International Public Management Journal

RETHINKING ACCOUNTABILITY IN EDUCATION: HOW SHOULD WHO HOLD WHOM ACCOUNTABLE FOR WHAT?

ROBERT D. BEHN
KENNEDY SCHOOL OF GOVERNMENT, HARVARD UNIVERSITY

ABSTRACT: Everyone wants accountability in education. Presidents want to hold the states and school districts accountable. The governors and state legislators want to hold the districts and schools accountable. School superintendents want to hold principals and teachers accountable. Parents want to hold their children's schools and teachers accountable. Whenever a class or a school or a district fails to live-up to someone's expectations, he or she wants to hold somebody else accountable.

Everyone wants to be an accountability holder. Few want to be an accountability holdee. For the accountability holders always get to punish the accountability holdees.

Our concept of educational accountability is a vestige of the industrial model of education: At age five, the raw materials (a.k.a., the children) are delivered to the plant door by their parents; after thirteen years, they emerge, at high-school graduation, as finished products. The teachers are the production workers, the principals are the shop foremen, and the superintendents are the plant managers. And if their products aren't up to our standards, someone in the production process should be held accountable.

But why not hold parents accountable? Why not hold students accountable? Why not hold legislators, civic leaders, citizens, and taxpayers accountable? Why not discard as obsolete our linear, unidirectional, hierarchical concept of accountability and replace it with a web of mutual and collective responsibility, in which each of us accepts that we all have a responsibility for improving education?

Consider what some parents face under the current system in some states. A child may pass the third-grade reading test. He or she gets in the eighth grade and, lo and behold, fails the eighth-grade test. And the parent says, "Who do I hold accountable? What happened? My child was successful in the third and here he or she is in the eighth. What went wrong? How come? Where did the system let me down?" 1

—President George W. Bush, January 23, 2001

Everyone wants accountability in education.

President Clinton wanted accountability in education. In his 1999 State of the Union address, the president announced "a plan that for the first time holds states and school districts accountable for progress and rewards them for results." Through his proposed Education Accountability Act, President Clinton sought to insist that "all states and school districts must turn around their worst-performing schools, or shut them down" (1999, 202-203).

President Bush wants accountability in education. "Our educators need to get ready for the new accountability era that's coming to our schools," he said (2001c) in support of his proposals "to ensure that no child is left behind." The president's proposals (most of which were enacted by Congress in December 2001) sought to create "accountability and high standards." They were designed to "establish a system for how states and school districts will be held accountable for improving student achievement" (Bush 2001b, 4, 8, 31).

The nation's governors have long wanted accountability in education. As chairman of the National Governors' Association for 1998-99, Governor Thomas R. Carper of Delaware established a Smarter Kids Task Force, with one of its three major objectives being to promote accountability. NGA reports that "to ensure that children are receiving the best education possible, the nation's governors are focusing on accountability—from schools, teachers, students, parents, and communities" (Gregovich 1999a, 3). At NGA's 1999 winter meeting, Governor Tony Knowles of Alaska, co-chair of the accountability component of Carper's task force, told his colleagues that "there is no subject more essential to student achievement than accountability."

School superintendents want accountability in education. As chief executive officer of the Chicago Public Schools, Paul G. Vallas said at the same winter NGA meeting that "We are successful in Chicago because we are demanding accountability." Governor George H. Ryan of Illinois echoed these sentiments: "Accountability has made the difference in the Chicago school system." The Chicago Public Schools have a Plan for Systemwide Accountability, an Academic Accountability Council, an Office of Accountability, a Department of Teacher Accountability, and a Chief Accountability Officer.

Yes, everyone wants accountability in education. Presidents want to hold the states and school districts accountable. The governors and state legislators want to hold the districts and schools accountable. School superintendents want to hold principals and teachers accountable. Parents want to hold their children's schools and teachers accountable. Who could possibly be against accountability in education? After all, American schools are certifiably lousy³—Bush cited "the low standing of America's test scores amongst industrialized nations in math and science" (2001a)—and it is about time we held someone accountable.

Everyone wants accountability in education—at least everyone who is an accountability holder. And everyone wants to be an accountability holder. Everyone wants to hold someone else accountable. Few, however, want to be an accountability holdee.⁴ Our system of accountability for education has two types of people: Either you are an accountability holder, or you are an accountability holdee.

And everyone wants to be an accountability holder so that he or she can get to punish all of the accountability holdees. If an accountability holdee accomplishes something significant, the accountability holders don't do very much. Whenever an accountability

holdee makes a mistake, however, the accountability holders get to inflict some punishment upon the miscreant. Our implicit concept of accountability is unidirectional, hierarchical, and adversarial. It requires that there be accountability punishers and accountability punishees.⁵

THE IMPLICIT THEORY OF EDUCATIONAL ACCOUNTABILITY

What exactly is the theory behind the current movement to establish accountability in American elementary and secondary education? By that, I mean: What are the implicit and explicit assumptions about what activities are linked to what results? Presumably we want to create a system of educational accountability because it will—somehow—create some improvements. But what improvements? And, more importantly, what somehows? What exactly is the linkage between an accountability system and these improvements? What is this theory of educational accountability?

This question is difficult to answer because there are many different accountability systems and because different people can agree to create a specific accountability system based on quite different theories—on quite different assumptions about the mechanics of the connection between the specific accountability system that they have agreed to create and the improvements, common or different, that they think it will produce.

Nevertheless, the nation, states, and localities are creating accountability systems that are based on several common (if implicit) assumptions:

- Schools need to improve.
- Schools won't improve unless society creates some mechanism to hold them accountable. 10
- Standardized tests will tell us which districts, schools, and classes most need to improve.
- The people who work in the schools should make these improvements, and they need to be motivated to do so.
- Explicitly comparing districts and schools (and even teachers and students) using test scores will provide some of the required motivation.
- Money and other rewards will provide more of this motivation.
- Sanctions and punishments will provide even more of this motivation.

This is the motivational theory of educational accountability (or the motivational component of this theory of accountability): To get the improvements we want out of the schools, we (just) need to motivate them to make those improvements. And this motivational theory of accountability is usually based on a series of carrots and sticks.¹¹

For example, President Bush's education proposal emphasized that "the federal government currently does not do enough to reward success and sanction failure in our education system." Thus, to "increase accountability for student performance," the president's blueprint contained both carrots and sticks: "States, districts and schools that improve achievement will be rewarded. Failure will be sanctioned." Moreover, creating such accountability would not just be the job of the federal government: "States must develop a

system of sanctions and rewards to hold districts and schools accountable for improving academic performance" (Bush 2001b, 6, 7).

But wait, say others, motivation isn't enough. Just because people are motivated to do a better job doesn't mean they can. They need resources. They need organizational and human capabilities. ¹² Thus, the implicit theory behind many accountability systems (or, at least, behind some of the thinking of some of the people who have created these accountability systems) also includes the assumption that poorly performing districts, schools, or teachers (indeed, maybe all districts, schools, and teachers) need help.

• Schools need to be given the resources and assistance necessary to create the capabilities required to improve.

This is the final component of most accountability systems. For example, the Reynolds School District in Oregon complemented its extensive use of performance measures and targets with extensive support, resources, and assistance for schools and teachers (Blum 2000).

"Most states," reports the NGA, "are focusing on school accountability measures, including public reports of assessment results, rewards for performance, technical assistance for struggling schools, and sanctions for schools that do not improve" (Gregovich 1999b). Similarly, the Southern Regional Education Board "has identified five policy areas that are crucial parts of a comprehensive school-accountability program: content and student achievement standards; testing [or assessment]; professional development; accountability reporting; and rewards, sanctions, and targeted assistance" (Watts, Gaines, and Creech 1998, 1). And, indeed, the education legislation adopted by Congress in December 2001 authorized more money and more flexibility in the use of that money.

But wait, say still others, motivation and capability themselves are not enough either. Before we can do any of this, we need to answer two other basic questions: (1) What do we mean by improvement? (2) How will we would know when we've got some of it? The answers to these two questions—the first about standards; the second about assessment—are not obvious. Yet, if we are going to hold schools accountable, we need to be able specify what we want the schools to do—what we want to hold them accountable for doing.

STANDARDS

What do we want the schools to do? What is the real purpose of the schools? The most fundamental answer is: We want schools to help children to grow up to be productive workers and responsible citizens. Unfortunately, it is quite difficult to hold schools accountable for doing this: We can't check whether a school has really achieved this purpose until many years (or decades) after its students leave. And, we would find it difficult to develop valid and reliable measures of whether specific students had indeed become productive workers and responsible citizens. (After all, people can be productive and responsible in a wide variety of very different ways, and whether a person is productive or responsible is certainly a subjective judgment.) Moreover, we can never determine how much of any adult's productivity and responsibility should be attributed to his or her schools, church, family, friends, and other institutions or individuals. We want our schools to help

to create productive workers and responsible citizens; yet we have absolutely no way to determine whether or not they have helped accomplish this purpose.

Thus, we create surrogate mechanisms for determining whether the schools are doing a good job. Behind all of the systems of educational accountability is the assumption that we know (or, at least, can agree on) what kind of short-term, and medium-term improvements we want the schools to make in students—specifically in students' knowledge and skills. ¹⁵ This is the question of standards: What particular forms of knowledge do we want all of the students in all of the districts, in all of the schools, and in all of the classrooms to understand and be able to use?

"Accountability is impotent without standards," U.S. Secretary of Education Roderick Paige told the nation's governors at their conference in February 2001. Setting high standards and then "holding schools accountable," continued Paige, will improve education performance. ¹⁶

But what standards should we set? What particular skills do we want all the students in all the districts, in all the schools, and in all the classrooms to master and be able to use? Our system of educational accountability is based on the assumption that we can, somehow, develop some mutually agreed upon standards for skills and knowledge.

This might not be such a big assumption. Elementary school students ought to know how to add, subtract, multiply, and divide. To be a productive employee or a responsible citizen in today's world, you have to be able to do some simple math. And, similarly, U.S. students have to be able to read and write in English. Oops. Do they really have to be able to read and write in English? Or is being able to read and write in Spanish or Farsi an acceptable standard? And what should they know about Charles Darwin and evolution? Oops again. Once we move beyond the most basic forms of knowledge (can we all agree that 2 + 2 = 4?), controversy enters. Accountability holders would have a much easier time creating some kind of accountability system if they could all agree on standards to which the holdees should be held accountable.

