

**The Role of Management and Representation in Improving Performance of
Disadvantaged Students: An Application of Bum Phillips' "Don Shula Rule"***

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*According to former Houston Oiler Coach Bum Phillips, the problem with coaching against Don Shula is that "He can take his'n and beat your'n, then take your'n and beat his'n." We would like to thank the Spencer Foundation and the Carlos Cantu Hispanic Education and Opportunity Endowment for financial support. We also thank Larry O'Toole who played major role in this research agenda before he retired to go into administration.

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Abstract

Scholars and practitioners within the U.S. education system have focused considerable attention on developing new programs aimed at raising educational achievement for disadvantaged students. New programs are only one way to improve student performance, however; recent work in public administration suggests that public management and implementation practices might also have a large impact on student performance. Existing research shows that managerial networking, managerial quality, and effective personnel management can significantly improve the quality of the education received by disadvantaged students. Additional work highlights the contribution of representative bureaucracy. Because these research agendas have targeted the public administration literature rather than the education policy literature, this paper seeks to bring this research back to education policy. Using data from several hundred Texas public school districts, spanning 1995 to 2002, and focusing on disadvantaged student performance (Latinos, blacks, and low income students), this paper illustrates how both management and processes to enhance the representativeness of teaching faculty produce benefits for disadvantaged students.

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How to improve minority student performance is a perennial question in education policy. Although numerous programs have shown promise in small numbers, how to "get to scale" in education reform still troubles the profession (Elmore 1996). This paper reports on literatures that take a decidedly different approach to education performance by focusing on management and processes rather than programs. The first literature is a research agenda that investigates how management matters in organization performance using school districts as the units of analysis. The second, also using school district data, examines the question of representative bureaucracy, when bureaucrats of a given ethnicity can produce better results among coethnic clientele. Neither literature has been directed at the education policy community even though the studies use education data and are clearly relevant to education policy and practice. The paper begins by reporting an anomaly from our qualitative investigation of quantitative results that suggested a focus on people rather than programs. Next, theoretical models of public management and representative bureaucracy are introduced and key measures operationalized. Third, we provide two sets of empirical tests, the first showing the impact of management on the performance of students, with special emphasis on disadvantaged students, and the second illustrating the impact of minority teachers on minority students. Finally, we conclude with the implications of these findings for education policy and the education of minority students.

An Anomaly and the Research Motivation

Using funds from the Spencer Foundation, in 2000 we began a systematic examination of minority students' college aspirations. The first step was to build comprehensive statistical

models of minority students' enrollment in Advanced Placement (AP) classes, their performance on AP exams, their high school graduation rates, their SAT and ACT test scores, and other "college prep" indicators. Using the residuals from these regression models, we then selected some of the very best districts in the state and, as a control, some of the very worst performers. Site visits were used to focus on what programs were used by the best districts with the idea of publicizing best practices. The following two vignettes provided a strong dose of reality.

High school A has one of the highest positive residuals in the state of Texas in terms of minority student preparation for college. This school, located in the Dallas area, enrolls large numbers of minority students in AP courses. Minority students are taking and passing AP tests at some of the highest rates in the state. Minority student SAT and ACT scores are off the charts. By almost any measure, School A is preparing minority students well for college.

When we asked what programs, policies, or procedures the school was using in order to achieve such impressive results, the academic coordinator responded that the block scheduling format was critical to their success. Students take eight, ninety-minute courses for a full year, four courses a day. The academic coordinator contends that the ninety-minute time block allows teachers "time to cover higher-order concepts at high levels and time for drilling at lower levels." It gives teachers and students greater flexibility, cuts down on the number of administrative tasks performed by teachers each day, and reduces conflict between students because the students are not in the halls as often. The block schedule also forces successful teachers to alter their teaching strategies over the course of the ninety minutes. Teachers have been instructed by the academic coordinator and other administrators to use at least three different learning strategies over the course of one period, devoting about thirty minutes to each strategy.

The academic coordinator pointed out that block scheduling also presents opportunities for students. The block scheduling format helps students develop responsibility by forcing them to manage their time effectively. It also gives students time to see a teacher before their homework is due if they do not understand a concept. In other words, block scheduling helps students develop habits of personal responsibility and initiative which are critical for college success.

