ABSTRACT: Drawing from scholarship on organizations and public administration, which I refer to collectively as the "management perspective," this paper explores some of the challenges facing governments across the American federal system, in particular the states, as they attempt to implement the No Child Left Behind Act of 2001 (NCLB). I compare the management perspective to another orientation dubbed the "command-and-control" (or "principal-agent") view, which has animated most of the public debate about the law's implementation. I argue that an approach focusing on managerial challenges rather than the narrower issue of control provides a more complete way to understand NCLB's implementation and the law's focus on measuring success based on policy outcomes (student learning) rather than policy outputs (the activities of public officials).
On January 8, 2002, with much fanfare President George W. Bush signed into law the No Child Left Behind Act (NCLB). This most recent iteration of the Elementary and Secondary Education Act (ESEA), the nation's principal K-12 education law, extended several reform initiatives that Bush's predecessor, Bill Clinton, had set in motion. During the 1990s, Clinton and his team faced many challenges as they attempted to implement the Improving America's Schools Act (IASA), the 1994 version of the ESEA. Thus, even before Bush's signature had dried on NCLB, many analysts, scholars, and members of the education policy community pondered a key question: If the states resisted the law's provisions, would the federal government force them to comply?

In a meeting with state education chiefs shortly after NCLB became law, U.S. Secretary of Education Rod Paige attempted to make clear the federal position regarding enforcement. Speaking to the chiefs at Mount Vernon, Paige noted his willingness to cooperate by saying, "I am serious about the partnership, and very sincere in the statement that we are in fact in this together." He warned, though, that his department would not tolerate shirking, excuses, or delays.

No Child Left Behind is now the law of the land. I took an oath to enforce the law, and I intend to do that. I will help states and districts and schools comply—in fact I will do everything in my power to help—but I will not let deadlines slip or see requirements forgotten. When students beg their teachers to extend deadlines, the choice between discipline and compassion can be very difficult. But if states ask me to extend deadlines, they will be asking me to make a choice between the needs of children and the flaws of the system. Having been a teacher, a coach, and a superintendent, I know my heart, and I can tell you that this will be an easy choice for me. When choosing between kids and the system, I choose the kids.

Initially, at least, some state officials reacted to these remarks like card players at a poker table, calling what they perceived to be Secretary Paige's enforcement bluff. Speaking of the law's requirements that states guarantee highly qualified teachers in classrooms, some state education chiefs noted that policy realities would overwhelm the administration's rhetoric and the law's expectations. "Will we have a qualified teacher in every classroom by 2005? No, of course not," stated Colorado commissioner of education William J. Maloney. California's state schools superintendent, Delaine Eastin, agreed: "You can't just wave a magic wand and say we need to have more teachers," she said, before adding, "It's a resource issue" (Olson 2002a, p. 1).

These early reactions and subsequent exchanges between federal education officials and state policymakers have framed much of the public debate about implementation of the No Child Left Behind Act. The key issue, many observers seem to agree, is a struggle over control. This battle pits federal principals against sometimes cooperative and often intransigent state subordinates who resist Washington's commands and requirements (Olson 2002b; Robelen 2002; Robelen 2003; Winerip 2003).

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1 Paige's remarks are available at <http://www.ed.gov/news/speeches/2002/01/20020109.html>. The content of this meeting, as reflected in Paige's statements, were confirmed in a personal interview with Billie Orr, President of the Education Leaders Council.

2 Bruce Hunter, Associative Executive Director of the American Association of School Administrators, acknowledged to me how he received rounds of applause when in speeches to local officials he suggested they simply "break the law" if they have must. The reason, he argued, was because "We all know that this is a big bluff from the feds; they won’t crack down and carry through."
Without question, these command-and-control issues are important. However, the analytical perspective they suggest, which social science scholars often discuss under the rubric of principal-agent theory, has garnered disproportionate attention given the way federal education policy (and the American federal system more generally) operates. Rather than seeing NCLB primarily through the lens of control, I argue for a more complete perspective of the law's implementation, which incorporates key control issues but represents more completely the environment in which it operates.

Drawing on scholarship on organizations and public administration, which I will refer to collectively as the "management perspective," this paper explores some of the challenges facing governments across the American federal system as they attempt to implement this latest round of the ESEA. I focus in particular on the states in their key role as middle managers in the American federal system. The data I draw on come from interviews with elites in Washington, DC conducted between June 2001 and August 2002; quantitative measures of school funding from the National Center for Education Statistics; and most important, quantitative and qualitative evidence from the Consolidated State Accountability Workbooks, which state governments have submitted to the U.S. Department of Education to document their progress on the accountability provisions of NCLB.

The paper is organized into four parts. The first describes and then assesses the lens of control, which has tended to orient discussions about NCLB implementation. The second section parallels the first in structure. Substantively, it explains why a lens of management provides a better way—both theoretically and empirically—to understand the key implementation issues that NCLB raises. The third section compares these two lenses directly by examining the development of state accountability systems as required under the law. A brief final section concludes. Overall, I argue that understanding NCLB implementation as a series of management challenges confronting actors across the federal system, rather than as a narrow battle for control between federal principals and state agents, provides a more complete picture of the law's implementation and keeps analysts and scholars focused on the outcomes NCLB is designed to achieve.

No Child Left Behind Through a Command-and-Control Lens

As a starting point, the principal-agent perspective highlights important elements of NCLB implementation. However, those insights are limited, both theoretically and empirically, as subsequent evidence from state efforts to develop accountability systems will illustrate. Before investigating that specific example, this section lays out the principal-agent approach in more general terms.

