Kenneth J. Meier
Texas A&M University
Laurence J. O'Toole Jr.
University of Georgia

Essays on Reframing Bureaucracy

Political Control versus Bureaucratic Values: Reframing the Debate

Kenneth J. Meier is the Charles H. Gregory Chair in Liberal Arts in the Department of Political Science at Texas A&M University and a professor of public management at the Cardiff Business School, Cardiff University. His research interests include empirical models of public management and questions of equity and public policy.
E-mail: kmeier@politics.tamu.edu.

Laurence J. O'Toole Jr. is the Margaret Hughes and Robert T. Golembiewski Professor of Public Administration and head of the Department of Public Administration and Policy in the School of Public and International Affairs at the University of Georgia. Much of his research focuses on policy implementation and public management in networked settings.
E-mail: cmsotool@uga.edu.

The literature on political control of bureaucracy reveals that bureaucracies are highly responsive to political forces. This paper argues that the political control literature misses evidence from other academic literature that bears directly on this phenomenon. Specifically, researchers need to consider the values of the bureaucracy in any effort to assess the degree of political control. An empirical test is presented using a data set from public education. Results show bureaucratic values to be far more influential in explaining bureaucratic outputs and outcomes than political factors. These findings suggest that a reinterpretation of previous empirical research is urgently in order.

Since 1982, a distinct line of research in political science has focused on political control of the bureaucracy. Taking its cues from political and journalistic claims that bureaucracy can run amok and must be held in check by political forces if democracy is to be served, the literature demonstrates that bureaucratic actions are correlated with political stimuli. This portrait of the political process suggests a bureaucracy not only responsive to political pressures but also generally passive in the face of such challenges. Bureaucratic variables themselves, however, are largely ignored in most studies of this genre (see columns 2 and 3 of table 1). Ironically, then, the modal test of political control over bureaucracy omits everything, or nearly everything, regarding the assertedly problematic institution itself—bureaucracy.

To paraphrase others, it is time to bring the bureaucracy back to the investigation of its own politically relevant actions (Evans, Rueschemeyer, and Skocpol 1985). This paper challenges the literature on political control of bureaucracy by arguing that the empirical studies have encouraged misleading inferences about the forces shaping bureaucratic action. First, a review of the literature illustrates several flaws that stem from the failure to incorporate the scholarly insights from related specialties. Second, work grounded in representative bureaucracy is identified as one way to overcome these weaknesses. Third, empirical tests explicitly compare the political control hypothesis with its usually neglected rival: that bureaucratic values dominate the administrative process. These tests, which employ several dependent variables, demonstrate that political factors, although influential, affect only a modest portion of bureaucratic actions. Bureaucratic features themselves dominate political ones in these explanations. Finally, the implications of these findings for the study of bureaucracy and politics are discussed.

Explorations of Political Control

The typical political control study begins with a brief allusion to theory, most frequently principal–agent theory. Rather than directly engaging agency theory (see Waterman and Meier 1998), the standard article merely assumes goal conflict between agents/bureaucrats and principals/politicians and the politicians and politicians will take action to get the bureaucrat to respond as they desire (e.g., Hedge and Scicchitano 1994). Such politically triggered actions can range from direct orders (Chaney and Saltzstein 1998) to political appointments (Wood and Waterman 1991) to "deck-stacking" administrative procedures (Balla 1998). When the empirical study is introduced, the bureaucracy itself is often left behind. In most cases, political variables are measured (often as surrogates), and the correlation of outputs with these is taken as evidence of political control.[1] The limits of this research, however, can be illustrated by a focus on three literatures that address similar problems: public administration, bureaucratic politics, and organization theory.

Public Administration

Within public administration, an extensive literature examines similar questions under the rubric of "public administration and democracy" (Finer 1941; Friedrich 1940; Redford 1969). This scholarship is explicitly focused on bureaucracy and how its nondemocratic processes might be reconciled with democratic governance. One stream of work advocates overhead democracy, that is, the notion that elected officials oversee and perhaps control the actions of bureaucracy (Redford 1969). Although this literature is both normative (e.g., Hyneman 1950) and empirical, it

Table 1 A Review of the Literature on Political Control of the Bureaucracy

Citation	Political Variables Measuring Preference?	Bureaucratic Values?	Bureaucratic Variables?	Number of Agencies in Study	More Than One Dependent Variable?
Moe (1982)	No	No	No	3	Yes
Gormley, Hoadley, and Williams (1983)	Yes	Yes	Yes	12/50	Yes
Moe (1985)	Yes	?	No	1	No
Scholz and Wei (1986)	No	No	No	1	Yes
Wood (1988)	No	No	No	1	Yes
Wood (1990)	Yes	No	No	1	Yes
Eisner and Meier (1990)	Yes	Yes	Yes	1	No
Scholz, Twombly, and Headrick (1991)	Yes	No	No	1	Yes
Wood and Waterman (1991)	Yes	No	No	7	Yes
Wood and Waterman (1993)	Yes	No	No	1	Yes
Hedge and Scicchitano (1994)	Yes	No	No	1	No
Ringquist (1995)	Yes	No	No	1	Yes
Sabatier, Loomis, and McCarthy (1995)	Yes	Yes	Yes	1	Yes
Carpenter (1996)	Yes	?	No	2	Yes
Krause (1996)	Yes	Yes	Yes	1	Yes
Balla (1998)	Yes	No	No	1	Yes
Chaney and Saltzstein (1998)	No	Yes	Yes	145	No
Meier, Polinard, and Wrinkle (1999)	Yes	?	Yes	1	Yes
Scholz and Wood (1999)	Yes	?	Yes	1	Yes
Balla and Wright (2001)	Yes	No	No	1	No
Mete (2002)	Yes	No	No	1	Yes
Whitford (2002)	Yes	Yes	No	1	Yes
Canes-Wrone (2003)	Yes	No	No	1	No

parallels the principal–agent and political control work within political science.

One distinct point of divergence in the two literatures is that the public administration literature is concerned with the circumscribed reach of political control. Friedrich (1940), perhaps most eloquently, notes the limitations on elected officials in terms of time, inclination, and expertise. Political control as a process is no different from the internal managerial question of how one gets subordinates to comply with the wishes of superiors. Within public administration, that relationship is addressed in far more nuanced ways than in the principal–agent literature. Simon (1947), relying on Barnard (1938), argues that authority comes from below. Bureaucrats have a "zone of acceptance," and requests to act outside that zone in normal circumstances are rejected. Simon conceptualizes the relationship between superior and subordinate as reciprocal, with both actors shaping aspects of their joint action. Political–bureaucratic relationships can clearly be seen in similar terms.

The notion of political control entails the concept of power: that *political officials get bureaucrats to act in a way that they would not otherwise have done*.

The reciprocal nature of the bureaucrat–politician relationship, the greater expertise possessed by the bureaucracy in both political and technical terms, the time constraints on politicians, the relative longevity of bureaucratic actors, and the general bluntness of political tools of control all suggest severe limits for overhead democracy. As Robert Dahl (1970) notes, the primary control on administrative behavior is the inner check—the values held by the bureaucrat (see also Brehm and Gates 1997). These operate beyond the decisions and actions that can reasonably be monitored by political overseers and may even enable bureaucrats to "respond" in an anticipatory sense to broad public preferences without explicit intervention or signaling from politicians.[2]

Without knowledge of the values held by the bureaucracy, any attempt to determine the degree of political control is futile. The notion of political control entails the concept of power: that *political officials get bureaucrats to act in a way that they would not otherwise have done*. Only by knowing how the bureaucracy would act, independent of the efforts of would-be political controllers, can the idea of political control have real meaning. Measuring bureaucratic values, therefore, is essential to resolving the issue of how much political control is available or possible and under what conditions.

Unfortunately, the political control literature rarely measures any bureaucratic variables, let alone

bureaucratic values (table 1, columns 2 and 3). In general, goal conflict between politicians and bureaucrats is assumed rather than measured despite evidence that many relationships are marked by goal consensus (Meier, Wrinkle, and Polinard 1999). In a few cases, some authors use the notion of revealed preferences and infer bureaucratic values from agency outputs (Krause 1996; Scholz and Wood 1999) or assume that values are captured in a lagged dependent variable (Wood 1992). Three exceptions can be noted: Sabatier, Loomis, and McCarthy (1995) use proposed forestry plans to estimate bureaucratic values; Eisner and Meier (1990) employ professional training; and Gormley, Hoadley, and Williams (1983) use surveys. For the most part, however, the political control literature fails to measure bureaucratic values adequately, thus limiting what can be said about how well political officials direct bureaucratic actions.