School B, in contrast, is one of the lowest-performing schools in the state in terms of minority student preparation for college. This school, also located in the Dallas area, has a struggling Advanced Placement program that enrolls very few minority students. The few minority students who do take the AP courses rarely take the tests which would allow them to receive college credit for their course work; and when they do take the tests, they rarely pass them. Minority student SAT and ACT scores are abysmal.

When we asked what they were doing in order to increase minority student preparation for college, the academic counselor focused on the block scheduling format. He emphasized that the school had moved to a block schedule a number of years ago in an attempt to improve academic achievement, but the teachers were not ready and not willing to use ninety-minute periods effectively. Teachers simply used the same teaching methods they used during fifty-minute periods and covered the same material. The students also appeared unmotivated to use ninety minutes effectively. After realizing that block scheduling did not improve performance, the school moved back to fifty-minute periods.

The experiences of school A and school B were repeated several times with a variety of different programs in our qualitative studies. Poor performing schools often used the same

programs that successful schools used, but the programs had little impact. These anomalies led us to speculate that programs by themselves might not always be the solution. Other variables such as creative leadership, motivated teachers, and high expectations appear to interact with programs to produce positive results. This realization led the research team to focus on nonprogrammatic variables, particularly management and representation.

Public Management: A Formal Treatment

The management element of this paper is heavily influenced by O’Toole and Meier (1999) who inductively developed a formal model of such relationships constructed from an analysis of the mass of theoretical and empirical (mostly case-study) material on public management and performance, as well as on some of the prominent notions of how management might matter in complex, or networked, institutional settings. They have published several studies using education data that offer systematic evidence supportive of their theoretical notions (for instance Meier and O’Toole 2001, 2002, 2003; O’Toole and Meier 2003, 2004a) and thus offer a perspective on educational performance that merits attention. The model can be outlined briefly.

The general model of public management and performance suggests that outcomes of public programs at any time t (or, O_t) are shaped by public management – actually, several discrete managerial functions (each designated with an M below) – along with other influences. One is the status quo ante, or outcomes at the preceding period (O_{t-1}); the others are a set of environmental forces (for simplicity designated simply as the term “X” below), and a cluster of stabilizing influences (or S). The model can be framed more precisely, then, in terms of the following expression:

$$O_t = \beta_1(S+M_1)O_{t-1} + \beta_2(X_t/S)(M_3/M_4) + \epsilon_t \quad [1]$$

where

O is some measure of outcome,

S is a measure of stabilizing forces,

M denotes management, which can be divided into three parts

M_1 management's contribution to organizational stability through additions to hierarchy/structure as well as regular operations,

M_3 management's efforts to exploit the environment,

M_4 management's effort to buffer environmental shocks,

X is a vector of environmental forces,

ϵ is an error term,

the other subscripts denote time periods, and

β_1 and β_2 are estimable parameters.

The two terms related to managing the environment can be combined where $M_2 = M_3/M_4$.

Thus M_2 incorporates all efforts to manage externally in the environment, in contrast to managing within the organization, M_1 :

$$O_t = \beta_1(S+M_1)O_{t-1} + \beta_2(X_t/S)(M_2) + \epsilon_t \quad [2]$$

The model is autoregressive (that is to say, inertial), nonlinear, and contingent. The autoregressive component is captured by the lagged dependent variable, thus requiring time-series data for estimation purposes. The nonlinear elements are represented by various interaction effects, some designated as reciprocal functions. The model is contingent simply because the stability term can be considered one end of a continuum, with fluid arrays on the

opposite pole. As the stability variable moves toward zero, the model estimates how management affects programs in settings marked by great and unpredictable changes over time.

In the model, S can be considered a composite of the various kinds of stability in an organizational setting. Stability means constancy in the design, functioning, and direction of an administrative system over time. In this study, we include the impact of both personnel stability and management stability on the performance of administrative systems. These factors can be considered part of the management of human resources.

Three other elements of management will be operationalized within the context of this model. First, managerial networking is clearly encompassed by M_2 , the effort to manage the forces in the networked environment; so we include a version of this variable developed by Meier and O'Toole (2001; 2003) and O'Toole and Meier (2003; 2004a). Specifically, we include in our measure of M_2 those external managerial efforts that include no principal-agent, or hierarchically oriented, links.