Describing the Principal-Agent Perspective

Several works have elaborated the principal-agent perspective and its various nuances (Bendor 1988; Bendor, Glazer, and Hammond 2001; Miller 1992). At its core, this approach posits a strategic relationship between a principal, known colloquially as the boss, and an agent, the boss' subordinate, who is assigned the task of carrying out the boss' commands. It is

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3 Jones (2003) offers a general critique of the overuse of principal-agent models in public policy studies, which is consistent with the specific argument I develop in this paper.
important to remember that the relationship between the principal and agent is strategic and hierarchical. That means both bosses and subordinates possess goals, which may or may not coincide; and even though they may speak with one another or exchange regular correspondence, their thinking and planning are not necessarily transparent or coordinated, which can create information asymmetries in the relationship.

Working in a policy context, principals confront a major challenge as they develop a law, regulation, or some other formal order—in general terms, a contract. Principals must consider how to increase the chances that the agent will comply with their wishes, while simultaneously building enough discretion into the contract so that agents can act effectively. Balancing commands, which keep the agent focused on the principal's goals but may prove stifling, with discretion, which provides needed flexibility but also opens the door for shirking or insubordination from the agent, is the key policy design problem that confronts all principals.

Scholars have used different versions of the principal-agent lens to explore several examples of policy implementation in the American federal system. Table 1 presents a sampling. Regardless of the topic, all of these works begin by defining the explicit roles of principals and agents in terms of hierarchy and control, the basic foundation of the principal-agent approach. However, these works are not simplistic portrayals of bosses and subordinates. Rather, nearly all attempt to incorporate several of the interactive forces and multiple layers that characterize the strategic relationship in the context of federalism.

For example, Chubb (1985) attempts to integrate analyses of actors across levels of the American intergovernmental system. In what he calls "a two-tiered hierarchy of principal-agent relationships," he posits one level of control where federal political principals (presidents and members of Congress) attempt to control their agents in the federal bureaucracy. The second tier involves the relationship between federal bureaus that attempt to control state and local grant recipients in their use of federal funds. In Hedge et al's (1991) study of surface mining regulations and Wood's (1992) research on state and federal clean air enforcements, the authors work within the hierarchical framework of federal principals and state agents, but allow those actors to have mutual influence on one another's behavior. That attempt, and the work of Hill and Weissert (1995) on the implementation of policies addressing low-level radioactive waste disposal, recognizes some the interactive features of the American federal system, while remaining loyal to its hierarchical elements.

*Table 1 about here*

At first glance, the basic elements of the principal-agent approach as applied to American federalism seem to provide a potentially useful tool for describing and explaining NCLB implementation. The language of hierarchy and control animates much of the current policy debate and the substance of the law itself. Still, despite the popularity of the command-and-control lens, it proves lackluster at addressing several of the more interesting and substantively important features of the law's implementation. In the general context of K-12 education policy, and NCLB specifically, these limits arise for theoretical and empirical reasons.
Theoretical Challenges and Empirical Limits

The structure of K-12 education policy in the United States presents two formidable theoretical challenges and two empirical realities that limit the command-and-control approach's ability to describe and explain NCLB implementation. Initially, consider the two theoretical challenges.

First, the principal-agent approach is not well-suited to describing and explaining environments where multiple principals and agents act simultaneously to influence policy. One of the strengths of the principal-agent lens is its requirement that analysts be specific when they define the relevant actors, lines of influence and control, and measurable behaviors of all involved. That requirement for theoretical rigor means that analysts can make careful inferences about relationships and their influence on behaviors. But the requirement that actors and relationships be specified carefully can cause analyses to break down in practice. With multiple players and varying degrees of power and influence between them, it can be a daunting challenge to specifying relationships and then measure them consistently to draw inferences about policy outcomes.

The theoretical challenges of handling multiple principals and agents collides head on with the complicated system of K-12 education governance in the United States and has been mobilized to implement NCLB. One of my experienced interview respondents called governance one of the nation's "huge problems" in part because so many different state arrangements exist. The result, according to this respondent, who served for several years as a top education staffer on Capitol Hill before becoming a top Washington consultant, is an "accountability disaster." The implications for principal-agent thinking are clear: if it is impossible to identify lines of accountability, and thus authority over policy, then it will be difficult analytically to specify clear relationships between principals and agents, assuming one could even identify all the relevant actors.

At the state level, specifically, multiple actors develop, produce, and implement K-12 education policy. Major players include a state's governor and legislature, the state board of education, and the state education agency, which is typically headed by the chief state school officer (sometimes called the state superintendent). Depending on the state, different actors wield varying levels of influence. This variation is partly a function of the financial commitment that states makes to their K-12 education systems (relative to local and federal financial contributions) and, in particular, the paths to power for state leadership positions in education. Virginia, for example, could be considered a "strong governor" state given that state board members and the chief state school officer are gubernatorial appointees, and the latter is a member of the governor's cabinet. Contrast that with Michigan, a "weak governor state," where citizens choose state board members in partisan elections; the board, in turn, appoints the state schools chief Other states harbor different arrangements altogether (National Association of State Boards of Education 2003).