ASSESSMENTS

Also behind all systems of educational accountability is a second assumption: We can determine the level of knowledge and skills mastered by individual students and thus by classes, schools, and districts. What do we want schools to accomplish? This is the question of standards. How will we know if the schools have accomplished it? This is the question of assessment: Can we find or create tests or other assessment tools that really tell us whether a student has, indeed, achieved our standards?¹⁷ In the jargon of education testing, can we create tests that are both valid and reliable? Can we create assessment mechanisms that can, indeed, determine if students know what they are supposed to know? And can we create assessment mechanisms that will produce the same (or similar) results when employed multiple times?

Much of the work on educational accountability is devoted to determining the validity and reliability of various assessment mechanisms. For simple forms of factual knowledge, this is not too difficult; for more sophisticated forms of analytical reasoning, it is quite a challenge. Yet, to hold the accountability holdees accountable (under our traditional approach to accountability), the accountability holders need valid and reliable assessment mechanisms. This is the motivation behind much of the research on performance measurement in education: If we could only find the right measures with which to hold schools accountable, we would solve the accountability problem. If we, the accountability holders, can identify valid and reliable measures of educational performance, we can collect the right data, determine how well schools are performing, and reward or punish the accountability holdees accordingly.

In many ways, accountability in education has morphed into testing. Annual testing. Of lots of children. As Lorna Earl and Nancy Torrance of the University of Toronto observed: "Testing has become the lever for holding schools accountable for results" (2000, 114). That is why Secretary Paige told the nation's governors in February 2001: "We must measure every child every year with good tests."

Indeed, accountability has morphed into high-stakes testing. High stakes for teachers. High stakes for principals. High stakes for superintendents. High stakes for (some) students. Today, when people talk about the need for more accountability in education, they are talking about—operationally—more testing. "All the governors—across the board—have been champions of testing and accountability," Governor Parris Glendening of Maryland told his colleagues at their August 2001 meeting. ¹⁹ To Glendening, it appears, testing and accountability are the same thing.

But let's ignore these two, enormous challenges—the difficulties of agreeing on standards, and the complexities of designing assessments—that can plague any system of educational accountability. Let's assume that a state (or nation or district) can agree on its educational standards—what, exactly, students should know after, say, grades three, six, and eight. And, let's assume that a state (or nation or district) can develop an assessment tool—be it a multiple-choice test, a series of essays and complex problems, or portfolios—that provides a valid and reliable measure of whether individual students do, indeed, know and can employ the educational content specified in the standards. These are two very large and yet unresolved problems; they cannot be dismissed (Brennan 2001). Yet, even if these two very big problems about standards and assessment were, somehow, to miraculously disappear, there would still remain fundamental problems in the design and implementation of any system of educational accountability.

THE CARROTS-AND-STICKS THEORY OF EDUCATIONAL MOTIVATION

I know: When discussing educational accountability, people don't really talk about carrots and sticks. Sticks just aren't politically correct. We no longer rap student knuckles with rulers or student rears with switches. So we certainly don't want to talk about taking sticks to superintendents, or principals, or teachers. Sticks (and carrots) are out. Accountability is in.

But isn't accountability just the politically correct way of saying carrots and sticks? Carrots and sticks sounds so crass—so depraved, so cruel. Accountability, in contrast,

sounds so neutral—so antiseptic, so fair. And yet, on the cover of *Education Week*'s 1999 special report on educational accountability are the words: "Rewarding Results, Punishing Failure." Sounds like carrots and sticks.

Behind much of the theory, much of the talk, and many of the details of accountability systems lies an implicit carrot-and-stick theory of human motivation.²⁰ If only the superintendents, the principals, and the teachers were adequately motivated, we'd get our kids educated. And so, we create carrots and sticks—oops, I'm sorry, rewards and punishments—to motivate educators to do a better job.

The limitations of carrot-and-stick motivation are well known (Levinson 1973; Kohn 1993).²¹ In contrast, Abraham Maslow's theory of motivation is based on a hierarchy of needs: physiological needs for food; safety needs; love, affection, and belongingness needs; esteem needs (both for self esteem and the esteem of others); and (finally) the need for self-actualization (1943). For individuals who still need to satisfy their physiological or safety needs, financial carrots and sticks can be powerful motivators. And for individuals for whom esteem—especially the esteem of others—is particularly important, psychological carrots and sticks may also motivate behavior. Still, the accountability holders who would wield such sticks and dispense such carrots cannot be sure that the behavior that they seek to motivate will be the behavior that they actually do motivate.

In analyzing human motivation to work, Frederick Herzberg (1968; Herzberg et al. 1959, chap. 12) made a distinction between satisfiers and dissatisfiers—between motivators and demotivators. For example, money, if handled badly, is a dissatisfier, a demotivator. But, if money is handled well, it is not a satisfier or motivator. Rather, money handled well is neutral; it has little impact. Thus, a dissatisfier that is handled badly demotivates; but a dissatisfier that is handled well accomplishes little. In addition to salary, Herzberg found demotivators to include organizational policy and administration, and relations with supervisers. In contrast, he found achievement, recognition, responsibility, and the work itself were motivators—if handled well.

Herzberg described KITA motivation—the stick or "externally imposed attempt by management to 'install a generator' in the employee"—as "a total failure." And so, he reported, was a "positive KITA," or carrot. And, Herzberg noted, although "managerial audiences are quick to see that negative KITA is not motivation," nevertheless, "they are almost unanimous in their judgment that positive KITA is motivation" (1968, 53-54). Yet, as the psychiatrist Harry Levinson writes in his book *The Great Jackass Fallacy*, in attempting to motivate people with carrots and sticks, we are treating them like jackasses and, thus, should not be surprised when they behave like jackasses (1973).

Still, most systems of educational accountability are based on a carrot-and-stick theory of motivation. Thus, in addition to standards and assessments, the generic accountability system includes ratings and rankings, rewards and punishments. Schools are rated, ranked, and compared on how well their students do on their assessments. To motivate educators to do a better job, we publish these ratings and rankings. Then, to further motivate them, we reward educators, financially and symbolically, if they do well; and we punish them, again financially and symbolically, if they do poorly.

Yet, in addition to the psychological problems with this reward-and-punishment approach to educational accountability, there are also some practical problems of implementation. For example, why should we assume that an extra \$500 or \$1000 is a tasty

enough carrot to motivate teachers to ratchet up their performance significantly? Suppose a teacher needs an extra \$500; which is the more effective and certain way to obtain it? Work harder during the school year to be sure that the students pass their assessment tests? Or work five weekends at the minimum wage at the local mall?²³

Minnesota rewards its high-school teachers who prove effective in advanced-placement courses (Bradley 1999a, 50; Allen 1999, 1). For every student who takes an AP test and earns a 3, 4, or 5, the teacher receives a bonus—of \$25.

FINANCIAL CARROTS AND STICKS

Of the fifty states, twenty have created sanctions that they can impose on schools that are performing poorly. Eighteen states provide rewards to schools that either achieve a high standard or demonstrate significant improvement. Twelve have both carrots and sticks (Meyer et al. 2002, 69, 76-77). In some states, the schools can distribute these carrots among the teachers and staff; in others they can only use them for collective purposes.

For example, both Kentucky and Maryland have created sanctions for low-performing schools combined with financial rewards for schools that make progress—but not for those that merely maintain their past high level of performance. In Kentucky, schools that meet their target of closing the gap between their baseline performance and performance defined as proficient can earn an award that in 1997 averaged approximately \$50,000 per school. Approximately 40 percent of the schools received this award, and most of these schools distributed the money as bonuses to teachers and staff. Under Maryland's Reward for Success, elementary and middle schools can earn monetary rewards if they have made "substantial and sustained" progress over two years on the state's School Performance Index. Maryland's schools cannot, however, distribute the money to their employees (Kelley et al. 2000, 162-163, 166-167).

Unfortunately, accountability systems can never guarantee that the financial rewards that are distributed this year, will be available again next year. After all, no legislature can bind a subsequent legislature to continue distributing rewards. Traditionally, when creating financial motivators for public employees, legislators have been, initially, very enthusiastic. But, as time progresses, the legislators' zeal diminishes—at least as measured by the dollars they appropriate for motivation.

For example, Richard King and Judith Mathers of the University of North Colorado studied four of the earliest educational-accountability systems—in South Carolina, Texas, Indiana, and Kentucky—and found (among other things) that three of these states eventually reduced their funding for financial incentives significantly:

- In 1984, South Carolina created the School Incentive Reward Program. For the 1985-86 school year, the legislature appropriated \$6.9 million for these awards (which go to the schools themselves and cannot be used as bonuses for teachers or others). By 1996-97, however, the legislature had reduced the pool by over twenty-five percent to \$5 million.
- Also in 1984, Texas created its Successful School Awards Program, and for 1992-93 appropriated \$20 million, which meant that school awards ranged from \$25,000 to \$175,000. For 1994-95, however, the legislature cut the appropriation to \$5 million, so that school awards ranged from \$250 to \$30,000. For 1995-96 and 1996-97, it

- appropriated no funds. (The program was then replaced by a principal performance incentive to award \$5,000 to principals whose schools ranked in the top 25 percent.)
- In 1987, Indiana created its School Improvement Award Program with \$10.1 million for awards in 1989-90. By 1996-97, however, the legislature had cut this appropriation by over two-thirds—down to \$3.2 million (King and Mathers 1997, 151-156).

If teachers, principals and other accountability holdees have reason to believe that the financial rewards may be canceled at any time, how motivating can such carrots be?

WHAT DOES ACCOUNTABILITY MOTIVATE?

Why do people go into teaching? For the money? Obviously not. ²⁴ So why would we think that using money (particularly an annual bonus of a few hundred or a few thousand dollars) would be the best motivator? ²⁵ Some people are satisfied more quickly by Maslow's need for food and safety. They are willing to live with much lower levels of basic needs than Donald Trump. They have entered teaching because of their need to obtain higher levels on the Maslow scale—companionship, esteem, and self-actualization. Perhaps they are in it for the companionship of teenagers. Perhaps. Perhaps they are in it for the esteem—though (if this is the case) they have to be in it more for the self esteem than for the public esteem given how little esteem today's public is willing to accord its teachers. Perhaps they are in it for the opportunity of self-actualization—for the chance to accomplish what they want to accomplish in their own way. If you want to self-actualize with little outside observation or interference, what better occupations to choose than small-business owner, computer hacker, or teacher?