Bureaucratic Politics

The political control literature is also less useful because it focuses attention on single agencies or a few agencies of a similar type. The work of Wood (1988), for example, uses advanced time-series techniques to show how political actions are associated with changes in agency activities (controlling for the history of the organization). The focus on a single agency over time gives analysts leverage by transforming some variables into constants and permitting others to be easily measured. Political forces, as a result, can often be measured as dummy variables representing a presidential appointment, a committee hearing, or a shift in partisanship. Attempts to overcome the limited number of agencies generally involve adding additional time-series cases with another agency (see Wood and Waterman 1993).

The advantages of a limited number of agencies in terms of measurement and tractability come at the cost of generalizability. Results could well be idiosyncratic to the agency. For example, why did the political appointment of William Ruckelshaus to head the Environmental Protection Agency (EPA) during the Reagan administration matter (Wood and Waterman 1993), whereas the appointment of Susan Kennedy to the Consumer Product Safety Commission did not? Of the political control studies listed in table 1, only Chaney and Saltzstein (1998) and Gormley, Hoadley, and Williams (1983) incorporate more than a handful of agencies.

Perhaps as limiting as the small number of agencies is the reliance on agencies generally of the same type—federal regulatory agencies (exceptions are Chaney and Saltzstein 1998; Corder 1998; Gormley, Hoadley, and Williams 1983; Meier, Wrinkle, and Polinard 1999). The bureaucratic politics literature suggests that an agency's ability to take independent action is a function of having both resources and autonomy. Resources and autonomy are, in turn, a function of the agency's political support (clientele, the public, and elected officials), expertise, organizational cohesion, and leadership (Meier 2000; Rourke 1969). Limiting studies to federal regulatory agencies alone truncates variation on many of these factors, suggesting either greater or lesser political control than would be the case for most other agencies.[3]

Organization Theory

Government bureaucracies are goal-oriented collectivities with multiple objectives (Downs 1967; Rainey 1997; Thompson 1967). This feature renders the interaction of political officials and bureaucracy more complex, simply because the bureaucracy can respond to political officials in terms of one goal while simultaneously moving away from political intent on another. The general issue of political control, therefore, is more complicated than is often apparent.

A review of political control studies shows that a range of bureaucratic activities is examined, each perhaps linked to different goals. Most of the relevant control literature follows Wood and examines enforcement actions (Wood 1988; Wood and Waterman 1994; Scholz and Wei 1986); other studies assess the content of regulations (Balla 1998), internal resource allocations (Scholz and Wood 1999), and proposed plans (Sabatier, Loomis, and McCarthy 1995).

Despite this diversity of activities across different research projects, each individual study usually limits itself to a narrow range of indicators. We do not know, for example, whether the EPA's response in enforcing regulations has come at the expense of issuing regulations or overseeing state clean air plans. A lesson of organization theory is that studies need to consider a wide range of agency activities that are consistent with the agency's multiple goals. This approach should include not just internal decisions and policy outputs but also policy outcomes. After all, the most critical political question is whether EPA actions result in cleaner air, not whether total enforcement actions rise or decline. Although the latter may relate to the former and may garner attention from political overseers (and researchers), an agency could manipulate enforcement actions so as not to affect policy outcomes (see Bohte and Meier 2000).

Representative Bureaucracy as an Integrative Theory

Because the political control research uses a truncated version of principal–agent theory (Waterman and Meier 1998), it cannot consistently present falsifiable hypotheses. Even in its most robust forms, the principal–agent model cannot predict in advance whether any individual attempt at control will succeed.

Although a variety of theories might be used to flesh out the question of political control over the bureaucracy, we think the most promising is representative bureaucracy.[4] The theory of bureaucratic representation provides an attractive alternative to the principal–agent framework because it can offer predictions about the most crucial question in the political control puzzle—how the bureaucracy would act in the absence of political actions.

Representation is a process that occurs in both political and bureaucratic institutions (Long 1952).[5] In political institutions, representation is often the institution's sine qua non. Legislatures exist to represent the preferences of the public, among other things. Bureaucracies are not considered primarily representative institutions, yet a long line of scholars has argued that bureaucracies can perform such functions, even if only under limited circumstances (for recent examples, see Keiser et al. 2002; Selden 1997). By examining representation in both bureaucracy and a political institution, some leverage on the question of political control can be gained.

The representation literature, whether for political institutions or for bureaucracy, is concerned with the translation of passive representation into active representation. Passive representation occurs when the representative resembles the represented along one or more dimensions (race, ethnicity, political party, social status, etc.). Active representation occurs when the representative acts in the interests of the represented—that is, takes action that the representative thinks will benefit the represented (Mosher 1982; Pitkin 1967).

The theory of representative bureaucracy focuses on this translation of passive into active representation by addressing whether and when a bureaucrat makes decisions that benefit the persons being represented. Representative bureaucracy is a parsimonious theory that considers such questions as when minority bureaucrats are likely to act in ways that benefit minority citizens. A bureaucrat who shares common demographic origins with a citizen is also thought to share values. As a result, if a bureaucracy that is representative of the public (in all its dimensions) exercises discretion and pursues its own values, it will also pursue the values of the public.[6]

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Of course, additional values are likely to be held by the bureaucracy—and political institutions—aside from those relevant to represented demographic groups. But comparing the translation of passive into active representation in both a bureaucracy and a political institution might tell us a great deal about political control of the bureaucracy. By incorporating some of the values of both institutions, we can determine when a bureaucracy is acting in the bureaucracy's self-interest and when it is acting in response to political demands.

The present study grapples with the question of political control over the bureaucracy by using the theory of representative bureaucracy within the context of Latino education. Previous studies of legislatures (Espino 2003; Hero and Tolbert 1995; Kerr and Miller 1997; Vigil 1997) and bureaucracies (Hindera 1993; Meier and Stewart 1991; Selden 1997) have examined the ability of Latino legislators and bureaucrats to make decisions that benefit Latinos in general. In both sets of studies, passive representation (being a Latino) was associated with active representation (actions that benefit Latino citizens).

Our specific test of politics versus bureaucracy focuses on Latino education in a large, diverse state. The analysis offers four distinct advantages over the extant literature on political control. First, the ethnicity of both elected officials (school board members) and bureaucrats (teachers) can be used to infer values in the respective institutions (this is similar in approach to past studies; see Hero and Tolbert 1995; Hindera 1993; Kerr and Miller 1997; Meier and Stewart 1991). Both political values and bureaucratic values, therefore, are measured on the same metric. The common metric is preferable to measures of values such as interest group scores or roll call votes, which can be tapped only for one institution (see Balla and Wright 2001; Scholz and Wei 1986; Wood 1988).

Second, schools have multiple goals, and this study exploits that feature by examining results on nine different policy measures. Third, the education literature has a well-developed set of production functions that predict how inputs lead to specific results. Control variables to ensure that the results are not spurious are readily available. Fourth, our data set contains more than 1,000 cases over a nine-year period—that is, more than 1,000 sets of political principals interacting with 1,000 different bureaucracies, thus ensuring the results are not a function of the unique features of a given set of politicians or bureaucrats.[7] In short, this study reaches beyond federal regulatory agencies with a large-*N* test of the relative importance of overhead political control versus the influence of bureaucratic values in shaping multiple policy outputs and outcomes.

Measures and Data

The Data

The units of analysis are 1,043 public school districts in Texas for the years 1993 to 2001. Because data are

reported only when at least five students in a district meet the reporting criterion—at least five Latino students taking an advanced placement (AP) exam—and we lag the dependent variable, the actual number of cases varies from 7,713 for student attendance to 317 for AP exam pass rates. More general indicators, such as attendance and performance on the required state test, have the most cases; indicators of elite performance, such as SAT scores or AP classes, have the fewest. In addition, some outcome indicators were not collected in the earlier years of the data set. All data were taken from the electronic files of the Texas Education Agency and cleaned for obvious errors.

A pooled time-series data set such as this one can be affected by problems with serial correlation and heteroscedasticity (Baltagi 1995; Beck and Katz 1995; Stimson 1985). Because the work in this area has for the most part used dynamic specifications, we opted to lag the dependent variable in all regressions. This process creates a set of fixed effects for each unit of analysis that was able to eliminate problems of serial correlation (see Beck and Katz 2004).[8] Heteroscedasticity tests showed only minimal levels of the phenomenon; reestimating the equations with Huber-White standard errors produced similar results.

Although most studies of political control do not justify the representativeness of their cases, little will be gained in the study of bureaucracy without an explicit consideration of organizational characteristics and how they compare to those of other bureaucratic units. School districts, the most common type of U.S. public bureaucracy, employ more individuals than any other kind of government organization. School districts in Texas are highly diverse, as one might expect in a heterogeneous state with more than 8 percent of all U.S. school districts. Districts in the data set cover the gamut from urban to rural, rich to poor, monoracial to multiracial.

