## 7

# Pedagogy and Policy

## David K. Cohen Carol A. Barnes

Much has been written about educational policy, but little has been written about how policy educates. That is curious, for nearly any policy must be educative for those who enact it. Policymakers may not intend such education, and in fact often are blissfully ignorant of the learning that their creations entail for enactors. But policies and programs regularly propose novel purposes. If they did not, they would be completely redundant. Some learning is required to achieve any new purpose, and that would be impossible without some education, even if it is only hasty self-education on the job.

These points hold for policies of all sorts. It is relatively easy to see that very innovative policies would require considerable education for enactors. For example, recent efforts to transform mathematics instruction from rote memorization to deep understanding would require extraordinary learning for most elementary school teachers. After all, they know only a little mathematics and seem to understand less. More important, the math that these teachers know usually is routine and algorithmic rather than deeply understood. The recent policies seek to remedy the consequences for children of teachers' weak knowledge. But teachers could hardly help children to cultivate a much deeper and more complex understanding of mathematics unless they learned a different version of

math themselves. And few could learn something so different without considerable education.

Even much more prosaic policies require learning. When states reduced the speed limit to 55 miles per hour, motorists who had been in the habit of driving much faster had to learn to keep their speed down. Such learning was required even though drivers already knew, as a technical matter, how to slow a car down. Theirs may not have been very complex learning. Perhaps they had only to teach themselves to monitor the speedometer more carefully, or to begin their trips earlier. Simple though such things may be, each entails a bit of learning. And as many ticketed speeders can attest, such simple learning can be quite difficult. States and localities increasingly have organized driver reeducation programs to encourage the requisite learning.

Hence learning for enactors is essential, whether or not policies and programs recognize the need for it. Most policies and programs at least tacitly recognize an educational need, as they offer regulations, guidelines, and the like. We might regard these as the most rudimentary curricula of policy. They sometimes include step-by-step manuals for learning; they typically explicate the meaning of key terms; and they often define acceptable interpretations. In some cases the need for instruction is quite explicitly recognized, as when policymakers offer enactors formal "training" or "technical assistance."

But that sort of education may be only a beginning. The ambitious changes in mathematics instruction mentioned above would require much more extensive teacher learning. In contrast, many other policies are thought to have no educational requirements because they demand only "compliance." Title VI of the 1964 Civil Rights Act required that federal funds be cut off if public agencies practiced discrimination, a provision that proved to be a potent tool in southern school desegregation. Regulations, guidelines, and other technical guides to learning played a key role in enacting this policy. But as it happened, legal and administrative compliance required considerable learning of rather different sorts, and often quite extraordinary education as well. For example, federal officials had to learn how to use Title VI to produce desegregation rather than die-hard resistance, damaging political

explosions, and enforcement failures.<sup>3</sup> Many local officials also had to learn their own version of these things if they wished to defuse local political dynamite. In those troubled years, when few white Americans had any experience with the enforcement of constitutional guarantees for African-Americans, such learning was no simple matter. Compliance with Title VI also required that many students of both races learn to go to school together, for if schools collapsed in race riots compliance would be impossible. Many local educators also had to learn how to tolerate biracial schooling, and even how to encourage and support it. At a time when few Americans had any experience with equal-status contact between the races, such learning was an extraordinary task for Americans of all sorts. Yet it was essential for the enactment of a policy that seemed only to seek legal compliance.<sup>4</sup>

**Pedagogy and Policy** 

Our examples suggest that if the education of enactors is nearly always an element in policy, it can be a more or less important element. It has been increasingly important in education since the end of World War II, for policies and programs have made progressively greater demands for educators' learning. The 1950s curriculum reforms sought to improve teaching, as did Head Start and Title I of the Elementary and Secondary Education Act (ESEA) of 1965 and the "back to basics" movement of the 1970s and early 1980s. Each required that teachers learn a good deal in order to make the improvements that policymakers proposed, though these requirements often seemed to go unnoticed by policymakers. The postwar policies and programs were educative in the general sense that is common to any policy. But they also were educative in a very specific sense: they sought to promote new pedagogies for pedagogues.<sup>5</sup> That point holds with a vengeance for recent efforts to promote "higher-order thinking," "teaching for understanding," and much deeper knowledge of academic subjects.

To say that most policies and programs entail learning and thus some education is only to make a logical or psychological claim. It tells us nothing about the education that actually was provided. That is our subject here: what kind of education has educational policy offered to enactors? What has been the pedagogy of policy? To answer these questions we must inquire about how policymakers actually tried to teach teachers to teach differently,

211

and to do that we must consider policy as a sort of instruction. Such a reading of policy is of course more suitable in some cases than others, but it seems marvelously suitable for post-World War II education.

In considering the pedagogy of policy, we employ a scheme that is familiar to students of instruction. We begin with purposes: what pedagogical aims have state and federal policymakers pressed on teachers? Then we turn to methods: what educational approaches have policymakers used as they have sought to teach teachers to teach differently? We also inquire about consistency: how do the pedagogies that policies enact compare with those that they press teachers to adopt?

One thread in our answers to those questions is paradoxical. Though policymakers have developed extraordinarily rich ambitions for schools, educational policies and programs have not been richly educative for enactors. The pedagogy of educational policy generally has been didactic, much as teaching often is didactic. Policymakers are practiced at telling teachers what to do, but they rarely have done much more than lecture. Like many teachers they focus more on broadcasting their message and covering the material than on figuring out what learners make of it and framing instruction accordingly. Cases in which policymakers or program managers engaged educators in extended instructional conversations that were designed to encourage the desired learning are even more scarce than cases in which teachers engage students in such conversations.

Most troubling, policymakers seem to have learned little from experience. The pedagogy of policy remains quite undeveloped even though policymakers' ambitions for classroom pedagogy have developed quite dramatically. In the last five or six years policymakers have advanced a new and much more ambitious agenda for improving pedagogy, as they press schools to offer "higher-order thinking," "teaching for understanding," and the like. Yet for the most part these policies break little new ground in efforts to educate enactors. Though policymakers now seek dramatic revisions in classroom instruction, they make few such revisions in their own efforts to help teachers make those instructional changes. Even that disjunction is only dimly and occasionally noticed by those who

make policiès and manage programs. Hence, we conclude by probing another issue: why has the pedagogy of education policy been so weakly educative?