Second, superintendents interact with the school board in a principal-agent relationship. The ability of superintendents to channel the inputs of the school board into constructive policy determinations is an essential part of the role. Third, managerial activity in either of these directions clearly includes a quantity component but can also be considered as varying in quality as well. Our measures of the two managerial functions emphasize extent or quantity of interactions, so we also incorporate a measure of managerial quality. This addition can be conceived as contributing to the various M's in the model sketched above.

The Theory of Representative Bureaucracy

In addition to these recent developments in the public management literature, a great deal

of theoretical and empirical research has been dedicated to the theory of representative bureaucracy. Put concisely, this theory contends that as the bureaucracy becomes more representative of the public in terms of demographic characteristics it will become more responsive to the public (Selden 1997). Representative bureaucracy is rooted in the belief that individuals who share similar demographic backgrounds tend to hold similar values due to comparable socialization experiences, and that these values are important in discretionary bureaucratic decision-making. This theory employs two conceptualizations of representation: passive and active. Passive representation refers to “standing for” a particular group while active representation involves “acting for” that group (see Pitkin 1967, Mosher 1968). The theory of representative bureaucracy argues that increased passive representation leads to active representation (i.e., the interests of the represented groups are pursued). Thus, a school district with substantial Latino teacher representation, for example, is likely to produce policy outcomes that are more favorable to Latinos students than a district that lacks such passive representation.

Active representation is not guaranteed, however, simply by the presence of passive representation. Indeed, several conditions are necessary for the transition to occur (see Meier 1993). First, an agency’s workforce cannot be segregated so that minority employees are relegated to positions where there is no opportunity to shape policy outcomes. Second, organizational socialization should not be extensive. If the organization socializes members into accepting the organization’s values as their own, and those values are in conflict with the values of the passively represented demographic group, minority employees may use agency values rather than group values when making policy decisions. Third, an agency must have jurisdiction over an area where policy outcomes can affect the passively represented group. Finally, there

must be an element of discretion to agency decisions. If agency decision-making is perfunctory and discretion has been removed, active representation is unlikely to occur.

Education policy, however, generally meets all of these conditions; that is, minority representation is found at all levels in education, organizational (versus professional) socialization is not excessively extensive, education policy directly affects minority groups in the public schools, and education policy involves substantial discretion at all levels of implementation. Indeed, the theory of representative bureaucracy has found considerable support in a substantial body of literature examining education policy. In education policy, minority teachers and administrators can act on behalf of minority students in a number of ways. This could include advocating particular programs or policies that may benefit minority students, or it may involve the teacher or administrator acting as a buffer against discriminatory practices. Further, minority teachers can act as a role model for disadvantaged students and may contribute to student performance by influencing the practices of Anglo teachers (see Meier, Wrinkle, and Polinard 1999; Keiser et al. 2002).

Empirical research has found that increased minority representation among teachers and administrators is strongly associated with less discrimination, more favorable policies, and improved student performance (see Selden 1997 for a review). Meier, Stewart, and England (1989) found that school districts with more African-American teachers adopted policies that were more beneficial for African-American students. Similarly, Latino teacher representation has been found to reduce discriminatory policies toward Latino students and was linked with higher performance (Meier and Stewart 1991, Meier 1993, see also Weiher 2000). Keiser et al. (2002) found that female math teacher representation had a positive influence on female *and*

male student performance. Similarly, Meier, Wrinkle and Polinard (1999) found that the same holds true for minority teachers and minority and Anglo students; that is, more diverse faculties are associated with higher performance among both minority and nonminority students. The empirical evidence, then, suggests that diversity among teachers and administrators can have significant, measurable effects on education policy and student performance.

The Units of Analysis

Our data are drawn from the 1000+ Texas school districts. School districts in the United States are generally independent local governments with their own taxing powers; all districts in the sample are organized in this way. The state of Texas, the locus from which our sample is drawn, operates a relatively decentralized system, with most authority residing with the local school districts. Each district determines its own curriculum and makes all its own personnel decisions. The sample of districts includes great diversity; they range from monoracial to multiracial, great affluence to considerable poverty, rural to suburban to urban, and tiny to very large. Approximately one of every 14 districts in the US are located in Texas. This sample provides a good base on which to build inferences about the impact of public management and representation on the performance of disadvantaged students.