Nevertheless, public esteem can be important. And, indeed, many accountability systems are designed to reward excellent teachers with both more money and more esteem and to punish inadequate teachers with both less money and less esteem. This is one reason why we publish school rankings: to give credit and prestige to the teachers, principals, and others affiliated with outstanding schools; and to, at the same time, embarrass and assign blame to those associated with low-performing schools. (In 2000, the Connecticut Department of Education decided to publish school tests scores but without combining them into a single, summary measure that could be used to compare schools; however, *The Hartford Courant* took the state's data, created such an index, and published their results [Archer 2001, 121].) Such rankings can affect teachers' own self esteem, and they will certainly reduce the esteem that teachers earn from parents, colleagues, neighbors, and friends.

Moreover, some educators, it appears, worry more about preventing the negative than gaining the positive. King and Mathers report that "the avoidance of negative publicity and sanctions is a powerful motivator"—particularly for "upwardly mobile principals" (1997, 159, 175). This may well be because a principal's colleagues and friends, neighbors and relatives pay more attention if the school ranks low than if it ranks high. The most significant motivational impact of accountability systems may come from their ability to shame and embarrass educators who work at low-performing schools.

But how does this threat of humiliation affect the behavior of educators? How can superintendents, principals, or teachers respond when publicly labeled by an accountability report as inadequate or a failure? What can they do? They can work harder and smarter. This

is the implicit theory behind the accountability system. But this is not the only possible response. The intended incentives that such accountability systems are designed to foster and the resulting incentives that they actually create may not be the same. After all, as Earl and Torrance write, "it is particularly important for policy researchers to routinely investigate the actual consequences of polices that are enacted" (2000, 137).

In 1998, Virginia launched its new Standards of Learning tests in mathematics, English, history, and social sciences, which are given every year to students in grades 3, 5, and 8. The real impact of this accountability system won't kick in until the 2006-2007 school year, when a school needs to have 70 percent of its students pass the test to maintain its accreditation (Portner 1999). Nevertheless, the tests quickly started motivating behavior. In early 1999, several school districts decided to accept fewer student teachers, fearing that replacing their experienced teachers with student teachers will lower their test scores (Samuels 1999).

In 1996, North Carolina created its accountability program called the ABCs of Public Education. If a school scores well on the state-wide tests, it earns an exemplary rating, and its teachers win a performance bonus of up to \$1,500. But if a school is rated as low performing, its teachers don't receive a bonus (and were supposed to take a competency test, although the teachers forced the legislature to postpone such teacher testing) (Manzo 1999). This testing and rating system has had an impact on teacher behavior, though not exclusively in the way that accountability advocates had intended. Previously, some teachers had consciously chosen to work in inner-city or other schools with predictably low-scoring students. With the publication of their schools' predictably low ratings, however, these teachers concluded that they were being punished and being held up to public ridicule, and began to consider returning to suburban schools that have a much easier time earning an exemplary rating (Kurtz 1998).

Agreeing to standards and creating valid and reliable assessments to determine if individual students have achieved these standards is not sufficient to create an accountability system that improves student learning. How the accountability holders deploy the results of those assessments to reward and punish, financially and psychologically, affects how the accountability holders are motivated—how they change their behavior.

CHEATING—HONEST AND DISHONEST

For example, accountability systems can motivate teachers to teach to the test. In recent years, North Carolina has done significantly better on the quadrennial National Assessment of Educational Progress by, in part, teaching to the NAEP test. In the 1990s, North Carolina created its own end-of-the-year tests that employed a format and questions very similar to those of the NAEP. And then, the state used these NAEP clones in its own ABCs accountability system to encourage teachers to teach to this test (Simmons 1999a, 14A).

Is North Carolina's strategy good or bad? As always, the answer is: It all depends. If you think that the NAEP test really captures the important theoretical ideas, analytical concepts, and practical skills that we want students do learn, and if you think that North Carolina is has chosen an appropriately focused instructional strategy, you are apt to think this is all to the good. But, if you think that the NAEP test misses many very important ideas, concepts,

or skills, or if you think that North Carolina is employing an excessively narrow instructional strategy, you will conclude that all this is quite bad.

"In a high-stakes accountability system," notes Robert Meyer of the University of Chicago, "teachers and administrators are likely to respond to the incentive to improve their measured performance by exploiting all existing avenues" (1996, 219). Helen Ladd of Duke University worries "whether the undesirable side effects of accountability and incentive systems can be kept to a tolerable level," and suggests that "a balance must be found so financial awards are large enough to change behavior, but not so large that they induce outright cheating" (1996, 14). Such cheating can be outright dishonesty, such as falsifying test results or giving students the test questions or the answers. I call this dishonest cheating. Or it can be what I call honest cheating—capitalizing on the many available ways (other than actually helping children to become productive employees and responsible citizens) to make sure the scores look better. Teaching to the test is honest cheating. Correcting students' answers is dishonest cheating (Behn 1998).²⁷

Yet, as accountability holders ratchet up the rewards and penalties they bestow on the accountability holdees, why should we believe that the holdees—upon examining all of Meyer's existing avenues—will respond first by changing their behavior in desired ways and will resort to cheating only as the stakes get higher? Maybe their personal commitment to teaching forces them to try changing their own behavior first—to try teaching harder or teaching smarter. Yet, if they believe standards have been set ridiculously high, or if they conclude accountability holders have failed to provide them with the necessary resources or support, or if they simply cannot figure out what kind of change in their own behavior will lead to an improvement in the assessments, why won't they resort to cheating first?²⁸

SHAME, VOICE, EXIT, AND ENTER

When threatened with being publicly labeled as a loser, educational systems can take a variety of actions to improve their chances of coming out a winner. Some of these actions might indeed be to work harder and smarter. But some of these actions might involve nothing more than cleverly creating a competitive advantage: Why should we take on any of those green student teachers? Why not let another school do the training and pay for it with lower test scores; then, when these student teachers graduate, they'll look at our higher scores, and the best will come work for us?

Similarly, when threatened with being publicly labeled as a loser, individual educators can take a variety of actions to improve their chances of coming out a winner. Some of these actions might indeed be to work harder and smarter. But others might involve nothing more than enhancing their own, personal competitive advantage. Why work for a struggling team, when my seniority lets me sign on with a well-established winner that regularly produces bonuses for its people? Or, why not simply go play an entirely different game in an entirely different league that gives me less hassle, higher prestige, and a bigger income?²⁹

As Albert Hirschman (1970) warned us, people who are unhappy with an organization can respond politically with voice or economically with exit. An individual's voice is, however, less influential than the combined and organized voice of many individuals; thus teachers and principals have formed associations to coordinate their collective voice. The individual, however, may conclude that exit is a much more effective strategy than voice. Why bother complaining—particularly when it is not at all obvious who (even if they were receptive) could act on this complaint?

When faced with the prospect of being publicly shamed by association with a low-performing school, how will teachers react? Clearly, they can exit. Teachers with enough seniority can exit to a school with better demographics, a better track record, or simply less bad publicity. Teachers with enough smarts or skills can exit the profession. Indeed, Richard Ingersoll of the University of Pennsylvania argues that teacher staffing is "a 'revolving door'—where large numbers of qualified teachers depart their jobs for reasons other than retirement," primarily various forms of "job dissatisfaction" (2001, 499). Not only is turnover in teaching higher than in other occupations, Ingersoll estimates that 29 percent of new teachers leave within three years, 39 percent within five years (Viadero 2002, 7).

Every year, California needs to recruit 25,000 new teachers (Archer 1999, 20; Sandham 2001, 116). In 1998, to attract fifty excellent teachers, Massachusetts began offering a signing bonus of \$20,000 spread over four years. Some Texas districts use such bonuses to recruit teachers from Oklahoma (Bradley 1999b, 10). Maryland, Philadelphia, and East Baton Rouge Parish in Louisiana (among others) have added recruitment bonuses (Olson 2000). Yet why accept the constant turnover; why not concentrate on keeping the existing teachers?

At a time when many are decrying a teachers shortage—the president himself has told us that "over the next decade, America will need more than 2 million new teachers" (Bush 2002)—should we be employing shame as our most powerful motivator? Imagine a business posting the following employment advertisement: "Come join our company. We put all our new people to work in our lowest performing plants, give them our worst equipment, and require them to employ the raw materials with which it is most difficult to work. And every year, we get the local newspaper to list the plants that are the lowest performers on the front page." Who would apply for such a job? And who, if they did, would tell their friends where they worked?

Should we employ shame as our most powerful motivator for principals? Yes, to upwardly mobile principals, avoiding shame may be very important. But schools do need principals, and many districts are having a difficult time recruiting them (Bradley 1999a, 49; Olson 1999b). Who would want to become a school principal? Who would want to become the principal of a low-performing school?³¹ Who wants to sign up for an opportunity to be shamed?

Robert Samuelson, *Newsweek*'s economics columnist, explains "Why I Am Not a Manager." The drawbacks, he concludes, are many: "resentment from below; pressure from above; loud criticism of failures; silence over successes." Sounds like the drawbacks of being a school principal. But Samuelson isn't writing solely about principals, even though he references their challenge when he describes the accountability demands on any manager: "they're supposed to get results—to maximize profits, improve test scores or whatever. Everyone must 'perform' these days and be 'accountable' (which means being fired, demoted or chewed out if the desired results aren't forthcoming)" (1999, 47). At least in business, the managers get chewed out in private.

Shame may be an effective motivator for those who choose to remain in the education business. In Florida, the list of critically low-performing schools is known as the list of shame (White 1998). But people can make personal, strategic choices. They can exit. Indeed, they have one more strategic choice. They do not ever have to enter.

When developing accountability and motivational strategies for employees—particularly for public employees—we tend to assume that they are conscripts—that they have no choice. In fact, however, it has been over a quarter of a century since the U.S. military has been able conscript to soldiers. Indeed, public employees are all volunteers. They did not have to choose to work for government. They do not have to continue to choose to work for government. Thus, if the shame associated with their association with government becomes too great—if they get chewed out too frequently, too aggressively, and too publicly—they do have another choice. They can exit. They can never even enter.

HOLDING SCHOOLS ACCOUNTABLE: THE INDUSTRIAL MODEL

The contemporary American system of democratic accountability has evolved from the thinking of Woodrow Wilson, Frederick Winslow Taylor, and Max Weber. It emphasizes Wilson's distinction between policy and administration, Taylor's belief in the efficacy of scientific management, and Weber's faith in hierarchical bureaucracies. Thus, the legislature creates policies and assigns to bureaucracies the task of carrying out these policies in the most scientifically efficient way possible (Behn 2001, chap. 3). The result is a hierarchical, unidirectional system of accountability:

- The state superintendent is accountable for implementing education policy in the state.
- The district superintendent is accountable for implementing education policy in the school district.
- The school principal is accountable for implementing education policy in the school.
- The teacher is accountable for implementing education policy in the classroom (Behn 2001, 65-66).