### **Policy and Pedagogy**

What educational aims have policymakers embraced as they have tried to teach teachers to improve their teaching? The answers vary, depending on the policies in question. We consider three of the great episodes in post-World War II education policy. The 1950s · curriculum reforms sought intellectually ambitious instruction for America. Students were to become little scientists and mathematicians, "doing" mathematics and "messing about" with science. These were heady plans, especially in view of American educators' previous efforts to do just the opposite. Since the beginning of the twentieth century, most educators and reformers had tried to concoct a "practical" education for most students on the grounds that few young Americans either wanted or needed anything more intellectually ambitious and that only a few could manage it in any event. If we view the fifties curriculum reforms against the background of such sad ambitions, it is probably unavoidable that they should seem elitist. Whether or not reformers intended improvement only for an elite, they did embrace a sort of academic seriousness that self-styled democratic reformers had been denouncing as elitist since 1900.6

Head Start and Title I of the 1965 ESEA were the leading programs in the second great postwar policy episode, and they were hardly elitist: both proposed to improve education for the poor. Their approach was quite plain in one sense—to provide more resources for schools, teachers, and families. But in another sense the approach was quite unclear, for initially both programs were agnostic about instructional content and pedagogy. How the resources were to be used was not an issue at the outset. For example, the Head Start and Follow Through Planned Variation experiments in the late 1960s and early 1970s included everything from open education on one end to highly structured behavior modification programs on the other.<sup>7</sup>

The "back to basics" movement of the 1970s and 1980s was

the third postwar policy episode that we consider, and these reformers were not at all agnostic about curriculum and instruction. They believed that education had badly deteriorated for most students, including those from disadvantaged circumstances. They argued that students should at least be required to master the rudiments of knowledge, and pressed a largely traditional concept of the basics. Though some interpreted the basics as a traditional academic curriculum, most reformers adopted quite a different and much more narrow view of the ends of education, one that was light-years from the earlier curriculum reforms. Indeed, this movement was notable for didactic concepts of teaching and formulaic approaches to improvement. Reform and research abounded with lists and other tidy formulae, including the elements of "effective" schools and the steps in teaching with Madeline Hunter's ITIP.

A fourth great episode may be in the making, though it is too soon to tell. In the last five or six years another group of reformers has taken off in yet another direction. They demand more thoughtful and intellectually ambitious instruction. They argue that students must become independent thinkers and enterprising problem solvers, and that schools should offer intellectually challenging instruction that is deeply rooted in the academic disciplines. These reformers envision instruction that is in some respects reminiscent of the Sputnik era. It certainly is much more thoughtful, adventurous, and demanding than was proposed by most advocates of back to basics. And it is a far cry from the rudimentary instruction that is found in most educational programs for the disadvantaged.

In just forty years, then, policymakers have embraced several different and sometimes divergent educational purposes. In fact, the aims of state and national education policy have changed so often since World War II that we can see no consistent vision of educational improvement in them. Yet these varied purposes have accumulated in schools and school systems. The ambitions for learning that policymakers pressed on teachers in the 1950s were only partly displaced by the new lessons that policymakers sought to teach in the 1960s. For instance, the innovative texts born in the 1950s continued in use in many high schools—especially in the top tracks—throughout subsequent decades. And the 1960s lessons were only partly displaced by the newer purposes that policymakers pressed

in the 1970s and 1980s. Chapter I and Head Start still thrive, and back to basics is alive and well in U.S. classrooms today, despite previous reforms and the subsequent turn toward teaching for understanding.

Education policy has been an inconsistent teacher. Americans have tried to solve many different problems with formal schooling, but we have been divided about what education is good, what it is good for, and how best to educate. We also have been politically fickle, giving only brief attention to one great problem before turning to another. Policymakers have tried to teach teachers several different and sometimes divergent lessons in quick succession.

What have teachers learned from this? They often say that whatever policy tells them today, it will tell them something different tomorrow. Upon hearing of a new policy or program, teachers often remind reformers and observers that they have been through something like this before. Though such evidence is important, it is only a beginning. To learn more about the educative character and effects of education policy, one also must investigate the specific instructional approaches that were employed and how they turned out. Those approaches varied, depending on how policy problems were framed and what policy instruments were used.

### The 1950s Curriculum Reforms

The 1950s reformers, nearly all gifted researchers who taught at leading universities, saw the problems of education chiefly in curricular terms. They believed that the schools' fare was a largely outmoded pabulum and proposed to replace it with radically new versions of academic subjects. In an early memorandum proposing the reform of science instruction in the schools, Jerrold Zacharias likened education to making good records. To do it well, he wrote, one needs good performers, good equipment, and the like. But "... most important of all is the composition itself; without a great composition everything else is pointless."

Zacharias was a distinguished MIT physicist, the chief author of PSSC Physics, and a leader in the reform movement. His comment caught the spirit of the thing: professors would write new symphonies for schools. Ideas would be the chief instruments of change. <sup>10</sup> Zacharias and his fellow academic crusaders composed novel texts and other materials. They enthusiastically promoted plans for reform. And they invented opportunities for teachers to learn much more at universities. The 1950s reforms stand out in the broad sweep of post-World War II education policy partly because the key instruments of policy were those of education itself, and partly because the ambitions for change were so deeply and exuberantly intellectual.

American public education was hardly notable for its intellectuality, its exuberance, or its well-educated teachers. Despite that, educating teachers was not the reformers' top priority. They worked much harder to produce exciting new materials from which students could learn, irrespective of what teachers knew.11 They did so in part because they thought poorly of teachers, but in much larger part because they thought well of students' independent learning. The reformers worked in the early years of the "cognitive revolution." when psychologists had begun to portray learning as a process of active sense-making and to reject earlier views of it as passive absorption. Jerome Bruner was one of the leading figures in this movement of psychological thought, and he was a prominent curriculum reformer as well. He and others saw learning as a process that required judgment, reflection, and decision making, and they wanted schools to encourage childrens' intelligence and intellectual independence. Additionally, many of the curriculum reformers were scientists who had worked in or near the great scientific revolutions of the twentieth century. They believed that students should learn science by doing the sorts of things that scientists do-"discovering" big ideas, investigating crucial scientific issues, and using authentic methods of scientific inquiry-not learning masses of dead facts and dry formulae. The reformers were convinced that students of all ages could "do" science if only the issues and materials were presented honestly and engagingly. They saw themselves as champions of intellectual independence and excitement in education and as enemies of the drab and mind-numbing instruction that they thought professional educators imposed on students.