District superintendents, the chief administrative officers, were sent a mail questionnaire on management styles, goals, and time allocations (return rate 55% with 507 useable responses).¹ We pooled eight years (1995-2002) of data on performance and control variables to produce a

¹Districts responding to the survey, conducted during 2000, were no different from nonrespondents in enrollment, enrollment growth, students' race, ethnicity and poverty, or test scores. There were slight differences in a few other factors. Respondents had 0.48 more students per class, paid their teachers \$200 more per year, but had annual operating budgets of about \$100 per student less.

total of 4114 cases for analysis. All nonsurvey data were from the Texas Education Agency.

Measures

Representative Bureaucracy Indicators

Because previous literature shows that street level representation is more important in educational settings, the measure of representative bureaucracy will be the percentage of black teachers (for black pass rates) and the percentage of Latino teachers (for Latino pass rates). The representative bureaucracy analysis will focus only on black and Latino pass rates on the TAAS.² Some effort must also be made to control for the quality of overall education in the school since minority student performance might simply reflect the overall educational performance of the system rather than any race specific impacts. This analysis will use the Anglo pass rate on the TAAS as a control (see Weiher 2000). This specification means that for minority teachers to matter, they must improve minority student test scores relative to those for Anglos, a highly stringent test of the representation hypothesis.

The remainder of our measures can be discussed as parts of the formal model presented earlier: management (M); elements of stability (S); the vector of environmental forces (X); and program outcomes (O) or performance. These items are covered in order.

Management

Three measures of public management are included as potential explanatory variables in this analysis: managerial quality, managing the network, and interacting with the school board. School districts use several levels of management, and a case can be made that a number of these

²For an extensive look at Latinos and representative bureaucracy using several indicators see Meier and O'Toole 2006.

are likely to be interesting. For reasons of feasibility and importance, however, we focus here solely on district superintendents as the lead managers.

Managerial quality is a notoriously difficult concept to measure. In earlier work, Meier and O'Toole (2002) validated a measure based on the residual from a model explaining salaries of district superintendents. The salary-setting process in Texas school districts approximates a competitive labor market with full information. As a result, management skills should be positively rewarded by the market. To isolate this quality component, they predict logged superintendent salaries with 11 variables measuring job size, human-capital factors, personal characteristics, and prior school-district outputs similar to common salary models in the literature (see Ehrenberg, Chaykowski and Ehrenberg 1988).³ Details of this analysis are reported elsewhere (Meier and O'Toole 2002).

The resulting model predicts 78 percent of the variance in salaries, thus comparing favorably to other models in the literature. The objective was to remove as many “non-quality” factors as possible from the superintendent’s salary. The remaining residuals are then standardized (converted to a mean of 0 and a standard deviation of 1) for use in the subsequent analysis as a rough indicator of management quality. This measure is clearly a messy one, since the residual contains all factors not included in the model. The impact of this measurement error,

³District characteristics included as predictors are the district’s total budget, tax rate, and average revenue per student; these district characteristics are logged. Four human-capital characteristics are included: experience as a superintendent, tenure in the current job, age, and possession of a doctorate. Personal characteristics included are whether the superintendent is female, black, or Latino. The adjustment for prior year’s test scores is also included because managerial quality is affected by prior performance, and quality then affects future performance. Over time, in other words, there is reciprocal correlation. The adjustment for this endogeneity is handled via an instrumental variables technique. Six student characteristics and district resources are used as instruments; the purged measure of prior performance is then included in the model.

however, will attenuate any relationships between a quality measure and other variables such as organizational outputs.

A systematic validation for this variable produced encouraging results. The measure contributed positively and in a statistically significant fashion to school-district performance in regression analyses using 10 different dependent variables.⁴ (The complete set of analyses are available in Meier and O'Toole 2002.) This study extends the management quality measure to the 2000, 2001, and 2002 school years.

A second set of management measures focuses on the frequency and extent of interaction by top managers with parts of their environment. *Managerial networking* can be defined as behavioral networking or interacting with key actors in the organization's environment. Because school districts operate within a network of other organizations and actors who influence their students, resources, programs, goals, and reputation, the extent to which a superintendent manages in the school district's network should be related to school district performance.

To measure the behavioral networking activity of school superintendents, we selected four sets of actors from the organization's environment: local business leaders, other school superintendents, state legislators, and the Texas Education Agency.⁵ In our mail survey, we asked each superintendent how often s/he interacted with each actor, on a six-point scale ranging from

⁴Controls in that set of analyses are identical to those employed in the present investigation. In the case of an eleventh dependent variable, there was no relationship.