As organizations, school districts are highly professional, decentralized organizations with a great deal of discretion vested in street-level bureaucrats. They fit Wilson's (1989) definition of craft organizations. Although such organizations have characteristics that appear to benefit bureaucrats in their interactions with politicians (e.g., professional expertise, decentralized structures, a craft-like technology), they also entail governance structures that facilitate political control. All districts but one in this study are independent school districts governed by an elected school board.[9] The school board appoints the chief operating officer (the superintendent), establishes the agency budget (as well as the tax rate), determines educational policy issues such as curriculum, and oversees the operations of the school systems.[10] Because school districts tend to be flat organizations, the distance between a school board member and a teacher actually delivering services is relatively small. The transaction costs of attempting to influence the bureaucracy, as a result, should be less than they would be for organizations in which politicians have to penetrate several layers of hierarchy to influence the appropriate bureaucrats. Earlier research found that proximity to political overseers enhances control (Chaney and Saltzstein 1998); these sorts of local districts, therefore, should be good contexts for picking up political influences. Furthermore, as special districts executing only one type of policy, school districts permit political leaders to pay focused and sustained attention to control and performance in a single policy field without competition from a range of unrelated policy matters. Finally, no separation-of-powers issues arise to complicate the principal–agent link.

No single study of the connection between politics and bureaucracy is likely to be generalizable to all such relationships, simply because bureaucratic units vary on numerous factors likely to influence these relationships (Meier 2000). Although the results of this study can most easily be generalized to other school districts and to highly professional, decentralized bureaucracies, the large number of cases, the focus on multiple outcomes, and the problems with prior research suggest that the findings here might be more likely to apply to political–bureaucratic interactions than those currently available in the literature.

Representation: The Values Surrogate

An objective comparison of political versus bureaucratic influence on policy outcomes requires that both political and bureaucratic values be measured by the same metric. If we assume, as the empirical literature finds, that both Latino school board members and Latino teachers seek to improve the educational opportunities of Latino students, then the simple percentages of school board members and teaching faculty who are Latino provide good measures for comparison purposes. Is ethnicity a good surrogate for measuring values in this situation? We believe that the ethnicity of school board members offers a suitable and perhaps superior alternative to those employed in past studies, which used primarily interest group scores, partisan percentages, or budgetary shifts as proxies for political preferences (see Carpenter 1996; Krause 1996; Ringquist 1995; Scholz and Wei 1986; Scholz, Twombly, and Headrick 1991; Wood 1990, 1998). Though these are not necessarily flawed measures of political preferences, they are also neither theoretically nor empirically superior to ethnicity as a proxy for values.

An extensive public opinion literature has demonstrated that Latinos hold political attitudes that are different from those of Anglos (Cain and Kiewiet 1984; de la Garza et al. 1992; Gimpel and Kaufmann 2001; Hood, Morris, and Shirkey 1997; Leal 2002, 2004; Martinez-Ebers et al. 2000); these differences

grow substantially when the issue is salient to the Latino community—matters such as bilingual education, immigration, or affirmative action (Espino 2004; Leal 2004). Although Latinos or any other group are not monolithic in attitudes, they do show a sufficient degree of consistency on key issues. Even the Cuban American population, which differs significantly on foreign policy issues (primarily focused on Cuba), shares positions with other Latinos on domestic issues. This commonality of interests is likely to be particularly true when the outcomes being studied directly affect clients of the same ethnicity, as they do in this study.

Because the variables capturing political and bureaucratic preferences are measured with the same metric, coefficient sizes can be directly compared. We constructed the *school board ethnicity variable* using information from the U.S. Census Bureau, the Texas Association of School Boards, the National Association of Latino Elected Officials, and an original survey (see the appendix for specifics). All other data were taken from the Texas Education Agency. Between 1993 and 2001, the average school district in Texas had 9.2 percent Latino board members ($s = 21.3$) and 8.1 percent Latino teachers ($s = 18.0$).[11] The two measures share approximately 75 percent of their variation; however, one advantage of a sample of several thousand cases is that substantial unique variation remains for both measures.

To provide a fair test of political versus bureaucratic influence, this study limits the comparison to these variables. Bureaucracies influence outcomes in a wide variety of ways, and we could easily bias the results by giving bureaucracy credit for overall student performance (used as a control), the stability of the system, or the level of expertise in the system (see Meier and O'Toole 2001). We ignore these possible bureaucratic influences and effectively create a tough standard against which to compare bureaucratic and political influence.

Dependent Variables

Public bureaucracies have multiple goals (Downs 1967; Simon 1947; Thompson 1967), and school districts are no exception. Even if one ignores the broader educational objectives of creating democratic citizens and focuses solely on student performance, school systems provide numerous programs aimed at a wide variety of goals—ensuring attendance, preventing dropouts, mastering basic skills, preparing students for college, etc. Even though some goals might be held in higher regard than others, Latino politicians and bureaucrats are likely concerned with Latino student performance relative to all these goals. To provide as complete a view as possible, this study uses nine performance indicators for Latino students.

At the low end of the performance scale, students need to attend school to gain any benefit from the process. Our measure is the percentage of Latino students who attended class. We also considered using dropout rates but decided not to do so because of the quality of the data. Student populations are highly mobile, and schools may not know whether a student has dropped out of school or has moved and reenrolled elsewhere—and they have little incentive to find out. In addition, at least one major school district in our sample (Houston Independent School District) was caught reporting false dropout data in 2003.

Basic skills achievement tests are a moderate-level goal for school districts. During this time, Texas used the Texas Assessment of Academic Skills (TAAS) in grades 3 through 8 and as an exit exam.[12] Our performance measure is the percentage of Latino students who passed all of the TAAS tests (e.g., math, reading, writing, etc.) at all grade levels.

Within a school system, the quality of education will vary from school to school and from classroom to classroom. To tap some of this variation in educational quality, we use three indicators: the percentage of Latino students who gained access to advanced classes, the percentage who took AP classes, and the percentage who passed AP exams. Advanced placement classes are designed to be college-level classes; students who take these classes and pass the national exam with a grade of 3 or higher can get college credit.

For top-end indicators, we include four measures of college preparation. These include the percentage of Latino students who took either the ACT or SAT exam, the average Latino SAT score, the average Latino ACT score, and the percentage of Latino students who scored above 1110 on the SAT or its ACT equivalent (defined by the state of Texas as an indicator of potential college success). Students who do not take either exam are unlikely to attend college. Texas has large percentages of students who take both the SAT and the ACT, so results generally are not affected by the performance of a small number of students.

The nine performance indicators for Latino students are clearly distinct from each other. The average of the 26 intercorrelations between the indicators was only .18, and eight of the correlations were actually negative (albeit very small). A factor analysis of the nine indicators revealed three significant factors, with no single factor accounting for more than 34 percent of the variance.[13]

Control Variables

Three distinct types of control variables are included in the analysis. The first is a lagged dependent

variable. The standard empirical question in the political control literature derives from its longitudinal designs: Does bureau A change what it is doing at time *t* (versus *t*–1) after some political activity takes place? This control for history is usually done through either complex ARIMA modeling or by lagging the dependent variable (see Wood 1992; Wood and Waterman 1994). Because we have only nine years of data and thus could not generate ARIMA estimates of any reliability, we include a lagged dependent variable in all models. This procedure gives us a precise estimate of the autoregressive nature of the policy process and provides a fairly stiff test for both political and bureaucratic variables.

The second control variable represents general school district performance. Some Latino students will do better simply because they attend better or more challenging schools. Because Latinos, especially recent immigrants, face a segmented labor market that discourages them from pursuing many professions, the literature also suggests the possibility that the pool of Latino teachers could be more talented than the pool of Anglo or black teachers (Meier, Wrinkle, and Polinard 1999). Other studies argue that nondiscriminatory bureaucracies are more likely to be effective simply because they do not consider nonproductive factors such as race, gender, or ethnicity (Becker 1993). Both arguments indicate that a control for non-Latino student performance might be appropriate, either because Latinos attend better schools or because Latino teachers could be associated with better performance for all students, not just performance by Latino students. For each indicator, therefore, we control for Anglo student performance on the same indicator (that is, for Latino SAT scores, we include Anglo SAT scores in the model). This control requires that Latino teachers or school board members affect Latino students over and above the impact that they might have on Anglo students (see Weiher 2000).