Zacharias, Bruner, and many others invested enormous energy, money, and inventiveness in devising lively and novel mate-

rials, especially independent investigations, "hands on" work, and films. 12 They assumed that students should learn largely on their own as they "discovered" ideas, "did" mathematics, "messed about in science," and the like. 13 But these eminent professors knew as little of schools, classrooms, and teachers as they imagined most teachers knew of science. They were particularly ignorant of how classroom teachers might apprehend and use novel materials. As it turned out, few teachers gave students much chance to independently use the new curricula. For while few teachers were deeply familiar with the new subject matter, most felt that it would be irresponsible to let students learn with little or no guidance. Hence when teachers used the materials, they did so in ways that made sense to them. Since few knew much of the new science, that meant that their use of the curricula typically was guided both by the inherited knowledge and pedagogy that reformers wanted to circumvent14 and by teachers' struggles with problems that reformers had never considered, like classroom management and local politics. The curriculum reformers' passion for active learning led them to overestimate the materials' independent power, and their ignorance about schools and teaching led them to underestimate teachers' influence on the use of the materials. 15

For all that, reformers did not ignore teachers' learning. Federal policymakers created the National Defense Education Act (NDEA) and other fellowships to attract talented new people to teaching. Many able recruits began with the help of such fellowships, and some have become America's educational leaders. But they were only a tiny fraction of a much less select army of new teachers then entering the profession. Most of those other recruits entered in more conventional ways, and got much less elegant education. The National Science Foundation also sponsored summer institutes to help experienced teachers learn more science, math, and the new curricula. While many teachers found the institutes useful, they were voluntary, costly, and mostly oriented to high school teaching. Hence they reached only a modest and relatively committed fraction of teachers. Additionally, few of the institutes were of much help when teachers tried to use the new curricula in their schools, for the institutes and workshops were conducted chiefly by faculty members in university arts and sciences departments. Their chief aim was to "cover" the new subject matter, and their grasp of the reformers pedagogical demands on school-teachers seems to have been rather limited. 16

Many of the new curricula were marvelously inventive and an improvement on extant materials, but reformers did not appreciate the learning that they would demand of teachers, students, and parents. Because they greatly overestimated the materials' independent educative power, reformers failed to frame an adequate pedagogy of change. <sup>17</sup> Many teachers nonetheless learned from them, but because they lacked appropriate help, most of that learning seems to have been halting and fragmentary. And because the civil rights movement soon changed educational priorities, much of what teachers learned also was ephemeral.

## Education for the Disadvantaged

Head Start and Title I of the 1965 ESEA were intended to improve instruction, but their task was not framed in curricular terms. The policy problem was instead viewed as one of insufficient resources, incorrect incentives, and inappropriate teacher behavior. The reformers who devised and managed these programs believed that one chief problem was inadequate resources to educate disadvantaged students. Money and materials were one sort of resource, and teachers' knowledge and attitudes were others. Many reformers believed that another problem was lack of rewards for teaching well and lack of punishments for teaching badly.

On this view, no one needed to write new symphonies for schools. The chief tasks of reform were to direct additional resources to the education of poor children, to offer guidance in the use of those resources, and to mobilize incentives for educators to do a good job. Reformers believed that conventional instruments of policy such as regulation and resource allocation would change incentives and professional behavior, and thereby improve instruction.

Resource allocation initially was the chief policy instrument. Head Start provided meals for children from poor families, screened and treated them for health problems, and offered an array of educational activities. Title I made grants to states and localities for schools that enrolled many children from poor families. The mon-

ies would allow schools to beef up instruction by adding teachers, materials, and more instructional assistance.

This seemingly straightforward approach turned out to have major educational requirements. One reason was that the programs were new. Nothing like them had been done before, outside of a handful of small foundation-funded projects. Hence, educators and program administrators had to learn an enormous amount as they started national programs and thousands of local projects. Washington managers offered locals some help, but they could not offer much. For starting new national programs with small staffs meant that national managers' attention was chiefly focused on such rudiments as getting the money out.

Another reason that extensive education was needed was that few of those involved knew much about improving education for disadvantaged students. Initially this lack of knowledge had not seemed to be a problem, for both Head Start and Title I were informed by the assumption that students who had more teachers and books would learn more. Mere exposure to educational resources was thought to be educationally powerful. 18 The assumption helps to explain how reformers could propose sweeping changes in education without considering that educators might have to learn a great deal to make the changes work. Policymakers could ignore instructional design for Head Start and Title I while still believing that classroom learning would improve, for they saw teachers, books, and other resources as instructionally potent in themselves as a kind of curriculum quite apart from any specific instructional design. Like earlier ideas about the potency of new symphonies for schools, these assumptions about the power of added money, materials, and staff made it easy for policymakers to believe that the Great Society educational programs would have dramatic effects without requiring much education for those who would enact them.

That belief soon was called into question. In the late 1960s researchers began to report that students in Title I and Head Start projects learned no more than similarly situated students who had not been in such projects. Had there been only a few of these studies, they probably would not have taken on such importance, but the reports multiplied. While most reports raised questions only about

one particular project, taken together they cast doubt on the entire rationale for Head Start and Title I, and policy analysts took them together. They asked: if students did not learn more when they had more educational resources, why increase resources to improve education?

One response to the query was to assume that more resources would work if they were better focused. Regulation began to play a much larger role as managers sought to ensure that resources were used in educationally productive ways. The first and perhaps largest issue was to make sure that money was concentrated rather than thinly spread. <sup>19</sup> Title I managers used regulation especially assiduously in efforts to require local schools to use federal funds to enrich instruction by adding them to local and state monies, rather than using them to substitute for local and state funds, or to purchase noneducational equipment.

Incentives soon became another focus of regulation. Title I officials began to press state and local educators to attend to instructional results, which in most cases meant test scores. Officials strongly encouraged testing of students as one means to this end, and mandatory evaluation of projects' effects on test scores as another. Federal officials believed that publishing such evaluations would provide valid evidence about projects' success or failure and would show whether teachers and administrators needed to work harder. They also believed that the evidence would give parents and others some leverage to press for better performance where it was indicated.<sup>20</sup> Poor evaluations would produce public pressure for local educators to do a better job in the classroom. As time passed, federal efforts to improve student performance through testing and evaluation increased.

Regulation was educative. <sup>21</sup> For instance, state and local officials learned to organize "pull out" classes, partly because shifting students from regular classes to exclusive Title I offerings seemed a safe way to comply with federal pressure to concentrate resources. State and local officials also learned to use standardized tests, to report results in terms of test scores, and to evaluate projects as national program managers wished. In fact, Title I staffers learned so well that recent reformers, who are promoting more intellectually ambitious teaching, see Chapter I as a major barrier, because

standardized testing and pull-out classes are so ingrained in program operations.