⁵In recent work, we have tested to see whether asking about additional nodes with which these top managers might interact would provide a better measure of managing outward. We have asked about interactions with three other actors along with those included here. The four-node networking measure correlates very highly (.97) with the seven-node measure and thus seems an appropriate measure for M_2 .

daily to never. Superintendents with a networking management approach, that is those who focus on managing outward, should interact more frequently with all four actors than should a superintendent with an approach focused on internal management. A composite network management-style scale was created via factor analysis. All four items loaded positively on the first factor, producing an eigenvalue of 1.82; no other factors were significant.⁶ Factor scores from this analysis were then used as a measure of network management, with higher scores indicating a greater network orientation.

Managing upward deals with the principal-agent relationship between the elected school board and the chief executive officer, the district superintendent. We also asked superintendents how frequently they interacted with members of their board, ranging again on a six-point scale from daily to never.

Stability

We incorporate two aspects of personnel stability in this study, as developed in an earlier analysis (O'Toole and Meier 2003). *Managerial stability* is simply the number of years the superintendent has been employed by the district *in any capacity*. The measure taps both stability and capacity — the latter in the sense of knowledge about the organization. *Teacher stability* is measured as the percentage of teachers employed by the district during the preceding year who continue to work for the district. For both measures, then, higher scores mean more stability. Data on managerial stability were obtained from the survey respondents; data on teacher stability were provided by the Texas Education Agency. While these measures are treated as stability

⁶The network management factor correlates at -.27 with time spent managing the district (in contrast to time spent in contacts outside the organization).

features here and in the subsequent discussion, they can also be considered aspects of management: what is usually referred to as personnel management. While not totally under the control of school district leaders, these variables are susceptible to influence by the individuals who make decisions about how such organizations are run.

Performance Measures

Finally, we introduce measures for O, or performance (outcomes), for the school districts in our analysis. Although virtually all programs have multiple goals and thus are subject to multiple performance indicators, some objectives are defined as more important by the political environment than are others. The most salient by far was the overall student pass rate on the Texas Assessment of Academic Skills (TAAS).⁷ The TAAS was a standardized, criterion-based test that all students in grades 3 through 8 and 11 had to take. The grade 11 exam was a high-stakes test, and students must pass it to receive a regular diploma from the state of Texas. TAAS scores were used to rank districts, and it was without question the most visible indicator of performance used to assess the quality of schools.

Four TAAS measures are useful as performance indicators in this study. The state accountability system assesses performance of subgroups of students, and districts must perform well on all these indicators to attain various state rankings. In addition to the overall pass rate, TAAS scores for black, Latino and low-income students are included as measures of performance indicators.

Control Variables

The base model of public management assumes that organizations are autoregressive

⁷The TAAS was replaced by a new exam in 2003.

systems. This implies that correctly specified models will include a lagged dependent variable. The inclusion of this variable serves two purposes. It is a hedge against an underspecified model since any omitted variable is likely to be reflected in past values of the dependent variable. It also stabilizes the error patterns in the regression by serving as a set of fixed effects that mitigate problems of serial correlation and heteroscedasticity.

Any assessment of public program performance must control for both task difficulty and program resources. For school districts, neither of these types of elements are primarily under the control of the districts themselves; and therefore, they can be considered key parts of the vector of environmentally influenced X forces represented in the O'Toole-Meier model. Fortunately, a well-developed literature on educational production functions (Hanushek 1996; Hedges and Greenwald 1996) can be used for guidance. Seven additional variables, all commonly used, are included in our analysis – three measures of task difficulty and four measures of resources.

School districts clearly vary in how difficult it is to educate their students. Some districts have homogeneous student populations from upper middle-class backgrounds. Students such as these are quite likely to do well in school regardless of what the school does (see Burtless 1996). Other districts with many poor students and a highly diverse student body will find it more difficult to attain high levels of performance because the schools will have to make up for a less supportive home environment and deal with more complex and more varied learning problems (Jencks and Phillips 1998). Our three measures of task difficulty are the percentages of students who are black, Latino, and poor. The last-mentioned variable is measured by the percentage who are eligible for free or reduced-price school lunch. All three measures should be negatively related to performance.