The third set of controls are the standard production function variables (Hanushek 1996; Hedges and Greenwald 1996) and can be clustered into two groups: resources and constraints. Bureaucracies cannot influence outcomes without resources. Five resource indicators, all commonly used in education production functions, are included in all models: average teacher salary, per-student instructional spending, class size, average years of teacher experience, and percentage of teachers who are not certified (see Burtless 1996). Three measures of constraints include the percentage of African American, Latino, and poor students; the last-mentioned variable is measured as the number of students eligible for free or reduced-price school lunches.

Although the production function literature specifies directional hypotheses for each control variable, the actual direction of relationships in this study is not obvious. Because each equation controls for Anglo student performance, these control variables must affect Latino performance over and above their impact on Anglo performance. For teachers' salaries to matter, therefore, better-paid teachers would need to benefit Latino students more than they benefit Anglo students. Although there is a modest literature on differential impacts (Jencks and Phillips 1998), it indicates little consistency with regard to expectations. The controls should be viewed merely as an effort to make sure key factors are not left out of the model.

Findings

Our logic of analysis is to first illustrate the influence of political factors on bureaucratic performance without any consideration of bureaucracy—thus replicating the typical approach taken in most earlier work on political control—then to add the bureaucracy variable, and finally to consider the influence of political appointees and other factors that might influence these results. We do so to illustrate why the literature has found numerous positive results and then to argue why those results might be less convincing than they appear.

The Case for Political "Control"

Political influence over the bureaucracy—some would even suggest political *control*—is commonly demonstrated by showing that variables representing political factors are correlated with bureaucratic outputs or outcomes. To mimic this argument, nine regressions were run with the full set of control variables and Latino school board membership as the political variable (the bureaucratic variable was not included). The results appear in tables 2 and 3.

The results suggest a fair amount of political influence on policy outcomes. Eight of the nine relationships are statistically significant and in the predicted direction. Greater Latino school board representation is associated with more Latino students passing the TAAS, attending school, taking advanced classes, taking AP classes, and taking college board tests. Latino representation is also positively related to Latino SAT scores, Latino ACT scores, and high college board scores (above 1110 on the SAT). In one case, passing AP exams, the relationship is negative and significant. Although some of the relationships are small, expecting massive impacts from political forces is unrealistic given that most of the indicators are policy outcomes rather than policy outputs.[14] That is, for the most part these are not measures of what the bureaucracy does (an exception might be advanced classes and AP classes) but measures of actual changes in Latino student performance. Such findings, given the difficulty of influencing such factors (Burtless 1996; Jencks and Phillips 1998), would be considered optimistic in the education policy literature and supportive in the political control literature.

Table 2 Political Influence on the Bureaucracy: Without Considering the Bureaucracy

Dependent Variables = Percentage of Hispanic Students Who…					
Independent Variables	Pass Test	Attend Daily	Advanced Classes	Take AP	Pass AP
Political Control					
Latino board percentage	.058* (6.95)	.003* (5.44)	.055* (7.69)	.036* (3.21)	-.093* (1.96)
Controls					
Lagged dependent variable	.423 (47.16)	.579 (70.32)	.251 (23.65)	.331 (13.10)	.445 (9.56)
Anglo performance	.518 (37.50)	.321 (28.50)	.517 (48.82)	.336 (21.58)	.393 (7.30)
Teacher salary (000)	.715 (13.84)	.001 (3.21)	−.073 (2.12)	.198 (1.87)	1.865 (2.96)
Instructional $ (000)	−.179 (0.64)	.046 (2.25)	.204 (0.19)	−.132 (0.30)	−5.630 (1.45)
Black student percentage	−.107 (9.53)	−.002 (2.07)	−.054 (5.53)	−.016 (0.91)	−.183 (1.58)
Latino student percentage	−.148 (16.05)	−.008 (11.61)	−.074 (9.20)	−.026 (1.72)	.041 (0.40)
Low-income percentage	.078 (7.65)	.006 (7.39)	.025 (2.71)	−.020 (1.18)	−.053 (0.49)
Class size	−.187 (2.17)	−.006 (0.89)	.022 (0.27)	−.142 (0.95)	−2.079 (1.86)
Teacher experience	−.292 (4.76)	−.029 (6.06)	−.140 (2.60)	−.281 (2.82)	−.536 (0.88)
Noncertified teachers	.050 (2.03)	.006 (3.24)	.090 (3.89)	.022 (0.59)	.235 (0.85)
Adjusted R^2	.72	.59	.43	.54	.62
Standard error	9.66	0.78	7.41	5.75	14.60
F	1843.72	1026.89	428.44	142.37	47.90
N	7,702	7,713	6,240	1,307	317

* $p < .05$ one-tail test; # $p < .10$ one-tail test.

Note: Directional *t* tests are not appropriate for the control variables. Critical values are 1.96 for $p < .05$ and 1.65 for $p < .10$.

These findings merit additional discussion within the context of the political control literature. The results reported in that literature are not massive—that is, one does not find 180-degree shifts in agency outputs. The influences are primarily incremental in size (although not in direction), and they often die out over a period of time (Wood and Waterman 1994). Given this context, to find significant political relationships for a pool of 1,000 agencies over a nine-year period, using nine different policy measures that are not easy for policy makers to manipulate, would be considered a substantively significant finding in the literature on political control.

The Limits of Political Influence

As is traditional, tables 2 and 3 have been interpreted thus far as supportive of claims about political control over bureaucracy. In past studies, these findings would have served as evidence that political principals had made the bureaucracy act in a way that it would not have done in the absence of oversight. Fortunately, the current data set permits us to test this assertion by directly measuring bureaucratic preferences. Table 4 reports abbreviated results for models that involve adding bureaucratic values—the percentage of Latino teachers—to each regression from tables 2 and 3. The results are stunning. The number of significant

Table 3 Political Influence on the Bureaucracy II: Without Considering the Bureaucracy

Dependent Variables = Percentage of Hispanic Students Who...				
Independent Variables	Take Test	SAT Score	ACT Score	Above 1110
Political Control				
Latino board percentage	.152* (6.92)	.177* (1.95)	.003# (1.56)	.020# (1.62)
Controls				
Lagged dependent variable	.329 (18.90)	.271 (10.40)	.216 (9.23)	.193 (8.63)
Anglo performance	.340 (13.81)	.433 (14.65)	.275 (10.92)	.207 (10.94)
Teacher salary (000)	–.118 (0.84)	1.513 (2.13)	.016 (1.37)	.413 (4.95)
Instructional $ (000)	1.815 (1.75)	–1.240 (0.19)	.017 (0.16)	–.541 (0.73)
Black student percentage	–.066 (1.96)	–.433 (2.80)	–.009 (2.24)	.010 (0.45)
Latino student percentage	–.046 (1.45)	–.332 (2.38)	–.011 (3.75)	.001 (0.05)
Low-income percentage	–.124 (3.52)	–.661 (4.20)	–.015 (4.55)	–.165 (7.31)
Class size	.118 (0.37)	–.179 (0.12)	.058 (2.12)	.069 (0.36)
Teacher experience	–.292 (1.49)	–.753 (0.77)	–.018 (0.90)	–.245 (1.94)
Noncertified teachers	–.111 (1.21)	.564 (1.17)	.004 (0.38)	.044 (0.70)
Adjusted R^2	.31	.60	.43	.37
Standard error	15.41	48.24	1.15	8.31
F	109.41	174.07	117.42	107.20
N	2,623	1,283	1,748	1,968

* $p < .05$ one-tail test; # $p < .10$ one-tail test.

Note: Directional *t* tests are not appropriate for the control variables. Critical values are 1.96 for $p < .05$ and 1.65 for $p < .10$.

Table 4 Bureaucratic Impacts Greatly Exceed Political Ones

	Political Impact		Bureaucratic Impact			
Dependent Variables	Slope	*t* Score	Slope	*t* Score	Adj R^2	*N*
Latino TAAS pass rate	.019	1.79*	.086	6.33*	.73	7,702
Latino attendance	−.001	0.91	.009	8.50*	.60	7,713
Advanced classes rate	.020	2.25*	.080	7.04*	.43	6,240
Taking AP classes	.008	0.60	.072	3.99*	.55	1,307
Passing AP exams	−.133	2.47	.132	1.55#	.62	317
College test rate	.081	3.32*	.209	6.16*	.32	2,623
SAT scores	.018	0.18	.673	4.43*	.60	1,283
ACT scores	.001	0.56	.005	1.66*	.42	1,748
Above 1110	−.000	0.03	.062	3.17*	.38	1,968

Note: All equations control for Anglo performance on the same indicator, a lagged dependent variable, percentage of state aid, teachers salaries, percentage of black students, percentage of Latino students, class size, teacher experience, and percentage of noncertified teachers.