Did regulation improve students' learning? The evidence is mixed. If the question is taken to refer to the specific classroom organization that federal officials urged on state and local educators, it seems that it did not. Brian Rowan and his colleagues studied a range of Title I projects and reported that their organizational formats were unrelated to learning. Pull-out classes neither enhanced nor impeded learning. What made a difference to students' learning was the instructional design of projects. The Title I projects that improved achievement over what might otherwise have been expected were those that focused attention on academic instruction, whether or not they were pull-outs.<sup>22</sup>

From one perspective that was reassuring, for it meant that Title I and similar programs could make a difference if they focused on academic learning. From another angle it was troublesome, for it meant that such programs would not make a difference unless they attended closely to curriculum, and organizing federal regulation of curriculum would be very difficult for program managers and policymakers. There were, after all, long-standing political taboos on national curricula. And taboos aside, there would be many practical problems of design and implementation if managers tried to organize a single curricular focus in a vast national program, for that would require extraordinary political muscle and equally extraordinary intergovernmental coordination. No less difficult, learning to enact such a curriculum would require much more education for program staff and teachers than had ever been contemplated.<sup>23</sup>

### **Back to Basics**

As it happened, Title I managers never had to directly face that large instructional problem. Instead, it was partly solved for them during the back to basics movement of the 1970s and early 1980s. Back to basics was a broad tendency in education that comprised many state and local programs and policies. Though these initiatives varied, they were animated by a common sense that American schools were

in trouble. The well-publicized decline in SAT scores was one worry. Another was the lagging school achievement of poor children. Still another was the sense that schools were not "accountable," that educators had abused a public trust by failing to sufficiently promote achievement. Other concerns included the seeming collapse of academic standards, the rise of "permissiveness" in the 1960s, and the lack of respect for adult authority in schools.

This was not a tidily defined policy problem of the sort one sometimes finds in textbooks. Back to basics was a collection of discontents and a shared mood, but not a single-minded approach to remedy. Some reformers defined the problem as a matter of standards. Others saw it as a matter of politics and incentives. Still others saw it as a curriculum problem. Some reformers focused on tightening up educational standards, others on reasserting adult authority, and still others on making schools more "accountable." As a slogan, "back to basics" nicely captured a vision of history and a public mood, but it did not focus on a single major intervention like curriculum reform or revised resource allocation. Reformers instead used several policy instruments.

One favorite was regulation, and ideas were another. Stiffened high school graduation requirements was an especially popular regulatory approach. In the early 1980s many state legislatures and executive agencies rushed to add high school graduation course requirements, perhaps on the assumption that adding to the courses that students took would add to what they learned. Another regulatory favorite was minimum competency tests. Between the mid-1970s and the mid-1980s many states and localities adopted such tests in efforts to increase "accountability" for schools. State and local school systems were pressed to specify the results for which they would strive, to measure them with tests, and to publicize students' scores. The tests often were required for high school graduation or for grade promotion, or both. The notion was that plain standards, published evidence on performance, and required passing marks would create incentives for teachers to teach effectively and for students to study hard. The tests were far from perfect. Many were hastily contrived under political pressure and even adapted from standardized norm-referenced instruments that had been designed for radically different purposes. But legislators and others believed that the tests would focus teachers' and students' attention on key learning requirements and encourage them to take school more seriously.

A related regulatory approach was the "alignment" of tests and curricula. Between the mid-1970s and the mid-1980s many districts adopted "basic skills" or "essential skills" curricula. Cities that had large minority group school enrollments and many children of poverty were especially likely to take this step. Many of these districts also adopted tests that were referenced to those curriula and took steps to align teaching and learning to the tests and curricula. Some retrained teachers in "effective" teaching. Others monitored students' performance on tests and encouraged teachers to reteach material on which there were poor scores. Others published test results by school. And still others retrained principals to become "instructional leaders," which included such things as devising common instructional goals for the school and learning how to evaluate teachers on their success in effective teaching or in covering the aligned curriculum, or both.

If regulation was a highly visible feature of the back to basics movement, ideas were no less important an instrument of policy.24 In fact, one might regard ideas about how to improve teaching and learning as the campaign's curriculum. Beginning in the mid-1970s, American education began to bubble with notions about how teachers and administrators could create "effective schools," how they could make teaching and schools more "accountable," and how they could teach and evaluate teaching according to one checklist of effectiveness or another. One source of these ideas was researchers' dismay about the reports on schools' relative ineffectiveness that had issued from James Coleman, Christopher Jencks, and others. In response to the dismal news, several researchers began looking for unusually effective and ineffective schools, hoping to show that schools could make a difference and to figure out how they did. Another source of the ideas was reformers who had been disappointed with extant efforts to improve education for disadvantaged children and were searching for ways to do better. Still another source was professional educators, who were disturbed about the reports that "schools didn't make a differ-

**Pedagogy and Policy** 

ence" and were trying to devise schemes that would make it clear that they did, or could.

These efforts soon created a growing sense that schools did make a difference, previous dismal reports to the contrary notwithstanding. Researchers and educators announced that they were discovering the elements of good teaching and instructional management, and their reports quickly became a curriculum for school reform. Though these reports issued from several streams of inquiry, they seemed to have a good deal in common. One crucial common element was a sonata-form conception of instruction. Effective teachers stated the purpose of every lesson in ways that students could easily comprehend. Then they presented each lesson's material clearly. As students dug into the material, teachers checked for students' understanding, evaluated their performance, "retaught" material that had not been learned, and the like. As it developed in these accounts, effective teaching was didactic and tightly designed. It had clear goals, methods that were directly tied to the goals, and close systems of monitoring and evaluation. Orderliness, step-by-step rationality, and a commitment to direct instruction all were crucial to this instructional approach. Improvisation around large themes and indirect instruction were entirely foreign to it.

Another key element in the curriculum of this reform movement was a skills-and-facts view of knowledge. Effective teachers focused on definable skills that students could master. They taught in ways that could be assessed on standardized tests. Hence they presented knowledge in manageable bits and pieces, rather than dealing with large and loose themes. Effective teachers also held center stage in their classes, presenting, regulating, monitoring, and evaluating instruction. These teachers also agreed with others in their school on the purposes of instruction. And they taught in ways that allowed "accountability" to parents and higher authorities. 25

Perhaps the most important feature of this curriculum for reform was that it existed. Previous reform efforts had offered little or no such detailed guidance for teachers. Another important feature was the reform curriculum's practicality. The ideas about teaching that we just sketched above were presented in ways that seemed usable in classrooms. Still another unique feature of the reform curriculum was its extraordinary coverage. Reformers blanketed American education, spreading their proposals from every imaginable source—state education agencies, local districts, professional associations, trade magazines, universities, consulting firms, and intermediate school districts. The back to basics curriculum achieved an extraordinary presence in U.S. education in a rather short time. The ideas became very popular in continuing professional education for teachers and administrators, as well as in the education of new teachers. Educators at all levels embraced the ideas, in part because they offered a clear focus for administrative as well as classroom work. By the early 1980s staff evaluation procedures in many local districts were suffused with the rhetoric of effective schools and Madeline Hunter's ITIP. The ideas also caught on within Title I and almost seemed to become its curriculum in many states and localities.