Everyone is accountable to someone in the next higher layer in the hierarchy—an example of what Robert Schwartz of the University of Haifa calls "classical public administration hierarchical accountability systems" (2000, 201).

This hierarchical, unidirectional system of accountability is based—if only implicitly—on an industrial model of education: At age five, the raw materials (a.k.a., the children) are delivered to the plant door by their parents; during the next thirteen years, they are processed using a variety of inputs; at high-school graduation, they emerge as finished products.³² The teachers are the production workers, the principals are the shop foremen, and the superintendents are the plant managers.³³ Each individual is accountable to his or her boss within this hierarchy. Indeed, this industrial model assumes, the production workers won't do their jobs right unless someone is looking over their shoulders and holding them accountable.³⁴

This industrial model of education and of educational accountability is reenforced by the simple use of the words inputs and outputs. Some, for example, might think of kindergarten children as the inputs, and high-school graduates as the outputs. Regardless, however, of which "puts" people label as the inputs and which they call the outputs, they are—if only implicitly—thinking about education as a production process that converts these inputs into outputs. And, anyone who employs this implicit mental model of education needs to make no big logical leap to conclude that the people who run this educational production process, those people who have the job of converting the inputs into outputs, ought to be held accountable.

HOW SHOULD WHO HOLD WHOM ACCOUNTABLE FOR WHAT?³⁶

Everyone is thinking about accountability in terms of holding educators accountable. Taxpayers, parents, school-board members, city-council members, district superintendents, state legislators, state superintendents, governors, even the president—they all want to hold educators accountable. Everyone wants to be an accountability holder. Everyone wants someone else to be the accountability holdee.³⁷

But who, exactly, should be this accountability holdee? We debate who—what size education unit—should be held accountable. The typical effort to create educational accountability, reports Ladd, "starts from the view that the school is the most appropriate unit of accountability." Efforts to hold schools accountable, she argues, "are potentially more productive because they encourage teachers, principals and staff to work together toward a common mission" (1996, 11). In contrast, Meyer advocates "localizing school performance to the most natural unit of accountability—the grade level or classroom." To Meyer, "a specific classroom or grade level" is "the natural unit of accountability in schools" (1996, 221, 214).

But why shouldn't we hold districts accountable? Why shouldn't we hold the school board and city council members accountable? Why shouldn't we hold state superintendents, state legislators, and governors accountable? Why shouldn't we hold students accountable? Why shouldn't we hold parents and taxpayers accountable? Why shouldn't we hold local business executives, union officials, and other civic leaders accountable? Why do all these people get to be accountability holders? Why can't we think of them as accountability holdees? Reginald Mayo, the superintendent of schools in New Haven, argues that, in addition to the teachers, "other people should be held accountable: parents, businesses, higher education institutions, and the faith community" (Reid 2001).

Why Not Hold Parents Accountable?

Education is a co-production process.³⁹ Parents are at least as important a factor of production as are teachers and schools. It isn't just the school—the principal and teachers—that produces the education that goes into the students' brains. Ever since the release of the Coleman Report over thirty years ago, we have understood that parents—more than principals and teachers—contribute the most to their children's learning (Coleman et al. 1966; Leithwood and Jantzi 1999). And neighbors, peers, mentors, and a variety of civic, social, and religious institutions are other factors of production. Yet, although we are quite prepared to hold teachers and schools accountable, we rarely even entertain the thought of holding anyone else accountable. Why don't we hold parents accountable?

By publishing a school's ranking in the newspaper, the accountability holders seek to reward, punish, and motivate these accountability holdees. But if this is such an effective accountability tool, why don't we publish other rankings, too? We could test children when they enter kindergarten and publish in the newspaper their scores, not next to their names but next to the names of their parents. At the end of each school year, we could publish in the newspaper the names of all the school's parents and how many parent-teacher conferences they attended.

For the 1998-99 school year, the Washington, D.C. school system set aside three different days (rather than one) for parent-teacher conferences. School Superintendent Arlene Ackerman made it clear that she would to hold the schools accountable for getting their parents to attend these conferences: "We're going to be tracking this. And if they [the schools] didn't do it this time, come next time they will" (Strauss 1998). Indeed, the district's evaluation forms for its school principals included an appraisal of how well they engaged parents in school activities, including these parent-teacher conferences (Ferrechio 1998).

In some ways, it makes sense to assign to the individual schools the task of getting parents to come to periodic parent-teacher conferences. After all, the schools have the closest relationships with their parents. The schools are the units that can, most effectively, both publicize these meetings to the parents and make it inviting for the parents to attend. Indeed, some District of Columbia schools did aggressively promote the teacher-parent conferences. Others did little. For the school district, it makes perfect sense to delegate to the individual school—and then to the individual teacher—the task of recruiting, cajoling, motivating, coercing, shaming, or otherwise getting the parents to attend.

But why should all the burden be on the schools? After all, the school district set the times for the teacher conferences—on Wednesdays from noon to 7:00 p.m. And both parents and teachers complained that these hours were hardly convenient for working parents.⁴²

Apparently, no one thought about also holding the parents accountable. Yet if we believe in rewards and punishments—if we believe in publicly making heroes of people who do their part while publicly shaming others who shirk their obligations—why not employ the same strategy with parents that we use with students and teachers? Why not create a parental report card? We could send this parental report card home with the student. (Don't you believe it would be delivered?) Or we could post a parental report card in the lobby of the school: One column would list the parents who attended the last teacher-parent conference; the other column would list the parents who did not.

Every June, America's schools send their students home with a summer assignment. Often, schools ask their students to read several books over the summer. But why not give parents an assignment? And why not hold them accountable for doing it? Why not ask parents of elementary-school students to read ten books to their children over the summer? And why not ask these parents to somehow report in September on the books they read to their children? Why not ask parents of middle-school and high-school students to do a joint history project over the summer? And, why not ask these parents to present a joint parent-child report during the first week of classes in September? Why don't we think of ways to hold parents accountable for their own children's learning?

Teachers, of course, would love to hold parents accountable. In a survey of teachers and parents, Public Agenda found that "teachers say inattentive, lazy students are the most serious problem they face, and they hold parents responsible" (1999, 1). When Public Agenda asked teachers how serious they thought various problems were, many of them ranked several problems with parents as very or somewhat serious (see table 1).

Actually, in Chicago, the United Neighborhood Organization is attempting to hold parents accountable. It convinced thirty schools to distribute parental report cards covering such subjects as reading (to their child), homework (checking it), and punctuality (at getting their child to school). But these report cards were ungraded; the parents were asked to grade themselves and then review their grades with their child's teacher (Johnston 2000).

In New Haven, Superintendent Reginald Mayo is being more aggressive. "I can grade parents," he says. "Why not?" (Zielbauer 2001). Mayo organized a task force that has prepared a report recommending, among other things, that the school system create a parent honor roll for those who fulfill their responsibilities, while referring parents who flagrantly fail to help with homework or participate in school activities to the Connecticut Department of Children and Families (Reid 2001). And New Haven's concept of shared accountability

TABLE 1Holding Parents and Students Accountable: What Teachers Think

	Percent of Teachers Who Thought the Problem Was:		
	Very	Somewhat	Either Very or
The problem	Serious	Serious	Somewhat Serious
Parents who fail to set limits and create			
structure at home for their kids	36	47	83
Parents who refuse to hold their kids			
accountable for their behavior and grades	31	50	81
Students who try to get by with doing as little			
work as possible	26	43	69

Source: Public Agenda (1999).

contains both responsibilities and performance expectations for parents that include "95% attendance record for their child" and "attendance at school orientation meetings, parent-teacher conferences and parent meetings" (New Haven Public Schools 2001, 17).

Why Not Hold Students Accountable?

We do, of course. We have long issued student report cards. Now, report cards are common throughout society. We issue report cards on all sorts of organizations—schools, colleges and universities; hospitals and health maintenance organizations; nursing homes and day-care centers (Gormley and Weimer 1999)—all in an effort to hold these organizations accountable. But we created the original report cards for students.

Have traditional report cards alone established student accountability? If they had, we would never have developed a problem. Indeed, in many places, student report cards became meaningless. Often, rather than hold students accountable for their grades by holding them back if they failed too many courses, we simply promoted them.

Now, however, social promotion is out. High-stakes testing is in. Students don't just get a report card. If they don't pass the test, they may not get promoted. If they don't pass the test, they may have to go to summer school to get promoted. If they don't pass the test, they may not receive a high-school diploma.

Across the nation, governors and legislators, superintendents and school board members, business and civic leaders are all decrying social promotion. In a banner headline across the top of the front page, *The News and Observer* of Raleigh announced: "Death knell sounds for social promotion in N.C. schools." The chairman of the State Board of Education proclaimed, "It's time a diploma means something in North Carolina," while a fifth-grade teacher declared, "I'm glad to see that we are beginning to hold children accountable" (Simmons 1999b). In South Carolina, the Student Accountability Act of 1998 established social probation for students who failed to display the skills required for their grade. Then, if they fail to improve in the following year, they will be held back (Johnston 1999a, 55; 1999b).

In Boston, Chicago, New Haven, and elsewhere, students who fail end-of-the-year exams will be required to pass summer-school courses or be held back. And seventeen states require (or will soon require) students to pass an exit exam to receive a high-school diploma (Meyer et al. 2002, 68, 77). Other states reward students with high grades with college scholarships.

Still, it isn't obvious what kind of behavior such a carrot-and-stick accountability system motivates. Students could, of course, decide to work harder and smarter. But they, too, can exit. They can simply drop out—either physically or mentally.⁴⁴

To attack this drop-out problem, to make exit a less desirable option for teenagers, Kentucky, North Carolina, Tennessee, and Virginia have a law: No Pass, No Drive. To get a learner's permit or driver's license, a student needs to be making sufficient academic progress. Sixteen states have a policy of No Pass, No Play; students who fail one or several courses cannot participate in athletics and other student activities (National Association of State Boards of Education 1999).

Why Not Hold Legislators Accountable?