The diversity of state actors governing K-12 education renders a command-and-control perspective on NCLB difficult to use in an analytically crisp way. With so many actors playing substantively important roles in the development of state responses to NCLB, it is hard to see how a perspective organized around federal control of the states provides more than limited
insight. As another respondent with several years of experience working for the states remarked, one important question to remember when considering federal-state relations is simply: "Who is the state?" In education, especially, that question does not always produce straightforward answers.\(^4\)

The second theoretical hurdle hampering the principal-agent perspective is the difficulty of capturing the behavior of actors who are simultaneously bosses and subordinates. Recall that the control perspective assumes one can specify the players and locate them in a hierarchy. When that assumption holds, the principal-agent approach can be a powerful analytical tool. Absent hierarchy and clear lines of authority, however, it becomes impossible to determine which behaviors to observe because it is unclear who in the relationship is in charge.

An apparent solution to the reality that players can simultaneously be bosses and subordinates is to refashion the relationship as a delegation chain (Bendor, Glazer, and Hammond 2001). In other words, even though actors may play both roles, it may be possible to separate those roles analytically. In a relationship between Congress and the bureaucracy, for example, agency bureaucrats may be agents of their political masters, but also principals of the states and localities monitor as they dole out federal funds. The use of the delegation chain works as long as one can identify distinct domains where the actor plays each role.

The relationships in the complex system of American education governance hinders the delegation-chain from being an effective analytical instrument. As middle managers occupying a niche below the federal government but above local school districts, the key stakeholders in state government frequently wear their principal and agent hats simultaneously. For example, consider NCLB's provisions regarding standards and accountability. Federal law mandates that states develop content standards (and tests aligned with those standards) that hold schools and school districts accountable to student achievement gains. But while federal law may command states to develop standards,\(^5\) the states themselves retain control over their content and how that content will be reflected in local school settings. It is difficult to consider analytically how one would disaggregate the substance of these activities. In responding to federal mandates regarding standards, state leaders simultaneously consider how their responses will affect their ability to influence local behavior. Furthermore, it unclear what "delegation" would mean in this instance given that few, if any, people would maintain that the federal government possesses the authority to set education standards for the states. In order to delegate power over standards-writing, federal officials would have to command the power to define standards in the first place.

In due time, scholars may succeed in overcoming the theoretical challenges posed by situations where actors are simultaneously principals and agents. Even with those improvements,

\(^4\) Wilson (1989, p. 156) makes a related point about multiple principals in the context of shirking behavior: "For every manager who complains that an employee is doing too little (shirking), there is another who complains that an employee is doing the wrong thing (subverting). Under these conditions of vague or conflicting goals, multiple principals [my emphasis], and bureaucrats with policy preferences, it is hardly surprising that economists have not made much progress in finding even theoretical solutions to the problem of shirking. What is surprising is that bureaucrats work at all rather than shirk at every opportunity."

\(^5\) Even though it is technically accurate to say that NCLB commands states to develop standards, one should not forget that the states were engaged in this effort well before federal mandates instructed them to do so (Manna 2003).
there would still be two additional reasons, which I have labeled empirical realities, why a command-and-control perspective would have necessarily limited applications to the case of No Child Left Behind.

The first reality is that despite the federal government's formal command over its grant programs, it is not clear that the label "principal" applies well to the federal government's substantive presence in K-12 education policy. The division of labor in the American intergovernmental system calls this moniker into immediate question. As Figure 1 illustrates, on funding matters, for example, the federal government has been and remains a marginal player in the finance of the nation's schools.6 State constitutions spell out, in great detail in some cases, the responsibilities that state governing institutions have in this policy area. In terms of the daily operations of the nation's classrooms, local school districts and classroom teachers still wield tremendous power, even as state officials have assumed a greater role in education.

Figure 1 about here

The implementation of past versions of the ESEA also suggests that the federal government may be a principal in name only. Formally, federal grant programs imply federal control; but since 1965 when states have demanded leeway in the form of adjusted timetables and expectations, the federal government typically has had no choice but to grant them.7 From a principal-agent point of view and even in the context of federal grant programs, the reality of K-12 education policy suggests if Washington, DC is in fact the boss it has delegated nearly all of its meaningful authority to its subordinates. If that is true, then the command-and-control view may provide only slim analytical traction for describing and explaining the federal role, even in the apparently high-accountability atmosphere that NCLB has created.

A second major empirical limit emerges when one considers the puzzles that the command-and-control approach, given its theoretically demanding parameters, moves scholars and analysts to probe. From the need to specify clearly the principals, agents, and, most critically, the measurable behaviors that lines of hierarchy and authority produce, scholars working in a principal-agent tradition tend to study policy outputs (what principals and agents do) rather than policy outcomes (the substantive results that policies produce).

Recall the studies summarized in Table 1, and in particular the dependent variables that the authors examine: the number of compliance monitor reports, administrative orders, and cases referred for litigation by the EPA in enforcing clean air laws (Wood 1988; Wood 1991; Wood 1992); state and local education expenditures (Chubb 1985); the number of inspections of surface mining activities and cessation orders issued (Hedge and Scicchitano 1994; Hedge, Scicchitano, and Chalfant 1998; Hedge, Scicchitano, and Chalfant 1999).

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6 Certainly for certain individual states, which may rely relatively more heavily on federal Title I funds, for example, the influence of federal money is much more evident.

7 Several of my interview respondents attested to this fact. See also Ravitch (2001) and Cohen (2002). Two recent exceptions help to illustrate the general rule of the limits of federal enforcement. The U.S. Department of Education's decision in the early summer of 2003 to withhold nearly $800,000 in ESEA funds from Georgia represented the first time in the department's history that it had done such a thing (Salzer 2003). A similar, but smaller, sanction against Minnesota withheld $112,000 from that state (Walsh 2003). In both cases, the penalties were limited to ESEA administrative funds and essentially amounted to a cut of an increase, given that NCLB had increased funding for Title I administrative activities.
Scicchitano, and Metz 1991). All of these measures represent policy outputs, not outcomes. They say nothing about whether the policy actions under review produced cleaner air, better educated students, or streams and rivers free from mining residues.