One additional reason that the ideas spread so quickly was that they did not have to be taught deeply. The back to basics reform curriculum generally was conveyed in quick, how-to-do-it formats in stolen hours during afternoon, evening, and weekend meetings. The pedagogy matched the reform ideas. Instruction was didactic and teacher-centered. Many instructors modeled, in their own presentations, the sort of classroom instruction that they proposed for teachers. They presented lessons in easy steps, with flip charts and overheads. Another reason that the ideas spread quickly was that reformers devised a message that could be useful in more than one way. Administrators could learn how to teach teachers to be effective. Some teachers could learn how to teach others. Administrators could learn how to evaluate teachers' classroom performance, using checklists of "effective" instructional methods. 26

There is no general, direct evidence on how much teachers learned from these reforms or on how extensively the ideas were incorporated into classroom practice. But there is some general indirect evidence of considerable learning and broad incorporation: achievement disparities between African-American and white students narrowed appreciably between 1971 and 1988. Black-white reading score differences in the National Assessment of Educational Progress (NAEP) were cut in half for thirteen-year-olds by 1988, and they were cut by a third for nine-year-olds by 1988. The black-white

disparity in mathematics achievement also was reduced by nearly half for thirteen-year-olds by 1988 and by slightly less than one-third for nine-year-olds.<sup>27</sup> These dramatic increases in NAEP reading and math scores for black and Hispanic students all occurred in basic skills, not in "higher-order" knowledge and skills. If, as reformers argued, teachers should be working much harder on basic skills, one would expect such a result.

These results seem to support the idea that there was appreciable incorporation of the back to basics curriculum in American elementary school classrooms. 28 That view gains additional support from observational studies, which show that many teachers adopted at least portions of the back to basics curriculum. 29 It also fits with the curriculum of reform itself, which was framed and promulgated with the notion of application clearly in mind. The ideas were kept simple. They were delivered in easy-listening formats. And they were broadcast to teachers and administrators from a remarkable variety of sources.

But the evidence is equivocal. For one thing, social policy may have played a large role in the NAEP gains. The 1960s and 1970s saw many social changes that would have been likely to improve childrens' school performance. One was greater educational attainment for African-American and Hispanic young adults who would have had children in school between 1971 and 1988. Another was reduced poverty, better housing, and improved welfare assistance. One was greater educational attainment for African-American and Hispanic young adults who would have had children in school between 1971 and 1988. Another was reduced poverty, better housing, and improve welfare assistance. All these things would be highly likely to improve student achievement; they are elements of the "family background" that has a strong influence on school achievement.

For another thing, much of the direct evidence on the effects of the back to basics crusade is equivocal. There are quite a few studies that show good results from small-scale, carefully controlled direct-instruction-oriented interventions. <sup>31</sup> But there also is some evidence that in ordinary districts that have less carefully controlled interventions, teaching reverts to prior form and student achievement falls off once the interventions end. <sup>32</sup> Additionally, several secondary analyses of research and evaluation reports from many effective schools projects raise grave doubts about the quality of the data and analyses. <sup>33</sup> And one careful reanalysis of the performance

in unusually effective schools casts doubt on the persistence of achievement gains.34

Most important, evidence on the impact of the large-scale regulatory efforts of the 1970s and 1980s is very mixed. The most careful study of graduation requirements concludes that high school course offerings did change and that there may have been a modest effect on students' achievement. But there did not seem to be a strong general effect on either teaching or learning. 55 Nor is there evidence that American teachers learned broadly from minimum competency tests. Several researchers assert that the tests have had a broad and powerful effect on teaching.36 They report that competency tests drove instruction in a mechanical and simplistic direction, that teachers oriented instruction to the test items, and if students did poorly on the tests, remediation consisted of drill on the items they did not know.37 Similarly, a recent U.S. Department of Education report claimed that "... accountability systems ... are very powerful policy tools that have changed school-level planning and teaching activities."38 But for every research claim that testing has such effects, there is another that teachers rarely take testing into account in instruction. 39 And even the reports that argue for powerful effects contain evidence to the contrary. 40

But competency tests did not need to be salient for most teachers in order to support gains in basic skills. They needed only be salient for the teachers of low-performing African-American and Hispanic students. The evidence suggests that competency testing affected instruction chiefly in "high stakes" situations—that is, when the tests counted for students' academic progress, or for schools or teachers. Many minimum competency testing programs were not in the "high stakes" category and were much more likely to enroll poor and minority group children, since advantaged students typically pass with little effort. Hence, the teachers of poor and minority group children were most likely to have learned from the tests, which fits with the NAEP test results.

As with most large-scale social change endeavors, we will never know exactly what the effects of back to basics were, let alone which feature of the effort was responsible for which effect. We are inclined to believe that the crusade did help to change teaching and learning in many U.S. classrooms and that the movement was responsible for some of the achievement gains that African-American and Hispanic students made in the 1970s and 1980s. But the evidence reveals very partial, spotty, and inconsistent classroom implementation of the reform. The movement's success probably owed a good deal to a combination of educational ideas, political and administrative regulation, broad changes in social policy, and the legacies of previous reform. It was essential that reformers blanketed American education with a curriculum that was relatively easy to understand, that seemed timely and practical, and that appealed to educators of many different sorts for many different reasons. But it also helped that state and local school systems were pushing regulatory reforms that stressed the same ideas, that seemed to offer teachers and administrators significant reasons to follow along, and that were especially salient in schools in low-income neighborhoods. Finally, it helped that Title I of the 1965 ESEA had established a national system of program administration by the mid-1970s and that strong professional networks of Title I administrators, teachers, and consultants were beginning to grow. For with those administrative and professional systems in place, Title I officials at the state, national, and local levels could embrace back to basics as their curriculum. The curriculum of this reform was a convenient answer to the problems of program effectiveness that had dogged the Great Society programs. By themselves, no one of these policy instruments would have had much effect, but together they seemed to have an influenced instruction.

#### Conclusion

The pedagogy of educational policy has been didactic and inconsistent. Policymakers have told teachers to do many different, hugely important things in a short time. And in each case policymakers have acted as though their assignment was to dispense answers, not to provoke thought, ask questions, or generate discussion. The pedagogy of policy has been teacher-centered. As policymakers taught, they created few opportunities to listen as schoolteachers and other educators tried to make sense of new de-

mands. Nor have policymakers cast policy as something that might be revised in light of what they learned from teachers' experience.

These features of policy seem ubiquitous. The curriculum reformers of the late 1950s and early 1960s were distinguished academics from great universities, yet they addressed teachers in quite didactic fashion. The reformers did not consider teachers as thoughtful learners and seemed largely unaware of vast problems that most would have in learning from the reforms. A didactic orientation is not peculiar to professors. The reformers who planned and operated Head Start and Title I of the 1965 ESEA were hardly professorial; they were cabinet officers, legislators, program managers, bureaucrats, and advocates for the poor. Yet they addressed teachers no less didactically than the professors, and they seemed similarly unaware of great problems of teacher learning. Nor is didactic orientation peculiar to certain types of policies. The advocates of back to basics pressed relatively simple ideas about instruction on teachers, while the 1950s curriculum reformers pressed very complex ideas on them. But like other reformers, the advocates of basics acted as though teaching was active "telling" and learning was passive accumulation.