* $p < .05$ one-tail test; # $p < .10$ one-tail test.

relationships for school board members drops from eight to three (TAAS scores, advanced classes, and taking the college boards); the AP exam pass rate remains statistically significant in the wrong direction. In contrast, all nine relationships for Latino teachers are statistically significant in the predicted direction. What appeared to be evidence for political control in tables 2 and 3 now seems to be simply a pattern involving politicians and bureaucrats holding similar values.

This general summary of statistical comparisons might actually underestimate the contrast between the two lines of influence. Several points support such an interpretation. First, two of the political influences in table 4 have to do with students taking either AP classes or college board tests; there is no evident political influence on how well students perform in class or on these tests, thus suggesting that such indicators could be symbolic, not substantive. Given the ability of bureaucracies to manipulate symbolic outputs for political principals (see Bohte and Meier 2000), these influences by school board members might be ephemeral. The bureaucratic influences, in contrast, appear across a wide range of indicators.

Second, in cases in which both institutions influence the outcomes, the relative size of the bureaucratic influence is far larger. By measuring Latino school board representation and Latino teacher representation by the same metric, we can conclude that Latino teachers have 4.5 times the impact on Latino students passing the TAAS, four times the impact on Latino students taking advanced classes, and 2.5 times the impact on Latino students taking the standardized college admissions examinations than do Latino school board members.

Table 5 examines the relative influence of politicians and bureaucrats in another way. Because the estimates in table 4 provide independent impacts controlling for the other set of actors, the table downplays the total influence and the joint influence that cannot be separated out. Table 5 shows the total influence of both school board members and teachers, as well as the percentage of that total influence that remains when one controls for the other set of actors. To illustrate, a 1 percentage point increase in Latino school board representation is associated with a 0.059 percentage point increase in the TAAS pass rate, but only 31.7 percent of that influence remains when one controls for Latino teachers. For teachers, the impact is 0.100 percentage point, and 85.6 percent remains after controlling for Latino board members. Even discounting the cases in which school board relationships are in the wrong direction, the conclusion from table 5 is that bureaucratic influence greatly exceeds political influence.

Third, the bureaucratic (i.e., teacher) relationships are supported by a more convincing causal theory than are the school board relationships. School board influence on students taking AP classes would almost certainly have to be indirect, either by advocating more funds for such classes or perhaps by serving as role models. For the most part, school board members do not come into direct contact with students. Teachers, on the other hand, interact with students on a daily basis. Latino teachers can influence Latino student performance by adopting more effective

Table 5 Comparison of Direct and Indirect School Board and Teacher Effects

	School Board		Teachers	
	Total	% Direct	Total	% Direct
Latino TAAS pass rate	.059	31.7	.100	85.6
Latino attendance	.0037	0.0*	.0087	106.8
Advanced classes rate	.055	35.6	.095	84.4
Taking AP classes	.0357	22.1	.078	92.8
Passing AP exams	–.093	NA	.032	414.1
College test rate	.152	53.7	.261	80.1
SAT scores	.177	9.9	.683	98.6
ACT scores	.0026	41.2	.0056	85.6
Above 1110	.020	0.0*	.0618	99.5

* unique impact is negative.

pedagogical techniques; providing support and encouragement for students having difficulty; advocating changes in school policies, many of which never reach the school board; serving as role models; or influencing Anglo teachers to change teaching styles.

One other aspect of table 4 merits discussion: the relationship between Latino school board representation and Latino teacher representation. Advocates of political control might contend that political control is so complete that even the values of professional bureaucrats are determined by political activity (see, for example, Wood and Anderson 1993). Such advocates might contend that school boards determine who is hired as teachers; therefore, Latino board members hire Latino teachers and should get credit for those relationships as well.

Two flaws mar this argument. First, the strong influence of teachers is apparent over and above any shared influence with school board members. Second, the political control argument assumes that the direction of causality between Latino political representation and Latino bureaucratic representation is solely top down, that is, political representation affects bureaucratic representation but not vice versa. Despite the common nature of this assumption in the urban politics literature (Eisinger 1982; Mladenka 1989), the only systematic across-time studies to examine these relationships (using Granger causality methods) have concluded that the relationships were reciprocal (Meier and Smith 1994; see also Krause 1996). We probed this relationship by conducting panel versions of Granger (1969) causality analysis on three variables: Latino school board members, Latino administrators, and Latino teachers. The Granger equations (not shown) for both two-year and three-year lags show that the relationships flow both ways among all three of these variables. That is, the number of Latinos on the school board was affected by the number of Latinos in administration and on the teaching faculty, and the number of Latinos on the board affected the number of Latino administrators and Latino teachers. Relationships in both directions were strong and approximately the same size. The implication of these Granger causality tests is that the shared variation explained by the school board and the teachers should not be allocated totally to the school board. In short, the school board influence is less than the regression results in table 4 suggest, though the influence of the teachers is greater.

A defender of the political control perspective might still challenge these findings by arguing that the values of school board members, even Anglo members, might be the reason some school districts have more Latino teachers and more favorable policies. Although measuring such a hypothetical attitude unrelated to ethnicity would require a massive survey, one can feasibly construct surrogates for such a policy orientation. Presumably, school boards that are favorably disposed to hiring Latino teachers would also be favorably predisposed to hiring Latino administrators. To probe this possibility, we included a measure of Latino administrators in the equations in table 4, and the results were essentially the same (results not shown). We also attempted to measure policy actions favorable to Latino students by regressing expenditures on bilingual education on the percentage of Latino students diagnosed as having limited English proficiency and on the percentage who are low income. Positive residuals in this equation should indicate a preference for spending money to aid Latino students. This measure, when used in the equations of table 4, had no impact whatsoever on the results (results are not shown but are available from the authors).

Do Political Appointees Matter?

A common conclusion of the political control literature is that political appointees are a key way to control the bureaucracy. Wood and Waterman (1994) show that specific political appointees were associated with significant shifts in the rate of bureaucratic enforcement during the Reagan administration. Perhaps a similar process works for school districts.

School boards have only a single but important political appointment, the superintendent. The superintendent has a major influence on school district policies, procedures and outputs (Zeigler, Kehoe, and Reisman 1985). The relative power of the superintendent in Texas districts and in most others far exceeds that of most federal political appointees. Merit system protections that make it difficult to move civil servants from policy-making positions do not constrain the actions of superintendents. Central office policy personnel and, in many districts, school principals can be replaced at will. The unions that some believe dominate school policy (Moe 2002; but see Hess 1999) are weak to nonexistent in Texas.

School superintendents also have greater advantages than federal appointees in overcoming the bureaucracy's information advantages. Unlike most political appointees, who have little experience managing complex bureaucracies (Durant 1993; Ingraham 1995) or modest substantive expertise, school superintendents are trained specialists who, in our study, average 24 years of administrative experience in education and seven years in their current job (compared to the average tenure of about 18 months for federal political appointees). As a result, superintendents know a considerable amount about what goes on in schools and classrooms.

Given the relative advantages of school superintendents, therefore, we might expect that Latino school

superintendents to be the missing link in the principal–agent puzzle. Latino superintendents led 5.5 percent of the districts in the study (a total of 512 district years). A dummy variable indicating a Latino superintendent was added to the models in table 4 to provide a relative comparison of the influence of bureaucrats, political appointees, and politicians.

The results in table 6 provide little support for the notion that political appointees are a major factor in shaping bureaucratic actions.[15] Only in the symbolic realm of admitting more Latino students in advanced classes and in taking college boards does the presence of a Latino superintendent matter, and that impact is relatively modest (the large coefficients reflect the dummy variable coding). In a third case, ACT scores, the regression coefficient is statistically significant and in the wrong direction. If anything, the influence of the superintendent on these variables appears to matter less than the influence of the school board. In both cases, influence can be characterized as modest at best.

Adding superintendents has little impact on the evidence regarding bureaucratic influence. All nine relationships remain significant, and the magnitudes of the coefficients in table 6 are similar to those in table 4. The inclusion of political appointees in the model, therefore, does little to change our earlier findings that bureaucracy and bureaucratic values matter the most in the interaction between bureaucracy and political institutions.