Even though outputs are not irrelevant, in recent years there has been a noticeable shift among policymakers and public management scholars alike who increasingly believe analytical resources should focus on evaluating policies in terms of the outcomes they produce. Writing from an international perspective, Kettl (1997, p.449) describes this shift as "profound," and illustrative of reformers' desires to "move from demand-driven government, where success often is defined by how many programs are passed and how much money is budgeted, to results-driven government, where success is defined by programs' effects."

Interestingly, seeing NCLB implementation through a command-and-control (and thus, outputs-oriented) lens, makes possible a perverse analytical result. States may, in fact, behave like good agents and comply fully with the law's provisions—developing accountability systems within required timetables and in the proper form; setting standards and elevating students to state-defined levels of proficiency; guaranteeing that only highly qualified teachers enter classrooms—and federal principals may praise the progress of states in glowing terms. Simultaneously, though, children may not learn more reading and math. With a focus on control the states could appear to be doing a good job (no shirking or subverting), but substantively their accomplishments would be hollow. A focus on outputs would provide little insight for explaining this result.

No Child Left Behind Through a Management Lens

If a lens of control provides only limited insights into the implementation of the No Child Left Behind Act, what should replace or supplement it? In this section I describe an alternative approach grounded in the managerial challenges NCLB creates. The key concepts for this approach come from Wilson (1989), which I adapt and apply to the American intergovernmental system.

Describing the Management Lens

The purpose of James Q. Wilson's book Bureaucracy, as identified in the work's subtitle, is to investigate "what government agencies do and why they do it." Central to understanding the managerial challenges that agencies face is to identify the critical environmental problem the agency's members need to confront. Critical tasks, according to Wilson, are "those behaviors, which, if successfully performed by key organizational members, would enable the organization to manage its critical environmental problem." When members define this critical problem and
tasks similarly, the organization possesses a sense of mission. Developing management strategies to execute that mission requires the organization to obtain "a reasonable degree of autonomy" in the form of "sufficient freedom of action and external political support (or at least non-opposition)" (Wilson 1989, p. 26).

So who are the organizational members who define critical tasks, seek a common mission, and search for autonomy? Wilson identifies three sets of people. Closest to the organization's critical tasks are "operators" who work on the organization's front lines and have the most direct connections with its clients or charges. "Managers" work in contact with but not directly on the front lines of the organization. They occupy a challenging role in that they need to motivate and inspire the operators in their charge, supervise the organization's daily activities (i.e., keeping the books, hiring and firing staff), while simultaneously responding to the prerogatives of the organization's "executives." Most removed from the critical environmental problem, executives have special responsibility for "organizational maintenance" (p. 184), which involves guarding agency autonomy in the face of external pressures or limits; securing a flow of resources to the agency (i.e., budgets and equipment); and obtaining necessary personnel.

It is important to clarify that depending on the context, operators, managers, and executives all engage in managerial behavior of some sort. These behaviors include organizing one's time and personal schedule, setting task priorities, and making decisions amidst uncertainty where established procedures or policies may be unclear.11

For analytical purposes one can draw an analogy between Wilson's concepts, which were designed to examine the behavior of government agencies, and the American intergovernmental system as a whole. Making this connection is not unreasonable especially in light of Wilson's (1989, p. 24) own definition of an organization (borrowed from Chester Barnard), which he calls a "system of consciously coordinated activities or forces of two or more persons." Thinking broadly, the intergovernmental arrangements in the United States and actors at federal, state, and local levels define the organization that Americans have decided shall be responsible for providing public education. In short, the American intergovernmental system manages public education in the United States. Thinking in these terms provides several advantages for describing and explaining NCLB's implementation challenges.

Advantages of the Management Lens

The first advantage the management perspective provides is its ability to capture the meaningful hierarchical relationships that exist in the American intergovernmental system and are relevant to NCLB implementation. Simply because these relationships are not rigidly hierarchical in practice does not mean that hierarchy is an irrelevant concept for beginning to understand NCLB or the American intergovernmental system more generally. Just as there are hierarchical relationships between executives, managers, and operators, there can also be parallel connections between the federal government, states, and local school districts and schools. In short, even though hierarchy may not represent how K-12 education policy operates in practice, it may be a reasonable way to begin to map out dynamics in the system.

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11 A well-known description of these behaviors on the front line of organizations is Lipsky (1980).
Additionally, although the management perspective can represent hierarchical relationships, it is not rigidly hierarchical. Put another way, a management perspective reflects where actors sit in the American intergovernmental system, but it provides more latitude to capture behaviors that frequently veer from command-and-control expectations where hierarchies are rigidly defined and lines of authority assumed to be clear. In the world of implementation, how these relationships play themselves out have less to do with hierarchy and more to do with how public officials—elected and appointed—navigate the constraints and take advantage of the opportunities that the federal system provides for them.

Organizing analyses of policy implementation around critical environmental problems produces a second advantage of the management approach. Outcomes emerge as the key object meriting study because critical environmental problems speak to the results policies are designed to produce rather than the activities that public officials pursue. Monitoring inputs is important to the extent that they are connected to outputs. For example, the key environmental problem that NCLB defines is the need to increase math and reading achievement of the nation's school children and to eliminate achievement gaps that persist between student groups. In studying implementation, then, the key policy outcome is whether students are learning more reading and math. Monitoring the development of standards and state obeisance to federal mandates is important only to the extent that these activities matter for that result.