Should the board of directors of a firm hold the managers, foremen, and line workers at one of their plants accountable for the plant's production if they don't provide them with adequate resources—if they don't provide high-quality raw materials, appropriate and effective technology, training for employees, and the funds necessary to obtain excellent materials, technology, and staff? This hardly seems fair. Still, we rarely talk about holding the public-sector equivalent of a board of directors—the legislature—accountable.

For example, we could rate the chairs of the ninety-nine education committees in the state legislatures in terms of their ability to mobilize and target resources, then rank and publish them in a national newspaper. Or teachers could evaluate their state legislators and publish their findings. For each legislative session, the Delaware State Education Association creates a report card that specifies how each legislator voted on key education bills (Miller 1999), though it no longer posts this report card on its Web site.

The state legislature, school board, and city council provide the resources with which educators must work. They micromanage the educators. Why don't we hold them accountable?

Why Not Hold State Superintendents Accountable?

Why not hold state superintendents and their staffs accountable? The state develops the curricula that the schools and teachers must employ. They certify the books that teachers can use. Why don't we hold the state superintendent—and all those curriculum specialists in the state offices—accountable?⁴⁶

Why Not Hold Business Executives and Other Civic Leaders Accountable?

We could rate and publish in the newspaper the names of the top executives of the biggest businesses in a school district based on their firm's overall contribution to education. We could rate the churches for their mentoring programs, for their after-school programs, or for their Saturday tutoring programs. We could publish the scores in the newspaper.

Why Not Hold Citizens Accountable?

Citizens are the people who, directly or indirectly, choose our educational leaders. They often can approve or reject school bond issues—and sometimes tax increases. Citizens are the individuals who read and joke about the school rankings that are published in the paper. (If people weren't mesmerized by these ratings, newspapers wouldn't put them on the front page.) Why aren't citizens accountable for improving education?

Why Not?

Why don't we hold parents, or students, or legislators, or governors, or superintendents, or civic leaders—or ourselves—accountable? After all, education is a co-production progress; we all contribute to or detract from the education of our communities' children. And, as Kenneth Leithwood and Lorna Earl of the University of Toronto observe, it is not

"legitimate to hold a person solely accountable for expected performances requiring a shared influence" (2000, 5).

Why not? Why don't we hold ourselves accountable? Because it is easiest to think about accountability as something we do to others. And the easiest others on whom to focus are the schools, the principals, and the teachers.

CREATING A COMPACT OF MUTUAL, COLLECTIVE RESPONSIBILITY

How should who hold whom accountable for what? Traditionally, the answer is obvious: Superiors hold subordinates accountable for whatever they want by quickly punishing failure and occasionally rewarding success. Indeed, the very phrase we use—hold people accountable—clarifies the nature of the relationship. There is an accountability holder and an accountability holdee. The accountability holder has all of the rights and leverage; the accountability holdee has none. The superior holds the subordinate accountable. The superior is the accountability punisher; the subordinate is the accountability punishee. Yet this conventional, unidirectional, hierarchical form of accountability is not the only way to think about enhancing accountability in education.

Accountability could also emerge from an agreement among everyone in what Kevin Kearns of the University of Pittsburgh calls the accountability environment (1996). As I have explained in more detail elsewhere (Behn 2001, chap. 7) such a compact of mutual and collective responsibility would make no hierarchical distinction between accountability holders and accountability holdees. Everyone would be both. Everyone signing on to this compact would also be accepting obligations and responsibilities. Every individual would recognize that he or she is part of a web of responsibility; each member is responsible to all of the others while simultaneously all of others are responsible to him or her.⁴⁷

I make a clear distinction between the concepts of accountability and responsibility. ⁴⁸ Someone else *imposes* accountability on you. But you *accept* responsibility. You may choose to accept responsibility for what someone else seeks to impose accountability, but no one can force you to accept responsibility. ⁴⁹

With such a responsibility compact, legislative-branch accountability holders would no longer dictate the terms of accountability to executive-branch accountability holdees. Federal accountability holders would no longer dictate the terms of accountability to state accountability holdees. State accountability holders would no longer dictate the terms of accountability to municipal accountability holdees. Rather, each member of the compact would agree to the obligations for which he or she would be responsible. And, no one would attempt to hold others accountable for a failure without first fulfilling his or her own responsibilities.

In this web of mutual responsibility, legislators would accept responsibility not only for creating goals but also for providing schools with the resources necessary to achieve their goals. Further, legislators would accept responsibility for not setting unreasonable deadlines for achieving these goals. Members of the state legislature would also accept responsibility for creating an intelligent macrostructure for the state's education system, and the members of the local school board would accept responsibility for creating an intelligent macrostructure for the district's education system. ⁵⁰ In this web of mutual responsibility, the

legislative and executive branches would be partners in helping to improve the schools rather than adversaries engaged in the allocation of blame. In this web of mutual responsibility, the feds, the state, the district, the school, and the classroom would be partners along with the taxpayers and the community. Each would be responsible to all of the other members of the compact.

In this web of mutual responsibility, parents would accept responsibility for reading to their children—even to their preschool children. They would not just be accountable for delivering their five-year-old bundle of raw material to the kindergarten door. They would accept responsibility for preparing their child for kindergarten and for encouraging and working with that child for the next thirteen years. They would accept responsibility for regularly attending teacher-parent conferences and other school activities, for following up on the suggestions offered by teachers, and for following the reasonable requirements of the school. In this web of mutual responsibility, parents would be neither clients nor customers nor accountability holders. They would be partners.⁵¹

Similarly teachers and parents would be partners. So would states and localities. Indeed, this web of mutual and collective responsibility would need to include legislators, executive-branch officials (both elected and appointed), principals, teachers, parents, business executives, labor officials, and other civic leaders. Each partner would accept that it had a specific responsibility for the education of the children in the partnership's school, community, district, or state.

Such a responsibility compact would create "the sense of collective responsibility"—the "accountability to partners"—that Eugene Bardach of the University of California at Berkeley and Cara Lesser of the Center for Studying Health System Change found among human-service collaboratives (1996, 206, 204). These collaboratives are: "two or more organizations that pool energies and perhaps funds (at least some of which are public) and seek thereby to overcome the fragmentation of services created by a host of current practices and institutional arrangements. For instance, local social services, mental health, education, and juvenile justice agencies might collaborate to serve certain multiproblem families or children" (198). A collaborative that employs "partnership accountability," report Bardach and Lesser, is "a self-governing community of accountability in which partners hold the collective to account" (206, 222). The "partner agencies are in many senses accountable to one another for competent or even excellent performance, and they use a variety of means to project this sense of accountability" (204).

BREAKING THE ACCOUNTABILITY MINDSET

Who do I hold accountable? Parents, reports President Bush, will ask this question when their child fails a reading test. What went wrong? How come? Where did the system let me down? (Bush 2001a). The implication, of course, is that the system that let the parents down was the school system.

But maybe what let the parents down wasn't the school system but the accountability system. Maybe what went wrong was our system of educational accountability. Maybe we won't really fix our education system until we fix our educational accountability system. Maybe we won't really have an education system until we create a sense of mutual responsibility among all of those who can make or withhold a significant contribution to the education of their community's children.

Maybe we need to rethink what we mean by accountability in education. Maybe we need to replace our traditional system of unidirectional, hierarchical, carrot-and-stick accountability with a new compact of mutual and collective responsibility.

To create such a web of mutual and collective responsibility, we must discard as obsolete our conventional concepts of accountability. If we can only think of accountability in terms of superiors and subordinates, then we cannot conceive of a network of partners who agree on what they want to produce, how they will know if they have produced it, and who needs to contribute what to ensure that this co-production process works. If we can only think of accountability in terms of superiors and subordinates, we cannot recognize that separating policy from administration is difficult. If we can only think of accountability in terms of superiors and subordinates, we cannot accept that front-line employees might understand more about the production process than the managers. If we can only think of accountability in terms of superiors and subordinates, we cannot envisage any organizational arrangement other than a hierarchy.

Americans, without even conceiving that there might be an alternative, have created an accountability system for education designed for a very hierarchical production process. Yet, if we conclude that education doesn't quite fit the traditional model of industrial production, we might also conclude that education doesn't fit the traditional model of accountability. If we conclude that the education of our children from kindergarten through high school requires cooperative efforts of teachers, parents, principals, school board members, superintendents, legislators, governors, as well as a variety of citizens, we might also conclude that we need an accountability arrangement that binds these people together as partners so that they feel responsible to each other. And, if we decide to create such a web of collaborative relationships, we need to develop a new theory of accountability in education—one that is based not on institutional rewards and punishments but on a personal sense of responsibility to colleagues and partners.

As table 2 suggests, a compact of mutual and collective responsibility is a much more complex institution compared with traditional, unidirectional, hierarchical accountability. After all, a sense of personal responsibility cannot be instilled by commands and hierarchy. It cannot be coerced by rewards and punishments. It cannot be nourished by labeling people as losers. Individuals will accept and act on a sense of personal responsibility only if they see others acting similarly and if they believe that others will continue to act similarly.

If educators believe citizens and legislators are not providing them with the resources necessary to do their job, they will feel no responsibility to either citizens or legislators. If educators believe that parents are not doing their part, they will feel less responsibility for them (even if they continue to care about their individual children). If educators believe that legislators and state superintendents are hiding behind commands and hierarchy, they will

TABLE 2

How Should Who Hold Whom Accountable for What?

Two Different Ways of Answering this Accountability Question

The Question	Traditional, Unidirectional, Hierarchial Accountability	A Compact of Mutual and Collective Responsibility	
How?	With rewards and punishments	By evolving a compact describing the responsibilities of each of its members, fostering personal relationships, and creating informal reporting mechanisms	
Who?	The accountability holders (or punishers)	Everyone who is a member of the compact (which ought to include everyone in the accountability environment)	
Whom?	The accountability holdees (or punishees)	Everyone who is a member of the compact (which ought to include everyone in the accountability environment)	
What?	Standardized test scores	Test scores, graduation rates, parental involvement, and whatever else the members of the compact decide	

reject the legitimacy of any associated accountability system. If educators believe that the other individuals and institutions in their accountability environment seek only to condemn them publicly for any and all failures, they will simply seek another line of work.

"Who do I hold accountable?" asks the parent of a failing child. "Where did the system let me down?" Maybe, however, this parent really needs to ask: "For what should *I* accept responsibility?" Maybe this parent really needs to ask: "Where did *I* let the system down?"

But neither parents nor presidents will ask these kinds of questions until they rethink what we mean by accountability in education.