Because part of our argument is that failing to incorporate bureaucratic values can generate misleading results, we replicated tables 2 and 3 but used the Latino superintendent variable rather than the school board variable. Such an estimation is common in the literature, with its focus on political appointees. The notes to table 6 show that this estimation generates six (out of nine) significant coefficients in the correct direction. Such an underspecification would overestimate the role of political appointees, thereby giving them credit for results that would have occurred in any event.[16]

Conclusion

If representativeness, in this case of Latinos, can be considered an appropriate values surrogate for both elected politicians and bureaucrats, the evidence presented in this study is unequivocal. The influence of the bureaucracy trumps that of elected political leaders on a wide range of performance measures. The large-*N* nature of the design, coupled with the use of appropriate controls and the array of dependent variables examined, provides presumptive evidence for the importance of bureaucracy in shaping outputs and outcomes.

The most obvious conclusion of this investigation is that it is critical to bring the bureaucracy back into the study of bureaucratic control. The second and ultimately more disquieting conclusion is closely related to the first. If this study had been conducted in the pattern that is common in the literature on control, possible *spurious relationships* would have been mistaken for evidence of political impact. Tables 2 and 3 suggest as much, and the general disappearance of political control in a more fully specified form of the equations in table 4 raises a concern about the validity of much of the received empirical wisdom accumulated during the last two decades. To the extent that scholars have left bureaucracy on the sidelines in their attempts to explain its actions, earlier findings and apparent theoretical and practical insights should be critically reexamined. The appropriate research designs for exploring this subject must directly account for bureaucratic values and bureaucratic influence.

Table 6 Representativeness of Political Appointees Matters Very Little in Bureaucratic Outputs

	Political		Bureaucratic		Appointee			
Dependent Variable	Slope	*t*	Slope	*t*	Slope	*t*	R^2	*N*
TAAS pass rate	.019	1.78*	.091	6.16*	−.346	0.53	.73	7677
Attendance	−.001	0.90	.009	7.85*	−.017	0.32	.60	7700
Advanced classes	.019	2.16*	.072	5.83*	.916	1.70*	.43	6235
Taking AP classes	.007	0.57	.069	3.49*	.379	0.44	.55	1307
Passing AP exams	−.136	2.51	.116	1.29#	1.837	0.64	.62	317
College test rate	.079	3.22*	.188	5.08*	2.096	1.38#	.32	2623
SAT scores	.022	0.22	.704	4.35*	−3.088	0.55	.60	1283
ACT scores	.001	0.67	.006	2.02*	−.149	1.39	.42	1748
Above 1110	.000	0.01	.066	3.10*	−.356	0.44	.38	1968

Note: All equations control for Anglo performance on the same indicator, a lagged dependent variable, percentage of state aid, teachers salaries, percentage of black students, percentage of Latino students, class size, teacher experience, and percentage of noncertified teachers.

Appointee slopes when school boards and teachers are omitted from these equations (*t* scores in parentheses): TAAS pass rate 2.463 (4.37), attendance .227 (4.94), advanced classes 3.101 (6.56), taking AP classes 2.179 (2.86), passing AP exams 1.487 (0.56), college test rate 7.351 (5.43), SAT 7.154 (1.39), ACT –.033 (0.34), above 1110 .869 (1.19).

* $p < .05$ one-tail test; # $p < .10$ one-tail test.

The findings in this paper should not be surprising. There are solid theoretical reasons to expect bureaucratic perspectives to exert a stronger influence on outputs and outcomes than political perspectives. Analysts since Max Weber (1946) have noted the positional and technical advantages of expert bureaucrats with respect to elected officials, and it should come as no shock to see these reflected in shaping performance. In addition, several well-developed bodies of literature have directed extensive attention to this theme and indicated some of the subtle ways bureaucracy and its discretionary decision making can influence the results of public programs.

One should be cautious to avoid caricaturing the general theory of political control. Other channels and modes of control are surely plausible. In the empirical portion of this analysis, we explored a few and ultimately rejected each on the basis of the evidence. Latino school board members in Texas do not exert representational *control* once removed, so to speak, by selecting or directing teacher-proxies as agents of school board advocacy. Nor is a different sort of multilevel principal–agent chain at work: Adding school-system superintendents into the picture does not reveal spurious or weakened relationships between bureaucratic values and performance. The evidence supports the claim of bureaucratic influence, even when assessed in light of these alternative causal possibilities.

We have not eliminated all possible principal–agent explanations for the findings presented here, nor do we contend that political leaders are irrelevant. Politicians influence bureaucracy in a wide variety of instances. "Control," however, is far too strong a term for the relationship of politicians to bureaucrats. A principal–agent interpretation of these results could be constructed, but it would have to be rather convoluted. We suggest that an explanation rooted in bureaucratic values and influence is more parsimonious and more plausible, and it also comports with theory and empirical findings in several related fields. Therefore, it should be considered as one that future work on political control should confront. Studies built on the assumption of a passive and largely pliant bureaucracy should be treated with skepticism.

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Notes

1. Accumulated studies are not all of a piece. Research has explored a wide range of external political institutions and stimuli, employed several methods, examined a number of (usually federal and regulatory) bureaus, and sought to explain a number of bureaucratic actions. Some of the studies have found only limited support for a simple version of the political control hypothesis (e.g., Balla 1998; Carpenter 1996; Wood 1988), and some suggest complex and possibly reciprocal causal paths (Krause 1996) as well as subtle and multiple bureaucratic response repertoires (Ringquist 1995; Wood and Waterman 1993).
2. The public administration and democracy literature can even be used to challenge the notion that democracy is what political institutions do. As Woodrow Wilson framed the issue comprehensively in his classic essay, "[T]he ideal for us is a civil service cultured and self-sufficient enough to act with sense and vigor, and yet *so intimately connected with popular thought, by means of elections and constant public counsel*, as to find arbitrariness or class spirit quite out of the question" (1887, 217; emphasis added). At times, the political control literature recognizes that responsiveness to a political appointee might not advance the interests of democracy (see Wood and Waterman 1994).
3. We think that regulatory agencies are more "controllable" than distributive agencies but less controllable than redistributive agencies. These are merely hypotheses that need to be empirically verified. The limited set of bureaucracies in the political control literature are all characterized by a similar structural factor; none operates in an interdependent network setting in which the agency must coproduce regularly with other units or gain the cooperation of other agencies, governments, and private organizations to actually implement policy (O'Toole 1997, 1998, 2000). Some evidence suggests that these more complicated structural arrangements are fairly common settings for new public programs (Hall and O'Toole 2000). In fact, what the notion of political control means in a situation in which policy is implemented through a network is unclear (see Light 1999). Does it actually matter whether a political institution "controls" a bureaucracy that is enmeshed in a network of actors over which the bureaucracy has little (if any) control?
4. The same theoretical implications could be derived through spatial modeling by constructing this problem with different ideal points for bureaucracy and legislature.
5. We abide by the practice, common in the literature, of referring to electoral institutions as "political institutions" and do not mean to include bureaucracies when we use that term here. We recognize that bureaucracies are also political institutions.

6. This outline of the theory omits numerous complications. Not all individuals in a given bureaucracy have equal power, so aggregate representativeness does not necessarily translate into active representation in important decisions. Agency and professional socialization can also limit the passive–active link. These and other issues can be ignored in the analysis that follows. The empirical portion of this paper focuses on bureaucracies in which discretionary decision making is widely dispersed and on a demographic dimension that is salient to both elected officials and bureaucrats, thus affording an appropriate assessment of political versus bureaucratic control.
7. Ideally, we would have bureaucracies that operate in a wide range of policy areas. Finding comparable output indicators in such a situation is likely impossible. By selecting the same type of public organizations, we improve our measurement at the expense of external validity, a good trade-off considering these districts are extremely diverse.
8. The autoregressive coefficients indicate that these series are clearly stationary (ranges from .58 to .19), so that differencing the series would induce substantial serial correlation (likely of a moving-average nature). We also replicated the results using individual dummy variables for each of the years and obtained similar results.
9. A dependent school district has a school board that is appointed by another entity (e.g., the mayor or the city council) and does not have independent taxing powers.
10. Unlike some states that permit voters to act on district budgets, Texas vests this authority fully in the school board. Voters can play a role in only two instances: school bond referenda and school board elections. Such structures are similar to those that operate in most models of overhead democracy.
11. Because the variables have generally the same mean and distribution, a comparison of the slopes yields an indicator of total potential impact in addition to the normal marginal impact.
12. The test was changed in 2003 to the Texas Assessment of Knowledge and Skills; results of the two exams are highly correlated.
13. The factor scores are not useful for analysis given the list-wise deletion of missing values. The factor analysis, as a result, is based on less than 4 percent of the total school districts (those with reportable data on every indicator).
14. The long-term impacts, however, might be substantial given that these are autoregressive systems. One can estimate these long-term impacts by calculating how the coefficient for the lagged dependent variable distributes these political influence effects over future years.
15. The limited impact of superintendents in the representational function contrasts with their substantial impact in managerial roles (see Meier and O'Toole 2001, 2003; O'Toole and Meier 2003). The present test is restricted to assisting Latino students and doing so with controls for the impact on Anglo students. In a nonrepresentative role, superintendents are likely to increase the performance of both Latino and non-Latino students.
16. We do not mean to suggest that political appointees do not matter. They do, but how much they matter depends on a variety of factors. Sometimes these factors include support or acquiescence from careerists, such as the movement to market-based policies in the EPA or the adoption of Chicago School principles in antitrust policy (Eisner 1991).