A third advantage of the management perspective is that it leads one to identify a more complete menu of bosses and subordinates who have influence on an organization's ability to solve its critical environmental problem. When the critical environmental problem, not externally assumed lines of control or hierarchy, per se, provides the organizing frame for analysis, it becomes easier to see how key actors relate to one another as they implement policy; to assess whether they agree over definitions of critical tasks; and to see how much mission coherence exists within the organization. If up-front assumptions about hierarchical relationships and control define one's analysis, however, several key actors may be left out altogether.

In the context of NCLB, the substantive result of focusing on the critical environmental problem, not simply measurable behaviors, is profound. Rather than primarily seeing the federal government and the states in a tug-of-war over the act, remaining mindful of the critical environmental problem of student achievement brings multiple actors into focus: federal elected officials, appointees, and career employees; state elected officials, boards, agencies, and school chiefs; local districts and schools; and several private-sector entities including tutoring providers and test developers. Analyzing NCLB without grasping or at least acknowledging the roles that these various actors play will produce potentially significant gaps in understanding the law's implementation.

A final advantage is that the managerial lens possesses enough flexibility to allow actors simultaneously to behave like principals and agents. Twined with the first advantage regarding the ability to represent hierarchy, this fourth benefit means it is also possible to capture more of the connections that exist between actors. Executives, managers, and operators are not always boxed into a responsive (agent) or controlling (principal) role, even if their behaviors in certain
domains of activity may tend toward one of those two poles. Frequently, it is when actors work in ways counter to their central tendencies that interesting insights about policy implementation are revealed. Previous examples in this paper have described some of the multiple hats that states have worn during the nearly two years since NCLB became law. Local school districts, especially urban ones, also find themselves with a full hat rack as they have responded to state or federal prerogatives regarding public school choice and hiring highly qualified teachers, while simultaneously trying to keep their own local reform ideas and school personnel on track.

The next section examines the development of state accountability plans under NCLB, and the management issues those plans raise. In so doing, it compares the principal-agent and management lenses, while simultaneously revealing some of the key challenges facing policymakers as the law moves deeper into the implementation phase.

**State Accountability: Applying the Lenses**

One of NCLB's central provisions is the law's requirement for states to develop educational accountability systems. Creating those systems, or adjusting current ones in light of NCLB's new parameters, involves several things. Most generally, states are charged with developing a set of examinations to be aligned with state content standards in reading and math for grades 3 through 8. This work must be completed by the 2005-06 school year.12 These tests (and other measures of student success) will be used to determine if students across different groups—racial, gender, limited English proficient—are making steady academic progress. In developing their accountability systems, states need to show how they would measure yearly gains, known as Adequate Yearly Progress (AYP), so that by 2014, based on state achievement standards, all students will be deemed proficient.

A predictable line of analysis emerging from the command-and-control perspective has portrayed the development of accountability plans as a struggle between federal principals who have declared NCLB the law of the land and state agents charged with obeying its provisions. Based on remarks from President Bush and Secretary Paige at a June 10, 2003 press conference, it appeared as if the states had minded their federal masters. In announcing state progress on accountability in the wake of a recent deadline, the president noted, "In the past five months we have approved the accountability plans of 33 states... And today we mark an historic milestone of accountability—this morning, Secretary Paige has approved the plans of 17 more states, bringing us to a total of 100 percent of the accountability plans in place." To emphasize the great success this result represented, Bush reminded listeners that "in January of 2001, only 11 states were in compliance with a 1994 education law [the previous ESEA reauthorization known as the Improving America's Schools Act]. Every state, plus Puerto Rico and the District [of Columbia], are now complying with the No Child Left Behind Act after one year." Paige concurred in his remarks by saying, "The extraordinary efforts of the states have laid the foundation for education improvement and accountability."13 Despite these enthusiastic comments, the actual accountability plans reveal a different result.

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12 The law also requires testing in other grades and other subjects, but the implementation timetable for these provisions are more distant than the 2005-06 starting date of the reading and math tests for grades 3 through 8.
As part of the process of developing these plans, each state was required to submit to the U.S. Department of Education a document known as the Consolidated State Application Accountability Workbook. In those workbooks, each state summarized its progress across 31 different accountability elements required by NCLB. Results from all 50 states, which challenge Bush and Paige’s claims that states had completed their plans, are reported in Table 2. Each proportion listed in the table represents the fraction of states that had completed their work on the various accountability elements.

Part A of the table documents overall state progress and shows that only 18 states (proportion = .36) had developed final policies on all 31 of the accountability elements. In other words, 32 states still had some work remaining. This work could have taken one of two forms. Either the state had proposed provisions for particular elements and was awaiting approval from required state stakeholders (i.e., the state education agency offered a proposal that the legislature was still examining), or the state was still working to develop a policy proposal.

Part B of Table 2 breaks out state progress by each individual element of the accountability plans. A majority of these elements, 16, had between .60 and .69 of the states with final plans, while another 12 elements correspond to proportions between .70 and .79. There were only 2 elements where over 40 states (proportion > .80) had completed final policies, and, at the low end, a single area where little over half the states (proportion = .54) had done so.