NOTES

- 1. Bush (2001a). Emphasis added.
- 2. Quotations from the National Governors' Association winter meeting are from the author's notes, 22 February 1999, Washington, D.C.
- 3. For example, in 1999, on the Third International Mathematics and Science Study (or TIMSS 1999), a test of eighth-grade students in thirty-eight different nations, U.S. students scored above the international average in Algebra, but below (among others) Bulgaria, the Czech Republic, Slovenia, the Russian Federation, and Hungary (Mullis et al. 2000, 98).
- 4. Various NGA publications note the governors' efforts to "hold schools, teachers, students, and parents accountable" and "to hold teachers and schools responsible for students' achievements" (Gregovich 1999a, 2-3). To be fair, however, Governor Carper also notes that his "approach will hold students, parents, teachers, schools—and Governors—accountable" (Curran 1999, v).
- 5. Yes: The official terminology is principals and agents. But this antiseptic language fails to capture how the relationship feels—particularly by the agents. For a more detailed analysis of what we (implicitly) mean by accountability—and by the ubiquitous phrase, "hold people

accountable"—see Behn (2001).

- 6. The current movement for accountability in education has actually been around for a while. A quarter of a century ago, for example, one study reported that thirty states had enacted "accountability legislation" (Hawthorne 1974, 2).
- 7. This article is about accountability for performance—specifically, educational performance. Nevertheless, we should not forget that society also seeks to establish accountability for finances and for fairness (Behn 2001, 6-14).
- 8. For a discussion of the linkage between accountability measurement and motivation in education, see Behn (1997).
- 9. Indeed, accountability and improvement may even be in conflict. Brennan draws attention to "an almost inevitable tension between using a test for instructional improvement and using a test for high-stakes accountability" (2001, 14).
- 10. Schwartz (2000), for example, emphasizes the importance of external accountability policies—particularly standards, measurement, monitoring, evaluation, auditing, the public reporting of such measurements, evaluations, and audits, plus rewards and sanctions. He contrasts this with internal, hierarchical, or professional accountability.
- 11. I am ignoring, of course, another mechanism for motivating improvement: the market. The advocates of vouchers and charter schools argue that the market provides better motivation because it contains more effective carrots and sticks. Ogawa and Collom (2000) argue, however, that most systems designed to hold schools accountable with performance measures implicitly assume a quasimarket rationale.
- 12. In education, organizational capability includes teachers, teaching skills, curricula, facilities, and educational equipment (from chalk to computers). But a school's complete operational capability would include parents and others who contribute to the students' education.
- 13. Lags between treatment and measurement create a generic problem for any effort to use the measures to learn and improve (see Behn 2002). In education, such lags complicate not just the heroic task of determining whether the schools are yielding—many years later—productive workers and responsible citizens. Such lags even complicate the more traditional effort of evaluating schools using test scores. A recent increase in a school's or district's test scores might reflect important improvements in educational practice made several years ago while masking recent mistakes. Similarly, a decrease in a school's or district's scores might stem from significant mistakes made several years ago that have been completely but only recently rectified. Thus, Meyer concludes that "the average test score reflect[s] information about school performance that tends to be grossly out of date," which "severely weakens it as an instrument of public accountability. To allow educators to react to assessment results in a timely and responsible fashion, performance indicators must reflect information that is current" (1996, 213-214).
- 14. Moreover, there is little reason to believe that the influences of these people and institutions are independent and linear rather than synergistic and very nonlinear.
- 15. The link between an individual student's performance on formal tests and that same individual's later functioning as a productive worker and responsible citizen is not the least bit obvious. Most of us, from personal experience or publicized stories, can offer counter examples. Yet, currently, the best we can do is to employ the existing surrogate measures of in-school tests.
 - 16. From the author's notes, 25 February 2001, Washington, D.C.
- 17. At the operational level, of course, what counts is not the standards but the assessments. The accountability system will be based on the results of the assessments, regardless of whether the assessment mechanism is connected to the standards or not. Thus, it will be the specifics of the test—not the abstractions of the standards—that will get the attention of teachers. Teachers won't teach to the standards. They will teach to the assessment.

18. Numerous scholars have devoted significant effort to developing and analyzing the validity and reliability of various kinds of assessment tools. See, for example: Meyer (1996), Murnane (1987), Wainer (1993), publications of the National Center for Research, Evaluation, Standards, and Student Testing (CREST), and the RAND Corporation's Center for Research on Evaluation, Standards, and Student Testing, and such journals as *Applied Measurement in Education*, and *Journal of Education Measurement*.

The results aren't always very encouraging. Rogosa analyzed the accuracy of the Stanford Achievement Test, Ninth Edition. He asked: What are the chances that a student who is truly at the 50th percentile on nationally normed test will score greater than five percentage points from this score—that is, either below the 45th percentile or above the 55th percentile? His answer: For a ninth-grade student in math: 70 percent. For a fourth-grade student in reading: 58 percent (1999, 1).

- 19. From the notes of the author, 4 August 2001, Providence, Rhode Island.
- 20. For example, in its 1999 special report on accountability, *Education Week* observes: "The assumption seems to be that if performance is the problem, what's missing is the will: Find the right combination of carrots and sticks, and effort and achievement will follow" (Olson 1999a, 8).

Of course, it could be that the will is there but the technology is missing. That is, teachers want to teach, but don't know how. And this isn't because they are dumb. Rather, it could simply be because the technology of teaching is not well developed. As Ogawa and Collom observe, "the causes and effects that comprise schooling and instruction are poorly understood" (2000, 210).

- 21. Kentucky and Maryland have both created educational accountability systems but with different structures for their sanctions and financial rewards. In a comparative analysis of these two systems, Kelley and her colleagues observe that "Regarding the effect of the financial incentive, Maryland principals have significantly higher average perceptions than do Kentucky principals that the monetary bonus or award is motivating to teachers." In both states, it appears, the bonus has a positive impact. But look at the question and the possible answers. Over two hundred principals in each state were asked whether they (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, or (5) strongly agree that "the possibility of a bonus helps me motivate teachers to work towards the accountability goals." For Maryland, the mean score was 2.97 while in Kentucky it was 2.35. That is, at best, the bonus neither helped nor hindered motivation. The results for three other questions about motivation were similar (Kelly et al. 2000, 184-185, 196).
- 22. For a discussion of "extrinsic, intrinsic and team-based motivators" applied to education, see King and Mathers (1997, 148-150).
- 23. The current minimum wage is \$5.15 per hour, which means it takes 97 hours to earn \$500. Someone can work these 97 hours in five weekends with a four-hour Friday evening shift and two eight-hour shifts on Saturday and Sunday. (In California and Massachusetts, where the minimum wage is \$6.75, it would take 74 hours, or just four weekends, to earn \$500.) And someone with a teacher's education ought to be able to land a part-time job at something above the minimum wage.
- 24. If we do identify someone who went into teaching for the money, we have also identified someone who is not smart enough to be a teacher.
- 25. Bromley does not wish "to discount the profound role of incentives in guiding human behavior." Nevertheless, he concludes "that monetary incentives—at least as economists tend to think of them—may be of equivocal necessity in reforming educational performance, and such incentives are almost certainly insufficient" (1998, 46).
- 26. "We are dealing with the consequences of greater and greater pressure on school administrators to put forth the best performance on schools tests," observes Ken Oden, the county attorney of Travis County, Texas. "That kind of atmosphere is what breeds greater temptation to manipulate ratings for your school" (Johnston 1999c). On April 6, 1999, Oden convinced a Travis County grand jury to indict both the Austin Independent School District and its deputy superintendent for tampering with government records; on January 8, 2002, he forced the district to

plead no contest. District officials had underreported drop-out rates for several schools to prevent them from being classified by the state as low-performing and had also modified the identification numbers of some students so that their test scores would not be reported (Jayson 1999; Kurtz 1999; Martinez 2002).

27. George Washington Plunkitt, a leader of Tammany Hall for nearly half a century, made a "distinction between honest graft and dishonest graft." Dishonest graft could earn you a jail sentence. Honest graft was perfectly legal and could make you rich (Riordon 1963, 3-6). Of course, since Plunkitt's day, we have attempted to convert, via legislation, various forms of honest graft into dishonest graft. Yet, today, honest graft still exists; it is called campaign contributions.

Similarly, I distinguish between honest cheating and dishonest cheating. Dishonest cheating can earn you a jail sentence—or a least dismissal from your job. Honest cheating will help your students, your school, your district, and you win at the accountability game without breaking any rules, though it may not help your students grow up to be productive employees or responsible citizens.

Meyer lists some of his avenues—things that might be called honest cheating—that schools can employ: "create an environment that is relatively inhospitable to academically disadvantaged students, provide course offerings that predominantly address the needs of academically advantaged students, fail to work aggressively to prevent students from dropping out of high school, err on the side of referring 'problem' students to alternative schools, err on the side of classifying students as special education students where the latter are exempt from statewide testing, or make it difficult for low-scoring students to participate in state-wide exams" (1996, 219).

28. The typical educational accountability system reminds me of W. Edwards Deming's "stupid experiment" with the red and white beads. Workers are supposed to "make" white beads from a box containing 800 red and 3,200 white beads. Unfortunately, management (that is, Deming) has failed to provide its workers (volunteers from the audience) with any mechanism for separating the red beads from the white ones; yet management berates its employees for their failure (Deming 1986, 346-354; Walton 1986, 40-51).

Moreover, complex—and thus, often obscure—performance measures can prevent a teacher, school, or district from figuring out what it should do to improve. Simple performance measures tend to be biased against low-income communities. Yet, a performance measure that compensates for such socioeconomic factors is often complex and, thus, obscure. For example, Clotfelter and Ladd report that "the attempt by Dallas to treat schools fairly has resulted in an incredibly complex methodology that participants view as a black box." Moreover, they observe, this "lack of transparency could weaken the incentive effects of the program" (1996, 56-57).

29. Bromley offers a novel suggestion for solving this supply problem: He recommends that "the top ten schools of education raise their admission standards to that required by the schools of business, engineering, and law." This would limit the supply of teachers, thus, he forecasts, "driving up starting salaries—and eventually the salaries of all teachers." And, he predicts, "it would lead to an increased interest in a career in education among brighter undergraduates" (1998, 61-62).

Note that a university has several options for responding to any effort to impose accountability on its teachers' college. It can improve it (by working harder or smarter). Or, it can exit. If it believes that improving the teachers' college will be very difficult—that is, if it believes that attracting better students will be very difficult—it can choose to put its resources into other lines of business in which it will have a better chance of success. After all, the opportunity cost of improving a teachers' college—in terms of the inability to improve other components of the university—could be very high. Several decades ago, Duke University closed both its nursing school and its education school.