References

Balla, Steven J. 1998. Administrative Procedure and Political Control of the Bureaucracy. *American Political Science Review* 92(3): 663–73.

Balla, Steven J., and John R. Wright. 2001. Interest Groups, Advisory Committees, and Congressional Control of the Bureaucracy. *American Journal of Political Science* 45(4): 799–813.

Baltagi, Badi H. 1995. *Econometric Analysis of Panel Data*. New York: Wiley.

Barnard, Chester. 1938. *The Functions of the Executive*. Cambridge, MA: Belknap Press.

Beck, Nathaniel, and Jonathan N. Katz. 1995. What to Do (and Not to Do) with Time-Series–Cross-Section Data. *American Political Science Review* 89(3): 634–47.

———. 2004. Time-Series–Cross-Section Issues: Dynamics, 2004. http://www.nyu.edu/gsas/dept/politics/faculty/beck/beckkatz.pdf [accessed November 10, 2005].

Becker, Gary S. 1993. *Human Capital*. 3rd ed. Chicago: University of Chicago Press.

Bohte, John, and Kenneth J. Meier. 2000. Goal Displacement: Assessing the Motivation for Organizational Cheating. *Public Administration Review* 60(2): 173–82.

Brehm, John, and Scott Gates. 1997. *Working, Shirking, and Sabotage: Bureaucratic Response to a Democratic Public*. Ann Arbor: University Michigan Press.

Burtless, Gary D. 1996. *Does Money Matter? The Effect of School Resources on Student Achievement and Adult Success*. Washington, DC: Brookings Institution Press.

Cain, Bruce, and D. Roderick Kiewiet. 1984. Ethnicity and Electoral Choice: Mexican American Voting Behavior in the California 30th Congressional District. *Social Science Quarterly* 65: 315–27.

Canes-Wrone, Brandice. 2003. Bureaucratic Decisions and the Composition of the Lower Courts. *American Journal of Political Science* 47(2): 205–214.

Carpenter, Daniel P. 1996. Adaptive Signal Processing, Hierarchy, and Budgetary Control in Federal Regulation. *American Political Science Review* 90(2): 283–302.

Chaney, Carole Kennedy, and Grace Hall Saltzstein. 1998. Democratic Control and Bureaucratic Responsiveness: The Police and Domestic Violence. *American Journal of Political Science* 42(3): 745–68.

Corder, Kevin. 1998. Political Control of Federal Credit Subsidy: Small Business Administration 7(a) Loan Guarantees. *American Review of Public Administration* 28(2): 166–87.

Dahl, Robert. 1970. *A Preface to Democratic Theory*. 2nd. ed. Chicago: University of Chicago Press.

de la Garza, Rodolfo. Louis DeSipio, F. Chris Garcia, John Garcia, and Angelo Falcon. 1992. *Latino Voices*. Boulder, CO: Westview Press.

Downs, Anthony. 1967. *Inside Bureaucracy*. Boston: Little, Brown.

Durant, Robert. 1993. *The Administrative Presidency Revisited*. Albany: State University of New York Press.

Eisinger, Peter K. 1982. Black Employment in Municipal Jobs. *American Political Science Review* 76(2): 380–92.

Eisner, Marc Allen. 1991. *Antitrust and the Triumph of Economics*. Chapel Hill: University of North Carolina Press.

Eisner, Marc Allen, and Kenneth J. Meier. 1990. Presidential Control versus Bureaucratic Power: Explaining the Reagan Revolution in Antitrust. *American Journal of Political Science* 34(1): 269–87.

Espino, Rodolfo. 2003. Electoral Influences on Latino Representation in Congress: Responsiveness to Populations or Electorates. *Paper presented at the National Meeting of the Midwest Political Science Association*, April 3, Chicago.

———. 2004. Minority Interests, Majority Rules: Representation of Latinos in the U.S. Congress. PhD diss., University of Wisconsin–Madison.

Evans, Peter B., Dietrich Rueschemeyer, and Theda Skocpol, eds. 1985. *Bringing the State Back In.* Cambridge: Cambridge University Press.

Finer, Herman. 1941. Administrative Responsibility in Democratic Government. *Public Administration Review* 1: 335–50.

Friedrich, Carl J. 1940. Public Policy and the Nature of Administrative Responsibility. *Public Policy* 1: 3–24.

Gimpel, James, and Karen Kaufmann. 2001. *Impossible Dream or Distant Reality? Republican Efforts to Attract Latino Voters*. Washington, DC: Center for Immigration Studies.

Gormley, William, John Hoadley, and Charles Williams. 1983. Potential Responsiveness in the Bureaucracy: Views of Public Utility Regulation. *American Political Science Review* 77(3): 704–17.

Granger, C. W. J. 1969. Investigation of Causal Relations by Econometric Methods. *Econometrica* 37: 424–38.

Hall, Thad E., and Laurence J. O'Toole, Jr. 2000. Structures for Policy Implementation: An Analysis of National Legislation, 1965–1966 and 1993–1994. *Administration & Society* 31(6): 667–86.

Hanushek, Eric. 1996. School Resources and Student Performance. In *Does Money Matter? The Effect of School Resources on Student Achievement and Adult Success*, edited by Gary Burtless, 43–73. Washington, DC: Brookings Institution Press.

Hedge, David, and Michael Scicchitano. 1994. Regulating in Space and Time: The Case of Regulatory Federalism. *Journal of Politics* 56(1): 134–53.

Hedges, Larry V., and Rob Greenwald. 1996. Have Times Changed? The Relation between School Resources and Student Performance. In *Does Money Matter? The Effect of School Resources on Student Achievement and Adult Success*, edited by Gary Burtless, 74–92. Washington, DC: Brookings Institution Press.

Hero, Rodney E., and Carolyn J. Tolbert. 1995. Latinos and Substantive Representation in the U.S. House of Representatives. *American Journal of Political Science* 39(3): 640–52.

Hess, Frederick M. 1999. *Spinning Wheels: The Politics of Urban School Reform*. Washington, DC: Brookings Institution Press.

Hindera, John J. 1993. Representative Bureaucracy: Further Evidence of Active Representation in the EEOC District Offices. *Journal of Public Administration Research and Theory* 3(4): 415–30.

Hood, M. V., Irwin Morris, and Kurt Shirkey. 1997. "!Quedate o Vente!": Uncovering the Determinants of Hispanic Public Opinion toward Immigration. *Political Research Quarterly* 50(3): 627–47.

Hyneman, Charles. 1950. *Bureaucracy in a Democracy*. New York: Harper and Brothers.

Ingraham, Patricia W. 1995. *The Foundation of Merit: Public Service in American Democracy*. Baltimore: Johns Hopkins University Press.

Jencks, Christopher, and Meredith Phillips. 1998. *The Black-White Test Score Gap*. Washington, DC: Brookings Institution Press.

Keiser, Lael R., Vicky Wilkins, Kenneth J. Meier, and Catherine Holland. 2002. Lipstick or Logarithms: Gender, Institutional Context, and Representative Bureaucracy. *American Political Science Review* 96(3): 553–64.

Kerr, Brinck, and Will Miller. 1997. Latino Representation: It's Direct and Indirect. *American Journal of Political Science* 41(3): 1066–71.

Krause, George A. 1996. The Institutional Dynamics of Policy Administration: Bureaucratic Influence over Securities Regulation. *American Journal of Political Science* 40(4): 1083–1121.

Leal, David L. 2002. Political Participation by Latino Non-Citizens in the United States. *British Journal of Political Science* 32(2): 353–70.

———. 2004. *Latino Public Opinion*. Unpublished manuscript, University of Texas, Department of Government.

Light, Paul C. 1999. *The True Size of Government*. Washington, DC: Brookings Institution Press.

Long, Norton E. 1952. Bureaucracy and Constitutionalism. *American Political Science Review* 46(3): 808–18.

Martinez-Ebers, Valerie, Luis Fraga, Linda Lopez, and Arturo Vega. 2000. Latino Interests in Education, Health and Criminal Justice Policy. *PS: Political Science and Politics* 33(3): 547–54.

