance

For a principal to be labeled effective, the students at his or her school must perform well. Difficulties arise when deciding exactly how to measure student performance, including which indicators to consider. This study measures student performance using standardized
tests and school accountability ratings. TEA data is used from 1996-2005 to develop indicators for these two measures. Since our goal was to capture the improvements in student performance attributable to principal effectiveness, we used a value-added measure of changes in TAAS and TAKS passing rates for the same cohort of students from one year to the next. Consideration of gains in passing rates instead of levels of passing rates allow for measurement of the value added by the most recent schools and principals to the existing base of the students’ knowledge and skills. Thus, we can compare the performance of students whether they are already more advanced or are performing at relatively lower levels.

Both adjusted gains and accountability ratings are useful for evaluating student performance because the two indicators measure different aspects of performance, and the schools receiving the highest accountability ratings are not always the ones with the highest adjusted gains. Furthermore, interpreting a school’s pattern of adjusted gains is most effective when taking into account the school’s accountability rating group.

Because both adjusted gains in standardized passing rates and accountability ratings differ significantly according to levels of student poverty, school size, student ethnicity, and geography, we control for these characteristics in our analysis of principal effectiveness. This finding also indicates that it is both inequitable and inappropriate to compare the effectiveness of principals that are not in the same category in any one of these variables. For example, student performance is generally higher in larger schools. Comparing a principal in a large school to a principal in a small school would be problematic because principal characteristics would be indistinguishable from the characteristics of the school that affect student performance. Thus, any policy aimed at encouraging administrative improvements would be most effective if it took differences among the various groups into account.

**Teacher Retention**

The second dimension of principal effectiveness we measure is teacher retention. Teacher retention is important because it reflects a principal’s ability to retain teachers and provide adequate support. Teacher retention may also affect student performance and impose costs on a school. Because beginning teacher turnover is systematically higher than the turnover of more experienced teachers, we recommend evaluating principals on beginning and experienced teacher turnover separately. Turnover rates also differ significantly among metropolitan, micropolitan, and rural areas, as well as from one metropolitan area to the next. Thus, principal performance in teacher retention is most appropriately evaluated by comparing beginning and experienced teacher turnover among schools in the same metropolitan area (for metropolitan schools), or in the same education service center (for schools in micropolitan or rural areas).

**Financial Management**

We used three indicators to measure the financial management dimension of principal performance: cost efficiency, instructional share, and attendance rate. The cost efficiency indicator allows us to compare school district expenditures with the level of expenditures
that would be expected given student performance, student demographics, and other cost factors. Arguably, good financial management suggests a balance between instructional, administrative, and other expenditures. As a benchmark, we use the Texas Governor’s 2005 Executive Order, which requires that 65 percent of current expenditures be spent on instruction. In addition, attendance rates are associated with school funding at the district level. As such, a principal may be able to attract more funds to his or her district by promoting high student attendance.

Our analysis suggests that on average, schools could spend 11.59 percent less than they do with no decrease in student performance. In particular, high schools could save 13.3 percent, elementary school could save 11.47 percent, and middle schools could save 10.53 percent. This finding shows cost-efficiency is significantly different among elementary schools, middle schools, and high schools, so we recommend comparing elementary school principals to other elementary school principals, middle school principals to other middle school principals, and high school principals to other high school principals.

As a final note, we examined the relationship between instructional share and our other indicators and determined there was generally no correlation. This suggests that either instructional share is a poor measure of principal performance or that it picks up an aspect of principal performance unmeasured by our other indicators.

**Conclusion**

Our last step was to evaluate the effectiveness of Texas principals from 1999 to 2005 using seven indicators (adjusted gains, accountability rating, beginning teacher turnover, experienced teacher turnover, cost-efficiency, instructional share, and attendance). The goal was to determine whether principals with similar effectiveness had any major characteristics in common, such as educational attainment, certification status, or tenure on the job. Because there were a number of significant relationships between the seven principal effectiveness indicators and student and campus characteristics, a comparison was made between principal characteristics and principal effectiveness on our seven indicators while controlling for such influential factors as student demographics (ethnicity, socio-economic status, and mobility), geographic location, campus size, year, and grade level.

We find that no observable principal characteristic has a systematic affect on all seven indicators. Principal certification appears to affect attendance rates, but not student performance or teacher retention. Furthermore, we find no differences in principal effectiveness between traditionally certified principals and alternatively certified principals. A principal’s educational attainment influences accountability ratings and attendance rates, but not the other indicators. Principals with more experience in the education system had lower adjusted gains during the TAAS testing period, but not during the TAKS testing period.
Principal tenure on the job was the only principal characteristic that significantly affected performance on most of the indicators. Principals in their first year on campus are much less effective than other principals. They have lower adjusted gains, lower accountability ratings, and higher teacher turnover. Students and teachers are negatively affected in the first year that a principal is at a particular campus. Intriguingly, none of the financial indicators are significantly related to a principal’s tenure. Further study is needed to determine whether this phenomenon reflects that a principal learns on the job, that principal volatility itself has a negative effect, or simply that new principals were brought in to help struggling schools. Because lower principal effectiveness occurs during a principal’s first year at a particular school, principal performance evaluations, including pay-for-performance programs, should be applied with caution to principals in their first year at a school.