While the linkage between resources and performance in schools has been controversial (see Hanushek 1996; Hedges and Greenwald 1996), a growing literature of well-designed, longitudinal studies confirms that like other organizations, schools with more resources generally fare better (Wenglinsky 1997). Four measures of resources are included. The average teacher salary and class size are directly tied to monetary resources. The average years of teaching experience and the percentage of teachers who are not certified are related to the human resources of the school district. Class size and noncertified teachers should be negatively related to student performance, and teacher salaries should be positively related to performance. The relationship of teacher experience⁸ to performance is ambiguous. On the one hand, greater experience should be positively correlated with the student performance. Equally likely, the relationship might be negative simply because current teachers are significantly better trained to teach in multi-ethnic settings that contain students with a wide variety of different needs.

Findings

In our test of whether management can affect student performance, we find further evidence that management matters significantly in educational achievement. Table 1 reports the models for overall student achievement and low income student achievement. In the first model of student exam pass rates, we find strong support for importance of management. The networking variable produces a substantively large and statistically significant coefficient, showing that a superintendent's time spent interacting with organizations outside of the district can have serious payoffs in terms of achievement. These gains found in networking, however, do

⁸This measure — mean number of years in the profession for a district's teachers — captures something quite different than does our teacher stability measure, which focuses on year-to-year turnover within a district. The correlation between the two is .39.

not carry over to the time spent interacting with the school board. In the model of district student achievement, time spent with the school board actually results in a negative effect on pass rates. In a principal-agent relationship like that of the superintendent and the school board, a reasonable level of interaction is necessary, but these findings would lead us to conclude that too much is not a good thing, perhaps because it leads to the board micro-managing the district.

[Table 1 About Here]

As we would expect, managerial quality produces a positive, substantively large, and statistically significant effect on performance. Though this would seem to be an obvious finding (that talented people are more successful), it is important to note that, in the search for the best programs or policy reforms to raise achievement, we rarely see empirical evidence showing that a good superintendent really can get more out of a district, all else being equal. Further still, these findings would also lead us to conclude that managers do get better at this over time, making steady (though not exceptionally large) gains in overall district achievement, as seen through the positive and significant coefficient for managerial stability. Similarly, teacher stability has a positive impact on performance, providing an incentive for superintendents to avoid high levels of teacher turnover in the district. Finally, although not the focus of this study, it is important to note that all of the control variables yield significant coefficients in the hypothesized direction.

Although the model for overall student achievement provides considerable support for the impact of management, the central issue in this study is educational achievement for disadvantaged students. The second model in Table 1 considers the effect of management on low income students, while Table 2 includes the models predicting achievement for black and Latino students. The model for low income students produces estimates that closely parallel the model

for overall district achievement, with networking, managerial quality, and both stability measures resulting in positive and significant gains in pass rates. The only real difference is in the school board contact measure, which is no longer a significant predictor of achievement.

[Table 2 About Here]

Unlike the model for low income students, the models that predict minority student achievement are markedly different. In examining the effect of networking on performance, we find no significant relationship for either black or Latino students, which is relatively unexpected, given the strong effect on low income students and overall pass rates.⁹ The variable for school board contact again yields mixed results, with a negative and significant (at .10) effect on black student achievement and no effect on Latinos. Despite these mixed findings, we have strong support for the importance of one of the management variables - managerial quality. Quality is shown to have a substantively large, statistically significant, positive effect on pass rates for both black and Latino students. The impacts for minority students, further, are much larger than those for all students. Over the effective range of this variable (-3 to +3), managerial quality is associated with up to a 3.7 point increase in black TAAS scores and 2.8 points on Latino test scores, substantial impacts given the lagged dependent variable.

The other two variables of interest, managerial stability and teacher stability, have similar effects on minority student achievement as in the more general models. Managerial stability is a positive and significant predictor of performance for both minority groups, while teacher stability is positive and significant for black students, but insignificant for Latinos. When taken as a

⁹O'Toole and Meier (2004b) shows that networking has distributional consequences and generally benefits the better off students.

whole, the model for black student achievement offers more support for the idea that management not only matters, but matters for minority students. For Latinos, management still has some effect on pass rates, but not in the multitude of ways that we see for other groups. Instead, the real gains can be seen in the superintendent's skill level and in increased superintendent tenure.

Overall, this lends additional support to what some districts have told us already. Sometimes, the answer is not found in programs, it's found in people. With the findings pointing to the various ways in which superintendents can influence performance, the question then turns to teachers. If people make the difference, we would expect teachers to be most influential simply because they have much greater contact with students.