- 30. For example, in 1999, Oklahoma needed mathematics teachers. The state had 700 people who are certified to teach math but weren't. They were working elsewhere. In Oklahoma, a college graduate could (then) earn \$24,600 as a math teacher or \$40,000 to \$50,000 as computer specialist (Bradley 1999b, 10).
- 31. Principals in New York City can increase their salary by \$30,000 by moving to the suburbs (Olson, 1999b, 21).
- 32. This industrial metaphor suggests that educational production is a line operation, which, writes Rosenthal, produces "a high volume of services in rather routine fashion." In reality, however, education is more like a job shop, which tends "to customize a smaller scale of work" (1989, 113). Still, we continue to use a mental model of accountability that suggests we are thinking about education production as a line operation.
- 33. Inevitably, they will create a few defective products—particularly if some of their raw materials are inferior—but these should be kept to a minimum.
- 34. Bromley suggests that economists, at least, tend to think about "the school as a firm" and that "the economic literature on the efficiency of public schools starts from the classic production function." Further, he suggests that the implicit use of "this traditional economic model" shapes how we think about what should be done to improve American education (1998, 43-46).
- 35. Again, however, the outcome that we really want to produce is productive workers and responsible citizens.
- 36. This single question covers the five accountability questions raised by Leithwood and Earl (2000, 2):

What level of accountability is to be provided? [My "what?"] Who is expected to provide the account? [My "whom?"] To whom is the account owed? [My "who?"] What is to be accounted for? [More of my "what?"] And what are the consequences of providing an account? [My "how?"]

Leithwood and Earl's last question about consequences is, however, narrower than my "how?" I want my "how?" to cover more than rewards and sanctions.

- 37. At the beginning of the 1999 baseball season, after years of being the accountability holders, major league baseball players decided to become the accountability holders by publishing a ranking of major-league umpires.
- 38. Some states seek to hold their districts accountable. In 1999, Mississippi and New Jersey issued report cards on districts but not on schools (though New Jersey now has them for schools). In West Virginia, if one or more schools are failing, the state has the power to take over the whole school district. And Maryland seeks to hold its districts accountable for fixing their failing schools (Keller 1999, 42).
- 39. The classic example of industrial production is the automobile; after all, Henry Ford invented the assembly line. Nevertheless, automobile production has moved beyond traditional, mass production to something that looks more like co-production. Womack, Jones, and Roos (1990) call this lean production, with the company as community rather than hierarchy and suppliers as partners rather than subordinate vendors. And, rather than impose accountability on their employees and suppliers, lean-production companies create arrangements of mutual responsibility (with mutual reward).
- 40. In 2001, New Mexico added parental involvement to the accountability criteria used to rate schools (Gewertz 2002, 139).
- 41. Some schools did post sheets on school bulletin boards on which parents could sign up for a teacher conference, but then did little to inform parents of this system. Moreover, reported *The*

Washington Post, this sign-up system would not work in those schools that forbid parents from walking their children into the building (Strauss 1998).

- 42. Again, Deming's parable of the red beads seems directly applicable. See endnote 28.
- 43. Arkansas was requiring students to pass a comprehensive exam to graduate from high school, but the high rate of student failure caused it to drop the requirement (Olson 1999a, 10).
- 44. One study of 102 low-achieving students in Chicago found that high-stakes testing motivated a majority of these students to increase their work significantly, but a third of them did little (Roderick and Engel 2001).
- 45. Eighteen states have some kind of No Pass, No Drive law. Most, however, only require that students attend school—but they need not demonstrate that they are actually learning anything (Education Commission of the States 1998).
- 46. In the fall of 2001, the Illinois Board of Education decided, because of low test scores, not to renew the contract of State Superintendent Glenn W. McGee (Stricherz 2001).
- 47. Although most of the scholarly literature on accountability in education implicitly employs an accountability relationship that is hierarchical and unidirectional, this is not exclusively the case. For example, Henry (1996) proposes a community accountability that is similar to my compact of mutual, collective responsibility. And in an article about accountability in education that explicitly uses the agent concept (and thus implicitly suggests that these agents have principals), Robinson and Timperley report on one exceptional school in New Zealand that had created "mutual accountability and shared responsibility for improvement" (2000, 78).
- 48. I am, undoubtedly, pushing the distinction between accountability and responsibility further than the traditional definitions of these two words may warrant. Webster's New Dictionary of Synonyms lists as synonyms "responsible, answerable, accountable, amenable, and liable." It reports that "responsible, answerable, and accountable are very close . . . meaning capable of being called upon to answer or make amends to someone for something. Although often used interchangeably they are capable of distinction based on their typical applications." Specifically, it argues: "Accountable is much more positive than responsible or answerable in its suggestions of retributive justice in case of default" (Gove 1968, 690).
- 49. My concept of accepting responsibility (as opposed to imposing accountability) is similar to the idea of signing up as described by Tracy Kidder in *The Soul of a New Machine*. At Data General, a firm that designed and built microcomputers, engineers were rarely ordered to do things. Rather, they signed up to do them. And getting an engineer to sign up was much more effective than an order, because, in signing up, the engineer made a personal commitment to produce the result. Thus, the manager's job was not to give orders but to convince people to sign up: "Nobody had ordered him to do all this. [Middle manager, Carl] Alsing had made the opportunity available, and [engineer Chuck] Holland had signed up" (1981, 63, 160).

Organizations, argues Kidder, are held together by "webs of voluntary mutual responsibility, the product of many signings-up." (1981, 120). All people in an organization have a responsibility to the people above them, the people below them, and to their peers operating at the same level.

50. "Because legislators ought to be accountable for rationalizing the system of delivering publicly financed human services," write Bardach and Lessor, "they should to some degree be accountable to the people who work the system and who know the most about it. It is not enough to say that legislators are accountable to the voters; for the delegate model of representation needs to be supplemented by a trusteeship model which, properly understood, implies a duty to consider advice from all sources that have a reasonable probability of making a helpful contribution to legislators' performance of the trusteeship function" (1996, 220).

51. In the Reynolds School District in Oregon, parents and teachers sign a contract outlining the responsibilities of the school, the parent, and the student. The district also provides parents with information about how to prepare their pre-school children for school (Blum 2000, 104).

REFERENCES

- Allen, Michael. 1999. Student Results and Teacher Accountability. A Policy Brief on Teacher Evaluation. Denver: Education Commission of the States.
- Archer, Jeff. 1999. "New Teachers Abandon Field at Higher Rate." *Education Week* 18, no. 27: 1, 20-21.
- —. 2001. "Connecticut." Education Week 20, no. 17: 120-121.
- Bardach, Eugene, and Cara Lessor. 1996. "Accountability in Human Services Collaboratives—For What? and To Whom?" *Journal of Public Administration Research and Theory* 6(2):197-224.
- Behn, Robert D. 1997. "Linking Measurement and Motivation: A Challenge for Education." *Advances in Educational Administration* 5:15-58.
- —. 1998. "Cheating: Honest & Dishonest." The New Public Innovator 1, no. 1: 18-9.
- —. 2001. Rethinking Democratic Accountability. Washington, D.C.: The Brookings Institution Press.
- —. 2003. Forthcoming. "Why Measure Performance: Different Purposes Require Different Measures." *Public Administration Review*.
- Blum, Robert E. 2000. "Standards-Based Reform: Can It Make a Difference for Students." *Peabody Journal of Education* 75(4):90-113.
- Bradley, Ann. 1999a. "Zeroing in on Teachers." Education Week 18, no. 17: 46-47, 49-52.
- —. 1999b. "States' Uneven Teacher Supply Complicates Staffing of Schools." Education Week 18, no. 26: 2, 10-11.
- Brennan, Robert L. 2001. "Some Problems, Pitfalls, and Paradoxes in Educational Measurement." *Educational Measurement: Issues and Practice* 20(4):6-18.
- Bromley, Daniel W. 1998. "Expectations, Incentives, and Performance in American Schools." *DÆDALUS* 127(4):41-66.
- Bush, George W. 2001a. Excerpt From Bush Statement Announcing Start of His Education Initiative. *The New York Times*, 24 January. See also: http://www.whitehouse.gov/news/releases/2001/01/print/20010123-2.html, Internet.
- —. 2001b. Communication from The President of the United States Transmitting A Report for Nationwide Education Reform Entitled, "No Child Left Behind." House Document 107-34, 30 January. Washington, D.C.: U. S. Government Printing Office.
- 2001c. "President Urges Quick Passage of Education Plan in Radio Address." The White House (September 1) [cited 18 November 2002]. Available at http://www.whitehouse.gov/news/releases/2001/09/print/20010901-2.html, Internet.
- —. 2002. "President Emphasizes Teacher Quality in Radio Address." The White House (March 2) [cited 18 November 2002]. Available at http://www.whitehouse.gov/news/releases/2002/03/20020302.html, Internet.
- Clinton, William Jefferson. 1999. "Urging Nation to 'Aim Higher,' Clinton Offers Proposals on Education, Retirement Security, Health Care." *CQ Weekly*, 23 January, 201-7.
- Clotfelter, Charles T., and Helen F. Ladd. 1996. "Recognizing and Rewarding Success in Public Schools." Pp. 23-63 in Helen F. Ladd, ed., *Holding Schools Accountable: Performance-Based Reform in Education*. Washington, D.C.: The Brookings Institution.
- Coleman, James S., E.Q. Campbell, C.J. Hobson, J. McPartland, A. Mood, F. Weinfeld, and R York. 1966. *Equality of Educational Opportunity*. Washington, D.C.: U.S. Government Printing Office.