How can we account for this uniformly didactic pedagogy of policy? In the back to basics crusade reformers urged a set of changes in classrooms that fit relatively well with established practice, which itself was didactic, teacher-centered, and oriented to skills and facts. They presented the reform ideas in practical, easy-to-adopt formats, and blanketed American education relatively effectively. The pedagogy of the reform fit quite nicely with the pedagogy that reformers urged on teachers.

The 1950s curriculum reforms urged a very different sort of instruction that would have required immense changes in teaching. But while these reforms were pedagogically very ambitious, they were much less effective in reaching teachers. Reformers only weakly understood practice and the problems their ideas posed for practitioners. The changes that they urged would have been extraordinarily difficult to pull off even if reformers had been exquisitely sensitive to teaching and extraordinarily thoughful in the education of teachers. In policy as in classrooms, learners ordinarily find it

much easier to grasp material that is familiar and consistent with what they already know than material that is unfamiliar and inconsistent with extant knowledge.

Another reason for the generally didactic pedagogy of policy lies in American politics and political organization. This is a vast nation, in which several states are larger than many foreign countries. Local control is a tradition of school governance that is dearly held in states large and small. American government is extraordinarily fragmented at all levels and Americans are deeply divided about many matters of education policy. Under these circumstances it often is very difficult for state or national governments to do more than formulate policy and announce it. Given these circumstances and the political, administrative, and educational resources that a more ambitious pedagogy of policy would entail, a simple and spare approach has been all that state and federal policymakers could manage in most cases.

Most local school boards and administrators have not cultivated a more sophisticated pedagogy in dealing with teachers, so politics alone cannot explain the prevalent pedagogy of policy. Americans' expansive belief in the power of education is another explanation for the very limited pedagogy of policy that we have described. The 1950s curriculum reformers urged fundamental change on schools without considering that teachers might have to relearn their practice. Reformers believed students would learn quite nicely on their own if only they had good materials. The 1960s advocates of Head Start and Title I pressed sweeping changes in the education of disadvantaged children without much attention to what teachers would have to learn, in part because they believed students would learn much more if only they had more teachers and better materials.

These reformers shared a characteristic American faith in the power of education. That faith allowed them to avoid careful consideration of instructional design, for if teaching and learning were as easily shaped as Americans have been inclined to believe, why spend lots of time carefully designing instruction? If learning and teaching were not difficult practices, reformers could easily imagine that students would learn independently from exciting materials

and that teachers would find it easy to improve their practice. Lacking a sense that learning and teaching were often difficult, why should policymakers include instructional design in framing policy?

A last explanation for the limited pedagogy of policy is rooted in teaching itself. We have argued that policymakers behave little differently than most teachers. Like teachers, reformers have been in the habit of telling learners what they should learn, without much attention to what teachers thought, or already knew, or made of the policy. Like most teachers, policymakers have made few efforts to engage their students in conversations that could illuminate their grasp of the material or their interpretation of policy. Hence policymakers, like most teachers, have not been able to use learners' ideas and understanding to revise instruction and advance learning. Like most teachers, policymakers focus on "putting the material across." They have learned to consult various interested parties as part of the politics of policymaking, but they inquire little about what enactors may have to learn in order to respond constructively to policy, what it may take for them to learn, how they might best learn, and how policy might be redesigned in consequence of learners' experience. Policy generally has been inattentive to learning, much as teachers often are inattentive.

If teachers typically behave in these ways, why should policymakers act differently? If classroom pedagogy is generally didactic and centered on the teacher, where could policymakers have learned to differently conceive the educational entailments of their handiwork? If, as several scholars point out, school is the chief place in which we all learn about teaching and learning as students, <sup>12</sup> how could policymakers have learned a more attentive and adventurous pedagogy? As long as teaching remains didactic and traditional, how can we expect policymakers to learn to address teachers in ways that are better calculated to change teaching?

#### Notes

1. We use the terms "policy" and "program" interchangeably to refer to large-scale change efforts. To avoid repetition of the two terms we often simply use the term "policy."

- 2. We include even such modestly novel purposes as the reaffirmation of older purposes that had not been achieved. Since policy often deals with the same issue at different times, or with different aspects of the same issue at different times, the combination of novelty and continuity is a regular feature of policy. For instance, the civil rights statutes and judicial decisions of the 1960s and 1970s were in a sense reaffirmations of Reconstruction-era policies. As such they should have required no new learning. Yet in another sense the 1960s and 1970s policies were radically new, for the policies that they reaffirmed had fallen into disuse, or had been contradicted by subsequent practice. Hence, the later civil rights policies required extensive learning.
- 3. See Orfield (1969).
- The 1964 Civil Rights Act recognized some of these educational entailments in Title IV, which provided education for those concerned with desegregation.
- 5. This subject is familiar to policy researchers in one sense, for they have increasingly probed the implementation of policies and programs since the 1960s. Investigators have studied the actions of those who enact policies, the regulations with which they deal, the relations among governments, and the design of policy. But in another sense our subject is unfamiliar to policy researchers, for in all the attention to implementation the educative character of policies and programs has been little noticed. For instance, the curricula of policy have been analyzed under the heading of regulation, not teaching and learning (see, for example, Bardach & Kagan, 1982). Only a few students of implementation have considered what enactors had to learn in order to respond to policies. Fewer still have probed how enactors were taught (see especially Elmore & McLaughlin, 1989).
- 6. On the history of these matters, see Cremin (1961); Dow (1991); Powell, Farrar, & Cohen (1985, chapter 5); and Ravitch (1983). Some of the 1950s reformers did seem to embrace elitist approaches to reform while others did not. Hyman Rickover (1959) appeared to be an unabashed meritocratic elitist in Ed-