[Table 3 About Here]

Consistent with previous research on representative bureaucracy, the empirical results suggest minority teacher representation has a significant positive effect on student performance. Table 3 finds that increases in black teachers are associated with statistically significant increases in black student exam pass rates after controlling for a variety of other factors including Anglo pass rates and past performance (i.e., the lagged dependent variable). This relationship holds for Latino teachers and Latino student performance as well. However, Latinos appear to benefit from the presence of coethnic teachers to a smaller degree than blacks, with a one point increase in percentage of Latino teachers raising the Latino pass rate by .08 (compared to the .188 boost blacks obtain from the presence black teachers).¹⁰ With the minority teacher variables and also the

¹⁰These impacts are larger than they appear since this is the impact of a one percentage point increase in minority teachers. For both blacks and Latinos, the percentage of teachers ranges from 0 to 100%. Because we control for Anglo performance, this coefficient indicates how much the gap between black or Latino and Anglo test scores is reduced.

Anglo pass rates included in the model, the effects of management on minority student performance appear to weaken. Indeed, only management quality retains statistical significance and only for Latino student pass rates. These changes suggest that much of the influence of management is on the overall performance of students rather than specifically on minority students. That is, management, for the most part, does not have a specific impact on minority students over and above the impact it has on Anglo students. By improving all scores, the impact of management is absorbed by the Anglo test score variable. The important findings in these tables, however, relate to the theory of representative bureaucracy particularly with regards to street-level bureaucrats (see Lipsky 1980). Increases in minority teacher representation positively affects minority student performance. The empirical evidence presented above, then, suggests that both management and teachers influence student outputs, albeit in potentially different ways.

Conclusion

The goal of this study has been to shed light on how student performance might be influenced by processes and people rather than programs, with a particular focus on the success of minority students. Undoubtedly, school districts can produce academic success through the adoption and implementation of specific programs. This research, however, underscores a point which is too often ignored: *people matter, often as much as programs*. In other words, districts can achieve success through a variety of means, one of which is the hiring of certain types of individuals, such as minority teachers and a superintendent with a particular style of management.

There are many reasons for this. No policy, however cleverly or carefully crafted, can be successful unless it is implemented well. The literature on representative bureaucracy argues that minority teachers are able to raise minority student performance because they can combine their

unique life experience and normative commitment to racial/ethnic equity with the considerable discretion teachers' possess in order to implement policies in a way which benefits minority students. Indeed, the findings presented here indicate that both blacks and Latinos benefit from the presence of coethnic teachers, although blacks appear to benefit more so than Latinos.

The successful implementation of policies also requires that organizations be well managed. Managers can work to create stability within organizations, shielding them from the potentially negative consequences of unexpected shocks (e.g. budget cuts). Regardless of how soundly specific programs are designed, such shocks could otherwise easily derail any potential success. The findings presented here underscore this point. They also note that stability helps minority and low income students. The longevity of a superintendent's tenure, for example, appears to be coupled with higher TAAS scores for Latino, black, and low income students. Just as Don Shula "could take his'n and beat your'n and then take your'n and beat his'n," quality superintendents can achieve better results regardless of programs.¹¹

While work on public management and representative bureaucracy provides many insights into how districts can raise educational performance, particularly for minority students, many questions remained unanswered. For instance, why does managerial networking raise the all student TAAS pass rate but not the pass rate for Latinos and blacks? In the broader context, can managerial networking ever be used as a tool to combat racial inequality in public schools (see O'Toole and Meier 2004b)? The literature on public management is in need of additional theory building in order to tackle questions such as these.

¹¹Our qualitative interviews suggest that success is a function of high standards, long term stable leadership (often promoted from within), a consistent curriculum and hard work. The exact curriculum appears to matter less than staying with a single curriculum.

Questions also remain regarding the influence of minority teachers on minority student success. Why do black students benefit from the presence of black teachers to a greater degree than Latino students benefit from the presence of Latino teachers? How does the presence of black teachers affect Latino student success and vice versa? One might also ask, does representative bureaucracy affect all policy outcome indicators equally? If not, does it matter more for high-end or low-end indicators (see Meier and O'Toole 2006)? The answers to these questions are likely to be found only by uniting insights developed by the too often disparate fields of education, public policy, bureaucratic politics, and racial/ethnic politics.