- Curran, Bridget. 1999. Focusing on Results: Toward an Education Accountability System. Washington, D.C.: National Governors' Association.
- Deming, W. Edwards. 1986. *Out of Crisis*. Cambridge, Mass.: Center for Advanced Engineering Study, Massachusetts Institute of Technology.
- Earl, Lorna, and Nancy Torrance. 2000. "Embedding Accountability and Improvement into Large-Scale Assessment: What Difference Does It Make?" *Peabody Journal of Education* 75(4):114-41.
- Education Commission of the States. 1998. States with 'No Pass/No Drive' Restrictions: September 1998. Denver: Education Commission of the States.
- Ferrechio, Susan. 1998. Parents Wanted for Conferences; Incentives Used to Lure Them. *The Washington Times* (of Washington, D.C.), 16 November.
- Gewertz, Catherine. 2002. "New Mexico." Education Week 21, no. 17: 138-39.
- Gormley, William T., Jr., and David L. Weimer. 1999. *Organizational Report Cards*. Cambridge, Mass.: Harvard University Press.
- Gove, Philip B. 1968. Webster's New Dictionary of Synonyms. Springfield, Mass.: G. & C. Merriam Company.
- Gregovich, Terrel. 1999a. Governors Boldly Leading the Way. Backgrounder, 20 February. Washington, D.C.: National Governors' Association.
- —. 1999b. Nation's Governors Focus on Education Accountability. News release, 22 February. Washington, D.C.: National Governors' Association.
- Hawthorne, Phyllis. 1974. *Legislation by the States: Accountability and Assessment in Education*. Denver: The Cooperative Accountability Project.
- Henry, Gary T. 1996. "Community Accountability: A Theory of Information, Accountability, and School Improvement. *Phi Delta Kappan* 78, no. 1: 85-91.
- Herzberg, Frederick. 1968. "One More Time: How Do You Motivate Employees?" *Harvard Business Review* 46(1):53-62.
- Herzberg, Frederick, Bernard Mausner, and Barbara Bloch Snyderman. [1959] 1993. *The Motivation to Work*. Reprint, New Brunswick, N.J.: Transaction Publishers.
- Hirschman, Albert O. 1970. Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States. Cambridge, Mass.: Harvard University Press.
- Ingersoll, Richard M. 2001. "Teacher Turnover and Teacher Shortages: An Organizational Analysis." *American Educational Research Journal* 38:499-534.
- Jayson, Sharon. 1999. AISD, Administrator Indicted: District and Deputy Superintendent Face Charges in TAAS Data Manipulation. *The Austin American-Statesman*, 7 April.
- Johnston, Robert C. 1999a. "Turning Up the Heat: Creating Accountability for Students." *Education Week* 18, no. 17: 53-9.
- —. 1999b. "Firm but Friendly Pressure." Education Week 18, no. 17: 54.
- —. 1999c. "Texas Presses Districts in Alleged Test-Tampering Cases." *Education Week* 18, no. 27: 22.
- —. 2000. "Chicago Parents Get Report Cards on Involvement." Education Week 20, no. 10: 1, 20-1.
- Kearns, Kevin P. 1996. Managing for Accountability: Preserving the Public Trust in Public and Nonprofit Organizations. San Francisco: Jossey-Bass.
- Keller, Bess. 1999. "A Role for the Districts: They Can Make, or Break, Accountability." *Education Week* 18, no. 17: 41-4.
- Kelley, Carolyn, Sharon Conley, and Steve Kimball. 2000. "Payment for Results: Effects of the Kentucky and Maryland Group-Based Performance Award Programs." *Peabody Journal of Education* 75(4):159-99.
- Kidder, Tracy. 1981. The Soul of a New Machine. Boston: The Atlantic Monthly Press.

- King, Richard A., and Judith K. Mathers. 1997. "Improving Schools through Performance-Based Accountability and Financial Rewards." *Journal of Education Finance* 23:147-76.
- Kohn, Alfie. 1993. *Punished by Rewards: The Trouble with Gold Stars, Incentive Plans, A's, Praise, and Other Bribes*. Boston: Houghton Mifflin.
- Kurtz, Michele. 1998. Teachers See Disincentive to Helping Low-rated Schools. *The News and Observer* (of Raleigh, N.C.), 18 February.
- —. 1999. AISD Tried to Improve Dropout Rate Data: Subpoenaed Memos Show District's Intense Effort to Avoid 'Low-performing' Status for Austin School. *The Austin American-Statesman*, 14 April.
- Ladd, Helen F., ed. 1996. "Introduction." Pp. 1-19 in Helen F. Ladd, ed., *Holding Schools Accountable: Performance-Based Reform in Education*. Washington, D.C.: The Brookings Institution.
- Leithwood, Kenneth, and Lorna Earl. 2000. "Educational Accountability Effects: An International Perspective." *Peabody Journal of Education* 75(4):1-18.
- Leithwood, Kenneth, and Doris Jantzi. 1999. "The Relative Effects of Principal and Teacher Sources of Leadership on Student Engagement with School." *Educational Administration Quarterly* 35, Supplemental:679-706.
- Levinson, Harry. 1973. *The Great Jackass Fallacy*. Boston: Harvard University Graduate School of Business Administration.
- Manzo, Kathleen Kennedy. 1999. "Seeing a Payoff: North Carolina's Accountability Plan Has Put the State's Troubled Schools on the Path to Reform." *Education Week* 18, no. 17: 165, 200.
- Martinez, Michelle M. 2002. District Fined for Altering Test Data: Austin School District Pleads No Contest to Tampering with TAAS Reports, Will Pay \$5,000. *The Austin American-Statesman*, 9 January.
- Maslow, A.H. 1943. "A Theory of Human Motivation." Psychological Review 50:370-96.
- Meyer, Lori, Greg F. Orlofsky, Ronald A. Skinner, and Scott Spicer. 2002. "The State of the States." *Education Week* 21, no. 17: 68-92.
- Meyer, Robert H. 1996. "Value-Added Indicators of School Performance." Pp. 197-223 in Eric A. Hanushek and Dale W. Jorgenson, eds., *Improving America's Schools: The Role of Incentives*. Washington, D.C.: National Academy Press.
- Miller, Beth. 1999. Teachers Union Flexes Muscles: When DSEA Talks—and It Knows the Talk—Lawmakers Listen. *The News Journal* (of Wilmington, Del.), 15 March.
- Mullis, Ina V.S., Michael O. Martin, Eugenio J. Gonzalez, Kelvin D. Gregory, Robert A. Garden, Kathleen M. O'Connor, Steven J. Chrostowski, and Teresa A. Smith. 2000. TIMSS 1999 International Mathematics Report. Chestnut Hill, Mass.: Boston College, Lynch School of Education, The International Study Center.
- Murnane, Richard J. 1987. "Improving Education Indicators and Economic Indicators: The Same Problems?" *Educational Evaluation and Policy Analysis* 9:101-16.
- National Association of State Boards of Education. 1999. Non Pass, No Play: Eligibility Requirements for Extracurricular Activities. *Policy Update* 7, no. 12 (June). Alexandria, Va.: Policy Information Clearinghouse, National Association of State Boards of Education.
- New Haven Public Schools. 2001. Greater Achievement through Shared Accountability Accountability Task Force Report, 11 June [cited 18 November 2002]. Available at http://www.nhps.net/pdf/NHPSReport_June11_2001.pdf, Internet.
- Ogawa, Rodney T., and Ed Collom. 2000. "Using Performance Indicators to Hold Schools Accountable: Implicit Assumptions and Inherent Tensions." *Peabody Journal of Education* 75(4):200-15.
- Olson, Lynn. 1999a. "Shining a Spotlight on Results." *Education Week* 18, no. 17: 8-10.

- —. 1999b. "Demand for Principals Growing, but Candidates Aren't Applying." *Education Week* 18, no. 25: 1, 20-2.
- —. 2000. "Sweetening the Pot." Education Week 19, no. 18: 28-30.
- Portner, Jessica. 1999. "Reality Strikes: After Much Debate, Virginia's Students Start Taking the State's New Exit Exams." *Education Week* 18, no. 17: 181.
- Public Agenda. 1999. Playing Their Parts: What Parents and Teachers Really Mean by Parental Involvement in Public Schools. New York: Public Agenda. See also http://www.publicagenda.org/specials/parent/parent.htm, Internet.
- Reid, Karla Scoon. 2001. "New Haven Accountability Plan Targets Parents." *Education Week* 21, no. 7: 5
- Riordon, William L. 1963. *Plunkitt of Tammany Hall: A Series of Very Plain Talks on Very Practical Politics*. New York: E. P. Dutton.
- Robinson, Viviane, and Helen Timperley. 2000. "The Link between Accountability and Improvement: The Case of Reporting to Parents." *Peabody Journal of Education* 75(4):66-89.
- Roderick, Melissa, and Mimi Engle. 2001. "The Grasshopper and the Ant: Motivational Responses of Low-Achieving Students to High-Stakes Testing." *Educational Evaluation and Policy Analysis* 23:197-227.
- Rogosa, David. 1999. How Accurate Are the STAR National Percentile Rank Scores for Individual Students? An Interpretive Guide. Stanford, Cal.: Stanford University.
- Rosenthal, Stephen R. 1989. "Producing Results in Government: Moving beyond Project Management and Its Limited View of Success." *Journal of Policy Analysis and Management* 8:110-6.
- Samuels, Christina A. 1999. Some in Va. Rejecting Student Teachers. *The Washington Post*, 20 February.
- Samuelson, Robert J. 1999. Why I Am Not a Manager. Newsweek, 22 March, 47.
- Sandham, Jessica L. 2001. "California." Education Week 20, no. 17: 115-6.
- Schwartz, Robert. 2000. "School Accountability—An Elusive Policy Solution: The Israeli Experience in Comparative Perspective." *Journal of Public Policy* 20:195-218.
- Simmons, Tim. 1999a. Focus on Reading Pays Off. *The News and Observer* (of Raleigh, N.C.), 5 March.
- —. 1999b. Death Knell Sounds for Social Promotion in N.C. Schools. *The News and Observer* (of Raleigh, N.C.), 1 April.
- Strauss, Valerie. 1998. A School Attendance Plan for Parents. *The Washington Post*, 15 November. Stricherz, Mark. 2001. "Getting Its Wish." *Education Week* 21, no. 13: 18.
- Viadero, Debra. 2002. "Researcher Skewers Explanations behind Teacher Shortage." *Education Week* 21, no. 30: 7.
- Wainer, Howard. 1993. "Measurement Problems." Journal of Education Measurement 30:1-21.
- Walton, Mary. 1986. The Deming Management Method. New York: Dodd, Mead.
- Watts, James A., Gale Gaines, and Joseph Creech. 1998. *Getting Results: A Fresh Look at School Accountability*. Atlanta: Southern Regional Education Board.
- White, Kerry A. 1998. "Florida's 'List of Shame' Shrinks As Legislators Hail Improvement." Education Week 17, no. 35: 18.
- Womack, James P., Daniel T. Jones, and Daniel Roos. 1990. *The Machine That Changed the World: The Story of Lean Production*. New York: Rawson Associates.
- Zielbauer, Paul. 2001. In New Haven, Report Calls for Making Education Everybody's Business. *The New York Times*, 2 September.