Another way to examine state progress is to summarize the workload remaining for individual states. Table 3 provides these numbers by listing the proportion of states that lacked final policies on a specified range of elements, grouped in increments of 5 (i.e., states where 1-5 elements lacked final policies; states where 6-10 elements lacked final policies; and so on). Beyond the 18 states (proportion = .36) that had completed final policies on all elements, the next largest clumping is of 12 states (proportion = .24) needing to complete final policies in the 1-5 element range. Looking at the other end of the table shows that an additional 5 states (proportion = .10) had yet to develop final policies for 21-25 elements, while 7 more (proportion = .14) did not have final policies on 26-31 elements. Put another way, the last two rows of the table reveal that 12 states still had work to complete on at least two-thirds of the required elements.

It is striking to consider the results in these two tables alongside the enthusiastic comments from Bush and Paige. Analytically, the contrast between the president and secretary’s congratulatory remarks and the actual progress in the states casts doubt on the usefulness of the principal-agent lens for understanding NCLB implementation. If federal policymakers—here the president himself and the highest federal education official in Washington—declare that states


14 See also Olson (2003) and Prah (2003).
had fulfilled their obligations when clearly they had not, then what is one to make of the approach that relates these federal actors and their state counterparts in a principal-agent relationship? The potential charge that states had obfuscated their progress and attempted to mislead their federal masters (an agent tactic that principal-agent scholars commonly note) is not relevant here. The workbooks that the states submitted to the Department declared where work was incomplete, which means information asymmetry was not an issue. Clearly, then, explaining NCLB's implementation dynamics requires reaching beyond the limited range of understanding that the language of command-and-control can provide.

Conceptualizing NCLB implementation as a series of management challenges confronting the American intergovernmental system provides greater traction for explaining the status of state accountability systems and the seemingly off-target comments of Bush and Paige. The workbooks themselves provide an interesting glimpse into several of these challenges facing policymakers at all levels as they attempt to solve the critical environmental problems of lagging student achievement and gaps between student groups. Consider four of these challenges in particular.

First is the challenge facing federal policymakers who hope to sow progress while not derailing the state and local support that their initiatives require. Even if federal leaders are bosses in some formal or informal sense, the level of "buy-in" from subordinates at state and local levels is a hugely important variable influencing the outcome of federal policy. That has been the case since first ESEA was adopted in 1965, just as it is today. Michael Cohen, a former assistant secretary of education under President Clinton, and a veteran of state and federal policymaking arenas, drew on his own experience in describing the limits confronting federal officials who may crave control but rely heavily on other levels of government for success.

The 2000-01 deadline for having a testing system up and running [per the IASA of 1994] was workable if a state started development work soon after the law was enacted. However, many states delayed the development of assessments for several years. Once that delay occurred, and once a state began good-faith efforts to develop the assessments, there was little either the state or the federal government could do to speed up the process. . . . No sanctions could speed up the process at that point. Some view these decisions as evidence of lax enforcement, but I see it as evidence of the limits [in original] of the department's enforcement ability (Cohen 2002).

One could also see Cohen's account as representing the patience that federal education officials must demonstrate as they attempt to build support for their initiatives across levels of the federal system. Celebrating incremental accomplishments, which may be consistent with the spirit of the law if not the letter, is one mark of this patient management style. Based on the accountability notebooks, Bush and Paige appear to have adopted this strategy as well, given their willingness to offer praise even though, from a principal-agent vantage point, state actions more closely resemble shirking than success. If the overall goal is to help students learn more reading and math, then federal officials straining for control at this early point in the long NCLB implementation process may derail the potential for future success.

Coordination at the state level is a second management challenge that the workbooks help to illustrate. Even though state education agencies were the formal entities that submitted the accountability plans to Secretary Paige, they are only one state actor among many involved in producing final policies on the 31 required elements presented in Table 2. In fact, several of the
accountability plans were incomplete because other state stakeholders, including the legislatures and state boards that have power to help define critical tasks, needed to consider and then approve particular components of the plans. At its core, achieving that coordination reflects a management rather than a control problem. Depending on the state, hierarchy may or may not describe relationships between the various entities involved in governance, such as the state agency, legislature, and board. Sometimes (but not always) the relationships contain elements of hierarchy, as when boards play a role in selecting agency chiefs. How state leaders build support for a common policy mission across relatively independent state institutions is a challenging management task. The challenge can involve disagreements over policy substance, or more mundane factors such as the work calendars of a legislature and state education agency, which may or may not overlap (Prah 2002).

The third and fourth management challenges emerge from the unique position that state policymakers inhabit in the American intergovernmental system. Wedged between federal and local levels, they face perhaps the most challenging management environment of all. With so much emphasis on the NCLB implementation battles between federal and state policymakers, the relationship between states and local school districts has received scant attention relative to its importance for solving the critical environmental problems associated with student achievement. Challenge number three, then, parallels the first, but in a different context. Just as federal officials require states to buy into federal efforts, states themselves need this same kind of enthusiasm from local implementers, the operators who work closest to the critical environmental problem. In the words of Richard Mills, Commissioner of New York State Schools, "Another challenge is that school districts and leaders need to be convinced that [performance] targets are achievable. This is necessary so that local leaders adopt these targets as their own and reinforce the standards and accountability movement" (National Governors' Association 2002).

Mills's observation, which identifies a management issue rather than a control one—he believes local officials need to be "convinced" rather than commanded—resonates with the results in Table 2. Note that the accountability element with the poorest record of completion (proportion = .54), was element 1.6, which requires the states to develop a system of rewards for schools that hit defined achievement targets and sanctions for those schools that fall short. States appear to be weighing carefully the concerns of local implementers who, in the end, have perhaps the most direct influence over the critical environmental problem of low and uneven student achievement. Rather than a sequential chain of delegation, where federal law reserves to states important powers that the states then delegate to local districts, from their middle management position states face simultaneous pressures from all directions as they develop their systems to offer praise and mete out punishment. Botching implementation in this particular arena could provoke local resistance to the overall idea of accountability, especially if school leaders are able to activate concerned parents and local business leaders to their side.