- ucation for Freedom. In contrast, Arthur Bestor (1953) seemed much more Jeffersonian in Educational Wastelands. But both argued for high academic seriousness, in opposition to "life adjustment education" and other intellectually flabby doctrines of the interwar decades.
- 7. These experiments were designed to teach educators and policymakers more about the strengths and weaknesses of various instructional approaches, so they could select those that were best.
- 8. Chapter 1 was pressed toward basics in the 1970s and 1980s, and is now being pressed back the other way. Head Start seems to have been much more consistent in its embrace of general principles of preschool and nursery education.
- 9. Silberman, 1970.
- 10. On ideas as policy instruments see Weiss (1990).
- 11. See Dow (1991), especially chaps. 3 and 4.
- 12. Dow, 1991.
- 13. Though some of the curriculum reformers deliberately tried to "teacher-proof" materials, their focus on materials that would be independently educational had much deeper roots. One key assumption was that learning was or should be active sensemaking, and the other was that if new curricular "scores" allowed students to be active sense-makers, they would be powerful. See Bruner (1961) for one participant's view of these notions. See Dow (1991) for a lucid discussion of the issues. Though Dow was a staff member in the Education Development Center (EDC) project that produced Man A Course of Study (MACOS), and a close associate of Jerome Bruner in that project, he presents an admirably balanced account of that curriculum development effort.
- 14. Dow (1991) argues that MACOS sought to become an exception to this generalization and presents some evidence on that point. But MACOS was killed before its plans for teacher education were fairly tried. See Dow (1991), chap. 4.
- 15. Some of this ignorance arose from the reformers' arrogant disdain for professional educators, but ignorance would have

- been a great problem even if the reformers had been models of humility.
- 16. For example, the new science and mathematics educators tended to see teachers' scientific knowledge as "misconceptions" that needed correction, rather than as efforts to make sense of complex material that offered opportunities for learning, revision, and extension.
- 17. For an extended account of this view, see Sarason (1971).
- 18. Under some circumstances, the idea is correct. In less developed nations, in which some children have no schools to attend, children who attend school learn more school subjects. Among those who attend school, those who have teachers and books learn more than those who do not. But in nations like the United States, in which nearly all children in school have comparatively rich educational resources, marginal or even large differences in gross resources are unrelated to students' achievement. One must define educational resources in more discriminating ways in order to observe instructional effects.
- Concentration included focusing on academic year projects in both programs, on elementary schools in Title I, as well as on limiting the number of projects.
- 20. See McLaughlin (1975).
- 21. The education was not necessarily easy. The 1970s vintage Chapter 1 guidelines that advised standardized testing for students in state and local projects created a considerable list of things for state, federal, and local officials to learn about tests and testing. And the federal regulations typically offered a spare and often quite arcane pedagogy. In this case they were so spare that the government soon established agencies that were intended to offer state and local educators various sorts of instruction, including technical assistance, in testing.
- 22. Rowan & Guthrie, 1989.
- 23. Both Title I and Head Start did use so-called conventional education in efforts to improve teaching. Program managers produced and distributed materials on effective approaches to instruction. They created systems to "disseminate" knowledge about instruction and sponsored efforts to offer technical as-

- sistance in a variety of matters related to instruction. They organized meetings in which program participants exchanged ideas and otherwise instructed one another. But such education nonetheless seems to have occupied a minor part in the two programs' efforts to instruct local educators.
- 24. Some of the ideas derived from regulation itself, for no policy instrument is pure. Much of the regulatory work was carried out with a great deal of political fanfare and public attention. The pressure for minimum competency testing and stiffened graduation requirements helped to create a political climate that further increased incentives for teachers' and students' performance and focused political pressures on schools and teachers to improve.
- 25. For a summary of these ideas see Purkey & Smith (1983).
- 26. Resource allocation played only an indirect role in this policy episode. Though few of the back to basics programs and policies had large amounts of money attached, they were part of a big political trade: If schools would offer better performance and more "accountability," public officials would support more revenues for education. Analysts report that education expenditures increased nationally by about 30 percent during the 1970s, and by about the same percentage during the 1980s. Most of these increases were absorbed in higher teacher salaries.
- 27. National Assessment of Educational Progress (1990), Table 3.1. More modest reductions in the gap were reported for Hispanic students. These changes occur against a background of belief that students' performance has been declining. There may have been a decline in test scores between the early 1960s and the 1970s, but there is reason to believe that students who attended school since World War II have higher achievement than students who attended in 1900, or the 1930s. When tests that were used in earlier decades are readministered, today's students do better than their colleagues in the past (Farr & Fay, 1982).
- 28. See Smith & O'Day (1991) for a brief discussion of this point.
- 29. Guthrie, 1990.

- 30. Smith & O'Day, 1991.
- 31. Brophy, 1986; and Brophy & Good, 1986.
- 32. Stallings & Krasavage, 1986.
- 33. Purkey & Smith, 1983; and Rowan, Bossert, & Dwyer, 1983.
- 34. Rowan, Bossert, & Dwyer, 1983.
- 35. We see no grounds for expecting significant teacher learning in this case, since for the most part they were simply being required to teach courses that were already on the books. See Clune, White, & Patterson (1989).
- 36. Darling-Hammond & Wise, 1989; Resnick & Resnick, 1985; Romberg, Zarinnia, & Williams, 1989; and Wise, 1979.
- 37. Madaus, 1988; and Kreitzer, Madaus, & Haney (n.d.).
- 38. Office of Educational Research and Improvement (OERI) State Accountability Study Group (1988, September).
- 39. Moreover, the evidence adduced for an effect of testing consists nearly exclusively of interviews and self-reports. See, for example, Floden, Porter, Schmidt, & Freeman (1978); Ruddell (1985); Salmon-Cox (1981); and MacRury, Nagy, & Traub (1987). There seems to be not a single U.S. study in which teaching was directly and independently observed over time in order to investigate the impact of testing (Madaus, 1988). Since no teaching was independently observed in these studies, the claim that state competency tests were "powerful" and "changed... teaching" is as difficult to assess as claims that testing has no significant effect. Both claims must be treated with caution. Even a group of researchers who believe that testing has a powerful effect on teaching report that there is "... a paucity of definitive information" (Romberg, Zarinnia, & Williams, 1989, p. 16).
- 40. Teachers also regularly presented evidence that was at variance from the conclusions that researchers drew about the effects of testing. For example, teachers' reports on their behavior often are solicited in a highly simplified form. A recent national survey of eighth grade mathematics teachers was one of the most extensive studies in which teachers were queried about their responses to local and state testing programs. Teachers were asked whether they took test results into ac-

count in making decisions—about student placement in ability groups, the content of instruction, test preparation, and the like. But teachers were not queried about how they took test information into account in these decisions. And in only a few instances were they even queried about how much they took test information into account. On the basis of quite simplified evidence about whether testing plays any role in teachers' decisions, the authors concluded that "testing does have an effect on teaching. . . . The majority of teachers change their allocation of instructional time. They gave practice [on tests] and set aside time to prepare" (Romberg, Zarinnia, & Williams, 1989, p. 88).

But unlike some others, this study offers a few bits of evidence on the extent of use. That evidence belies the categorical reports. The authors write that "... just over half..." of the teachers in their survey reported that they "set aside time to prepare for the test"—that is, slightly less than half did no test preparation whatever. And of the half that did set aside time for preparation, just under half (45 percent) set aside only "... several days a year" (Romberg, Zarinnia, & Williams, 1989, p. 80). Since the study concerned only one school subject which is ordinarily taught no more than an hour a day, the report of "several days" preparation does not convey a sense of overwhelming impact. Quite the contrary. The report shows that only about a quarter of the teachers spent more than a few class periods on test preparation, and that roughly half spent no time at all.