Meier, Kenneth J. 2000. *Politics and the Bureaucracy: Policymaking in the Fourth Branch of Government*. 4th ed. Fort Worth, TX: Harcourt Brace.

Meier, Kenneth J., and Laurence J. O'Toole, Jr. 2001. Managerial Strategies and Behavior in Networks: A Model with Evidence from U.S. Public Education. *Journal of Public Administration Research and Theory* 11(3): 271–95.

———. 2003. Public Management and Educational Performance: The Impact of Managerial Networking. *Public Administration Review* 63(6): 675–85.

Meier, Kenneth J., J. L. Polinard, and Robert Wrinkle. 1999. Politics, Bureaucracy, and Farm Credit. *Public Administration Review* 59(4): 293–302.

Meier, Kenneth J., and Kevin B. Smith. 1994. Representative Democracy and Representative Bureaucracy: Examining the Top Down and the Bottom Up Linkages. *Social Science Quarterly* 75(4): 790–803.

Meier, Kenneth J., and Joseph Stewart, Jr. 1991. *The Politics of Hispanic Education*. Albany: State University of New York Press.

Meier, Kenneth J., Robert D. Wrinkle, and J. L. Polinard. 1999. Representative Bureaucracy and Distributional Equity: Addressing the Hard Question. *Journal of Politics* 61: 1025–39.

Mete, Mihriye. 2002. Bureaucratic Behavior in Strategic Environments: Politicians, Taxpayers, and the IRS. *Journal of Politics* 64(2): 384–407.

Mladenka, Kenneth R. 1989. Blacks and Hispanics in Urban Politics. *American Political Science Review* 83(1): 165–91.

Moe, Terry M. 1982. Regulatory Performance and Presidential Administration. *American Journal of Political Science* 26(2): 197–224.

———.1985. Control and Feedback in Economic Regulation: The Case of the NLRB. *The American Political Science Review* 79(4): 1094–1116.

———.2002. Political Control of the Public Schools: The Role of Teachers' Unions. Paper presented at the Conference on Political Control of the Bureaucracy, Texas A&M University, February 1–2, College Station, TX.

Mosher, Frederick C. 1982. *Democracy and the Public Service*. New York: Oxford University Press.

O'Toole, Laurence J., Jr. 1997. Treating Networks Seriously: Practical and Research-based Agendas in Public Administration. *Public Administration Review* 57(1): 45–52.

———. 1998. *Institutions, Policy and Outputs for Acidification: The Case of Hungary*. Aldershot, UK: Ashgate.

———. 2000. Different Public Managements? Implications of Structural Context in Hierarchies and Networks. In *Advancing Public Management*, edited by Jeffrey Brudney, Laurence J. O'Toole, and Hal G. Rainey, 1–12. Washington, DC: Georgetown University Press.

O'Toole, Laurence J., Jr., and Kenneth J. Meier. 2003. *Plus ça Change*: Public Management, Personnel Stability, and Organizational Performance. *Journal of Public Administration Research and Theory* 13(1): 43–64.

Pitkin, Hanna F. 1967. *The Concept of Representation*. Berkeley: University of California Press.

Rainey, Hal G. 1997. *Understanding and Managing Public Organizations*. San Francisco: Jossey-Bass.

Redford, Emmette S. 1969. *Democracy in the Administrative State*. New York: Oxford University Press.

Ringquist, Evan J. 1995. Political Control and Policy Impact in EPA's Office of Water Quality. *American Journal of Political Science* 39(2): 336–63.

Rourke, Francis. 1969. *Bureaucracy, Politics and Public Policy*. Boston: Little, Brown.

Sabatier, Paul A., John Loomis, and Catherine McCarthy. 1995. Hierarchical Controls, Professional Norms, Local Constituencies, and Budget Maximization: An Analysis of U.S. Forest Service Planning Decisions. *American Journal of Political Science* 39(1): 204–42.

Scholz, John T., and Feng Heng Wei. 1986. Regulatory Performance in a Federalist System. *American Political Science Review* 80(4): 1249–70.

Scholz, John T., and B. Dan Wood. 1999. Efficiency, Equity, and Politics: Democratic Controls over the Tax Collector. *American Journal of Political Science* 43(4): 1166–88.

Scholz, John T., Jim Twombly, and Barbara Headrick. 1991. Street-Level Political Controls Over Federal Bureaucracy. *American Political Science Review* 85(3): 829–50.

Selden, Sally C. 1997. *The Promise of Representative Bureaucracy*. New York: M.E. Sharpe.

Simon, Herbert A. 1947. *Administrative Behavior*. New York: Free Press.

Stimson, James. 1985. Regression in Time and Space: A Statistical Essay. *American Journal of Political Science* 29(4): 914–47.

Thompson, James D. 1967. *Organizations in Action*. New York: McGraw-Hill.

Vigil, Maurilio E. 1997. Hispanics in the 103rd Congress. In *Pursuing Power: Latinos in the Political System*, edited by F. Chris Garcia, 234–64. Notre Dame, IN: University of Notre Dame Press.

Waterman, Richard, and Kenneth J. Meier. 1998. Principal–Agent Models: An Expansion? *Journal of Public Administration Research and Theory* 8(2): 173–202.

Weber, Max. 1946. *From Max Weber: Essays in Sociology*. Translated and edited by H. H. Gerth and C. Wright Mills. Oxford: Oxford University Press.

Weiher, Gregory R. 2000. Minority Student Achievements: Passive Representation and Social Context in Schools. *Journal of Politics* 62(3): 886–95.

Whitford, Andrew B. 2002. Bureaucratic Discretion, Agency Structure, and Democratic Responsiveness: The Case of the United States Attorneys. *Journal of Public Administration Research and Theory* 12(1): 3–27.

Wilson, James Q. 1989. *Bureaucracy: What Government Agencies Do and Why They Do It*. New York: Basic Books.

Wilson, Woodrow. 1887. The Study of Administration. *Political Science Quarterly* 2(2): 197–222.

Wood, B. Dan. 1988. Principals, Bureaucrats, and Responsiveness in Clean Air Enforcements. *American Political Science Review* 82(1): 213–34.

———. 1990. Does Politics Make a Difference at the EEOC? *American Journal of Political Science* 34(2): 503–30.

———. 1992. Modeling Federal Implementation as a System. *American Journal of Political Science* 36(1): 40–67.

Wood, B. Dan, and James E. Anderson. 1993. The Politics of U.S. Antitrust Regulation. *American Journal of Political Science* 37(1): 1–39.

Wood, B. Dan, and Richard Waterman. 1991. The Dynamics of Political Control of the Bureaucracy. *American Political Science Review* 85(3): 801–28.

———. 1993. The Dynamics of Political-Bureaucratic Adaptation. *American Journal of Political Science* 37(2): 497–528.

———. 1994. *Bureaucratic Dynamics*. Boulder, CO: Westview Press.

Zeigler, L. Harmon, Ellen Kehoe, and Jane Reisman. 1985. *City Managers and School Superintendents*. New York: Praeger.

Appendix: Constructing the School Board Ethnicity Measure

To obtain annual data on Latino representation for school districts from 1993 to 2001, we started with the 1992 Census of Government's survey of school boards. Although that survey asked both board size and board member ethnicity, it was the last survey the census conducted on this question (they also did a similar survey in 1987). We obtained the ethnicity of school board membership from the Texas Association of School Boards for 1999. Because those data had several missing cases, we conducted additional phone calls to 300 districts to complete the data set. These two surveys were taken as good data for the 1992 and 1999 school years. We then took the annual compilations of the National Association of Latino Elected Officials (NALEO) to make adjustments. The NALEO data are conceded to contain errors in their counts of elected officials, particularly at the local level, so the NALEO data were not used directly as estimates. As an illustration, in 83 cases, NALEO reported more Latinos on the school board than there were school board seats. Rather, when NALEO showed an increase of one (or more) school board members over the previous year, we coded representation in our data set as increasing by one (or more if the numbers increased more). Similar codes were entered for declines. The data from NALEO were carefully screened to eliminate cases of double counting (frequently when a seat changed hands, NALEO included both the old representative and the new representative). These adjustments provided our estimates for school years 1993–98 and 2000–01. In a small number of cases, the percentage of Latino board members exceeded 100 percent because we could not verify which of the board members had been double counted. In those cases, the percentage was coded as 100 percent. We then further checked this data set for errors by examining outliers, that is, districts that appeared to have too many or too few representatives given their population numbers. This process located three errors made by the U.S. Census Bureau (Bosqueville, Rivercrest, and East Bernard were each coded as having seven Latino board members). We could find no evidence that any of these districts ever had even a single Latino board member and thus recoded them as zero.