A final management challenge confronting the states is their need to develop standards and expectations consistent with federal law, while simultaneously translating those standards and expectations into terms that local schools and districts can implement. Since at least the

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15 See footnote #1 in this paper and Tyack (1995).
passage of the IASA in 1994, with so much attention riveted on the question of whether states would comply with federal mandates, most policymakers and other observers have ignored this all-important translation step (Barton 2001). They do so at their peril. States with fantastic standards and tests will make little headway toward solving the critical environmental problem of achievement if local districts and teachers cannot teach the material that students are supposed to master. A principal-agent approach examining whether federal bosses approved the accountability systems of state subordinates would pull up short of this vitally important implementation issue.

Educational Outcomes, Management, and the States' Role in the American Policy System

A fundamental shift has occurred in American education policy during the last decade. Today, policymakers across the nation are attempting to reshape K-12 education from a system focused on outputs into one organized to achieve substantive outcomes, specifically increased student achievement in reading and math. Washington's burgeoning interest in K-12 schooling is less the cause of that shift and more a marker of its importance.

The larger substantive significance of this shift has gone unnoticed by several observers who have focused disproportionate attention on the control issues that the No Child Left Behind Act has raised. Those control issues are meaningful given how, through its history, the United States has allocated responsibility for K-12 education. But whether states and localities obey the directives from policymakers in Washington is simply one question among many that analysts should consider as they monitor NCLB's implementation.

Focusing on the management challenges confronting policymakers at all levels of government and organizing future analyses of NCLB with an eye on the critical environmental problems the law is designed to solve provides a needed implementation perspective. This management lens, as I have called it, makes visible the wide range of the law's relevant players and terrain, but goes well beyond simple description. Recognizing the shift in emphasis toward educational outcomes can also help policymakers anticipate and confront future implementation challenges, as the previous example of translating general standards into teachable classroom lessons illustrates.

Several more challenges, associated with a focus on outcomes, loom on the horizon. Judging substantive successes based on policy outcomes sometimes moves policymakers to become too focused on measurable results (Wilson 1989, p. 161). Certainly, there are good reasons to base program and policy evaluations on what analysts can measure. However, doing so raises other relevant substantive questions. Assuming all actors can agree on which outcomes are important, is it possible to design valid and reliable instruments to measure them? Are there other valid outcomes that are difficult, or perhaps impossible, to measure, which should be preserved? In general, how should policymakers manage a policy system, and the costly stumbles that will inevitably occur during implementation, as it migrates from a universe organized around outputs to one focusing on outcomes? In the NCLB context, these questions have surfaced amidst the calibration of formulas to measure adequate yearly progress and the dominant role that standardized testing has come to play in the law's implementation.
Because states tend to be the "default setting" in the American intergovernmental system (Derthick 2001, p. 28), they will likely shoulder the burden of working out answers to the most difficult implementation questions that NCLB raises. While state officials sometimes play subservient roles to federal masters, rarely are those roles clearly defined nor do they apply equally to all state officials who might have a say in a particular policy decision. Both formally and informally, state governments typically possess more power vis-à-vis the federal government than may be apparent to the casual observer. And as state officials wield that power they attempt to balance a panoply of considerations and demands emanating from Washington, DC and local governments. Such is the work of the middle managers in state capitals who walk a challenging, hugely consequential, yet too often underappreciated, path in the American intergovernmental system.

References


Walsh, James. 2003. State Loses $120,000 in U.S. School Funds. *Minneapolis Star Tribune*, August 2, 3B.


Table 1. Examples of research applying principal-agent models to federalism and public policy implementation

<table>
<thead>
<tr>
<th>Article(s)</th>
<th>Policy area or issue</th>
<th>Policy activities analyzed (dependent variables)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood (1988), Wood (1991), and Wood (1992)</td>
<td>Clean Air Act</td>
<td>U.S. Environmental Protection Agency monitoring activities (number of inspections, compliance monitor reports, compliance tests, and routine surveillance actions) and abatement activities (number of notices of violations, administrative orders, consent orders, consent decrees, case development inspections, cases referred for litigation, meetings of formal and informal negotiations)</td>
</tr>
<tr>
<td>Hill and Weissert (1995)</td>
<td>Radioactive waste disposal</td>
<td>State implementation of the federal Low-Level Radioactive Waste Policy Act, either by joining a state compact to determine a common disposal site for waste, or by not joining a state compact and establishing a waste site in the state</td>
</tr>
<tr>
<td>Hedge, et al (1991), and Hedge and Scicchitano (1994)</td>
<td>Surface mining</td>
<td>State regulatory activities, consisting of the number of complete inspections, notices of violations, and cessation orders. Federal regulatory activities, consisting of the number of oversight inspections and ten-day notices; federal Office of Surface Mining's number inspections per inspectable units.</td>
</tr>
</tbody>
</table>
Figure 1. Revenues for K-12 education by source of funds, school years 1939-40 to 1998-99

Note: Beginning in 1980-81, revenues for state education agencies are excluded. Beginning in 1988-89, data reflect new survey collection procedures and may not be entirely comparable with figures for earlier years.