An OERI report offers a similar picture. In its only discussion of how much teachers take tests into account, the authors present an example drawn from a school that deliberately tried to improve, apparently in response to earlier, poorer test scores. An informant reported that "we spend 30 minutes a week on skills" (Romberg, Zarinnia, & Williams). Averaged over a five-day school week, that comes out to six minutes a day. While six minutes is a noticeable period of time, it hardly seems a major change in instruction.

Similarly, the OERI study cited above reports that "a

majority" of teachers interviewed were "... concerned about their students' test performance and are willing to change their teaching to improve it" (OERI, 1988, p. 33). But at the same time, the study notes that teachers expressed "... substantial ambivalence" about teaching to the test (p. 33). Apparently many teachers were simply unwilling to even consider changing their teaching in light of the test. Additionally, of the majority who were willing to change their teaching, many were "ambivalent" about whether a competency test was the proper instrument for change (p. 33). This does not suggest that testing was a powerful policy intervention.

- 41. On these matters, see Cohen & Spillane (1992).
- 42. Lortie, 1975.

#### References

- Bardach, G., & Kagan, R. (1982). Going by the book: The problem of regulatory unreasonableness. Philadelphia: Temple University Press.
- Bestor, A. (1953). Educational wastelands. Urbana: University of Illinois Press.
- Brophy, J. (1986). Teacher influences on student achievement. *American Psychologist*, 41(10), 1069-1077.
- Brophy J. E., & Good T. L. (1986). Teacher behavior and student achievement. In Merlin C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed.) Washington, DC: American Educational Research Association.
- Bruner, J. (1961). The process of education. Cambridge: Harvard University Press.
- Clune, W., White, P., & Patterson, J. (1989). The implementation and effects of high school graduation requirements. New Brunswick, NJ: Rutgers University, Center for Policy Research in Education.
- Cohen, D. K., & Spillane, J. P. (1992, April). Policy and practice: The relations between governance and instruction. *Review of Research in Education*. Washington, DC: American Educational Research Association.

- Cremin, L. (1961). The transformation of the school. New York: Random House.
- Darling-Hammond, L., & Wise, A. E. (1989). Beyond standardization: State standards and school improvement. The Elementary School Journal, 85 (3), 315-356.
- Dow, P. (1991). Schoolhouse politics: Lessons from the Sputnik era. Cambridge: Harvard University Press.
- Elmore, R. F., & McLaughlin, M. W. (1989). Steady work: Policy, practice, and the reform of American education. Santa Monica, CA: RAND Corporation.
- Farr, R., & Fay, L. (1982). Reading trend data in the United States: A mandate for caveats and caution. In G. R. Austin & H. Garber (Eds.), The rise and fall of national test scores (pp. 83-137). New York: Academic Press.
- Floden, R. E., Porter, A. C., Schmidt, W. H., & Freeman, D. J. (1978). Don't they all measure the same thing? Consequences of selecting standardized tests (Research Series No. 25). East Lansing: Michigan State University, Institute for Research on Teaching.
- Guthrie, J. W. (Ed.). (1990). Educational evaluation and policy analysis, 12(3).
- Kreitzer, A. E., Madaus, G. F., & Haney, W. (n.d.). Competency testing and dropouts (pp. 1-28). Unpublished paper. Boston: Boston College.
- Lortie, D. (1975). Schoolteacher: A sociological study. Chicago: University of Chicago Press.
- McLaughlin, M. (1975). Evaluation and reform. Cambridge, MA: Ballinger.
- MacRury, K., Nagy, P., & Traub, R. E. (1987). Reflections on largescale assessments of study achievement. Toronto: The Ontario Institute for Studies in Education.
- Madaus, G. F. (1988). The influence of testing on the curriculum. Unpublished paper. Boston: Boston College.
- National Assessment of Educational Progress. (1990). America's challenge: Accelerating academic achievement. Princeton, NJ: Educational Testing Service.
- OERI State Accountability Study Group. (September, 1988). Creat-

- ing responsible and responsive accountability systems. Washington, DC: U.S. Department of Education.
- Orfield, G. (1969). The reconstruction of southern education. Chicago: University of Chicago Press.
- Powell, A., Farrar, E., & Cohen, D. (1985). The shopping mall high school. Boston: Houghton Mifflin.
- Purkey, S. C., & Smith, M. S. (1983). Effective schools: A review. Elementary School Journal, 83(4), 427-452.
- Ravitch, D. (1983). The troubled crusade. New York: Basic Books.
- Resnick, D. P., & Resnick, L. B. (1985, April). Standards, curriculum, and performance: A historical and comparative perspective. *Educational Researcher*, 14, 5-20.
- Rickover, H. (1959). Education for freedom. New York: Dutton.
- Romberg, T. A., Zarinnia, E. A., & Williams, S. R. (1989, March). The influence of mandated testing on mathematics instruction: Grade 8 teachers' perceptions. Unpublished paper. Madison: University of Wisconsin.
- Rowan, B., Bossert, S., & Dwyer, D. (1983). Research on effective schools: A cautionary note. *Educational Researcher*, 12(4), 24-31.
- Rowan, B., & Guthrie, L. F. (1989). The quality of Chapter 1 instruction: Results from a study of twenty-four schools. In R. Slavin, N. L. Karweit, & N. A. Madden (Eds.), Effective programs for students at risk (pp. 195-219). Needham Heights, MA: Allyn & Bacon.
- Ruddell, R. B. (1985). Knowledge and attitude toward testing: Field educators and legislators. *The Reading Teacher*, 38(6), 538-543.
- Salmon-Cox, L. (1981). Teachers and standardized achievement tests: What's really happening? *Phi Delta Kappan*, 62(9), 631-633.
- Sarason, S. (1971). The culture of schools and the problem of change. Needham Heights, MA: Allyn & Bacon.
- Silberman, C. (1970). Crisis in the classroom. New York: Random House.
- Smith, M., & O'Day, J. (1991). Systemic school reform. In S. H. Fuhrman & B. Malen (Eds.), The politics of curriculum and testing (pp. 233-268). New York: Falmer.
- Stallings, J., & Krasavage, E. (1986, January). Peaks, valleys, and

plateaus in program implementation: A longitudinal study of a Madeline Hunter follow through project. Paper presented at the Family and Research Action V Conference, Lubbock, Texas.

Weiss, J. (1990). Ideas and inducements in mental health policy. Journal of Policy Analysis and Management, 9, 178-200.

Wise, A. (1979). Legislated learning. Berkeley: University of California Press.