Once again, the central thesis of this paper is not that programs do not matter, simply that they are not the only things that matter. As practitioners within the US education system continue to search for ways to raise student performance while also lowering traditionally high levels of racial/ethnic inequality, they should bear in mind that the best solution likely lies in a multi-method approach, combining good policy with good management and good implementation at the street-level.

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Table 1. The Impact of Management and Stability on Student Test Scores

Dependent Variable = Student Exam Pass Rates for

Independent Variables	All Students		Low Income Students	
	Slope	t	Slope	t
Managerial Networking	.2877	3.48*	.3091	2.68*
School Board Contact	-.1843	2.01*	-.1828	1.41
Management Quality	.2187	2.69*	.2606	2.29*
Management Stability	.0164	1.99*	.0416	3.58*
Teacher Stability	.0492	4.28*	.0490	2.94*
Lagged Dependent Variable	.7057	71.67*	.6460	58.88*
Control Variables				
Teacher's Salaries (000s)	.1531	3.10*	.2759	3.96*
Class Size	-.0927	2.78*	-.2121	4.34*
Teacher Experience	-.0952	2.07*	-.1482	2.28*
Non Certified Teachers	-.0492	3.01*	-.0493	2.13*
Percent Black Students	-.0567	6.81*	-.1031	8.57*
Percent Latino Students	-.0254	4.93*	-.0481	6.39*
Low Income Students	-.0310	4.37*	.0119	1.16
<hr/>				
R-squared	.84		.77	
Standard Error	4.76		6.67	
F	1057.62		688.61	
N of Cases	4114		4083	
Dummy variables for individual years not reported				
* p < .05 two tailed test				

Table 2. The Impact of Management and Stability on Black and Latino

Test Scores

Dependent Variable = Student Exam Pass Rates for

Independent Variables	Blacks		Latinos	
	Slope	t	Slope	t
Managerial Networking	.3946	1.63	.1447	0.85
School Board Contact	-.4462	1.72#	-.0025	0.85
Management Quality	.6158	2.58*	.4633	2.83*
Management Stability	.0428	1.89#	.0366	2.20*
Teacher Stability	.1861	4.23*	.0307	1.19
Lagged Dependent Variable	.5631	34.31*	.5333	41.46
Control Variables				
Teacher's Salaries (000s)	.1877	1.24	.3604	3.57*
Class Size	-.0649	0.44	-.2406	3.38*
Teacher Experience	-.3059	1.96*	.0602	0.60
Non Certified Teachers	-.0122	0.20	-.0613	1.75#
Percent Black Students	-.0623	2.59*	-.0530	3.15*
Percent Latino Students	.0011	0.06	-.0201	1.80#
Low Income Students	-.0508	2.07*	-.0380	2.48*

R-squared	.66	.64
Standard Error	10.80	9.20
F	233.87	317.99
N of Cases	2413	3655

Dummy variables for individual years not reported

* p < .05 two tailed test

p < .10 two tailed test

Table 3. The Impact of Minority Teachers on Black and Latino Test Scores

Dependent Variable = Student Exam Pass Rates for

Independent Variables	Blacks		Latinos	
	Slope	t	Slope	t
Percent Black Teachers	.1880	3.78*	-	-
Percent Latino Teachers	-	-	.0809	5.40*
Anglo Student Performance	.6316	15.74*	.4530	19.02*
Managerial Networking	.0834	0.35	-.1239	0.75
School Board Contact	-.1475	0.47	.2007	1.10
Management Quality	.3090	1.18	.3020	1.91#
Management Stability	.0235	1.08	.0149	0.93
Teacher Stability	.0920	2.17*	.0296	1.18
Lagged Dependent Variable	.4741	28.53*	.4354	32.82*
Control Variables				
Teacher's Salaries (000s)	.1821	1.26	.2933	2.99*
Class Size	.1941	1.36	-.2083	2.92*
Teacher Experience	-.4969	3.32*	-.0480	0.49
Non Certified Teachers	.1021	1.71#	-.0234	0.69
Percent Black Students	-.1968	5.88*	-.0651	4.03*
Percent Latino Students	-.0841	4.77*	-.1102	8.26*
Low Income Students	.0730	2.96*	.0293	1.91#
<hr/>				
R-squared	.69		.67	
Standard Error	10.29		8.78	
F	245.75		327.76	
N of Cases	2413		3615	
Dummy variables for individual years not reported				
* p < .05 two tailed test				
# p < .10 two tailed test				

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