Table 2. States' implementation status of the No Child Left Behind Act's required accountability elements, June 2003

<table>
<thead>
<tr>
<th>A. Status of states' work on overall plans</th>
<th>Proportion$^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>States that have developed final policies for all 31 required elements</td>
<td>.36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Status of states' work on each of the 31 required elements</th>
<th>Proportion$^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principle 1. All Schools.</strong> The accountability system…</td>
<td></td>
</tr>
<tr>
<td>1.1 Includes all schools and districts in the state.</td>
<td>.74</td>
</tr>
<tr>
<td>1.2 Holds all schools to the same criteria.</td>
<td>.74</td>
</tr>
<tr>
<td>1.3 Incorporates the academic achievement standards.</td>
<td>.78</td>
</tr>
<tr>
<td>1.4 Provides information in a timely manner.</td>
<td>.66</td>
</tr>
<tr>
<td>1.5 Includes report cards.</td>
<td>.76</td>
</tr>
<tr>
<td>1.6 Includes rewards and sanctions.</td>
<td>.54</td>
</tr>
</tbody>
</table>

| **Principle 2. All Students.** The accountability system…    |                |
| 2.1 Includes all students                                     | .76            |
| 2.2 Has a consistent definition of full academic year.       | .64            |
| 2.3 Properly includes mobile students.                       | .72            |

| **Principle 3. Method of AYP determinations.** The accountability system… |                |
| 3.1 Expects all student subgroups, public schools, and LEAs to reach proficiency by 2013-14. | .66 |
| 3.2 Has a method for determining whether student subgroups, public schools, and LEAs made adequate yearly progress. | .60 |
| 3.2a Establishes a starting point.                           | .64            |
| 3.2b Establishes statewide annual measurable objectives.     | .62            |
| 3.2c Establishes intermediate goals.                         | .62            |

| **Principle 4. Annual Decisions.** The accountability system… |                |
| 4.1 Determines annually the progress of schools and districts. | .64            |

| **Principle 5. Subgroup Accountability.**                    |                |
| 5.1 The accountability system includes all the required student subgroups. | .74 |
| 5.2 The accountability system holds schools and LEAs accountable for the progress of student subgroups. | .66 |
| 5.3 The accountability system includes students with disabilities. | .82 |

(Continued on next page.)
5.4 The accountability system includes limited English proficient students. .74
5.5 The State has determined the minimum number of students sufficient to yield statistically reliable information for each purpose for which disaggregated data are used. .66
5.6 The State has strategies to protect the privacy of individual students in reporting achievement results and in determining whether schools and LEAs are making adequate yearly progress on the basis of disaggregated subgroups. .76

**Principle 6. Based on Academic Assessments.**
6.1 The accountability system is based primarily on academic assessments. .82

**Principle 7. Additional Indicators.**
7.1 The accountability system includes graduation rate for high schools. .66
7.2 The accountability system includes an additional academic indicator for elementary and middle schools. .72
7.3 Additional indicators are valid and reliable. .74

**Principle 8. Separate Decision for Reading/Language Arts and Mathematics.**
8.1 The accountability system holds students, schools and districts separately accountable for reading/language arts and mathematics. .64

**Principle 9. System Validity and Reliability.**
9.1 The accountability system produces reliable decisions. .64
9.2 The accountability system produces valid decisions. .62
9.3 State has a plan for addressing changes in assessment and student population. .70

**Principle 10. Participation Rate.** The accountability system…
10.1 Has a means for calculating the rate of participation in the statewide assessment. .66
10.2 Has a means for applying the 95% assessment criteria to student subgroups and small schools. .68

N (50)

Note: (a) All state accountability workbooks submitted to the U.S. Department of Education, with the exception of those from New York, New Hampshire, and Arkansas, indicated for each of 31 separate elements whether the state was still "Working" to develop a policy for that element, had "Proposed" a policy that still needed approval from various state institutions (i.e., state board or legislature), or had developed and approved a "Final" policy. To code results for New York, New Hampshire, and Arkansas, I read the narratives in these states' workbooks where the status of each element was described. *The proportions reported in the table represent the proportion of states that had developed and approved a "Final" policy.* For example, 35 states (proportion = .70) had final policies on element 9.3, but only 26 (proportion = .52) had final policies for element 1.6.

Table 3. Remaining elements of the No Child Left Behind Act's accountability provisions that states have not completed, June 2003

<table>
<thead>
<tr>
<th>Number of elements lacking final policya</th>
<th>Proportion of states</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>.36</td>
</tr>
<tr>
<td>1-5</td>
<td>.24</td>
</tr>
<tr>
<td>6-10</td>
<td>.02</td>
</tr>
<tr>
<td>11-15</td>
<td>.06</td>
</tr>
<tr>
<td>16-20</td>
<td>.08</td>
</tr>
<tr>
<td>21-25</td>
<td>.10</td>
</tr>
<tr>
<td>26-31</td>
<td>.14</td>
</tr>
<tr>
<td>N</td>
<td>(50)</td>
</tr>
</tbody>
</table>

Note: (a) All state accountability workbooks submitted to the U.S. Department of Education, with the exception of those from New York, New Hampshire, and Arkansas, indicated for each of 31 separate elements whether the state was still "Working" to develop a policy for that element, had "Proposed" a policy that still needed approval from various state institutions (i.e., state board or legislature), or had developed and approved a "Final" policy. To code results for New York, New Hampshire, and Arkansas, I read the narratives in these states' workbooks where the status of each element was described. The proportions reported in the table represent the proportion of states needing to complete final policies for a the specified number of elements. For example, 5 states (proportion = .10) needed to complete between 21-25 elements. A total of 18 states (proportion = .36) had established final policies for all elements.