Chapter 1

Policy and Practice: The Relations Between Governance and Instruction

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Ours is a time of remarkable ferment in U.S. education. The recent school reform movement initially focused on the "basics," but then took off in a dramatically new direction in the late 1980s. Reformers started to demand more thoughtful and intellectually ambitious instruction. Leaders in politics and business argued that students must become independent thinkers and enterprising problem solvers. Educators began to say that schools must offer intellectually challenging instruction that is deeply rooted in the academic disciplines.

These ideas are a dramatic change. For most of this century, politicians and businessmen ignored public education or supported only minimum programs for most students. And most leaders in education long have been inclined to the view that most students need basic and practical education rather than more high-flown and demanding stuff. These tendencies were entirely representative. Though the American people have been enthusiasts for schooling, few have been keen on intellectually ambitious education.

More unusual still, recent reformers have proposed fundamental changes in politics and policy to achieve the new goals. They argue for the creation of state or national curricula, to push instruction to new heights. Or they advocate state or national tests or examination systems, to pull instruction in the same direction. Or they propose to link examinations and curricula so as to gain even more leverage on teaching and learning. Prominent politicians, businesspeople, and professors have en-

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dorsed one or another of these proposals. Several state and national agencies have begun to implement them. Major efforts are under way to mobilize much more consistent and powerful direction for instruction from state or national agencies.

These developments seem hopeful to some and unwise to others. But everyone agrees that they mark an astonishing reversal, and many therefore wonder whether the new proposals are attainable. One set of problems concerns politics. Power and authority have been extraordinarily dispersed in U.S. education, especially in matters of instruction. Could state or national agencies actually mobilize the influence required to steer teaching and learning in thousands, or hundreds of thousands, of far-away classrooms? That would require extensive new state or national infrastructure in education, as well as a radically new politics of education. Are such things possible?

A second set of problems concerns instructional practice. The new proposals envision much more thoughtful, adventurous, and demanding instruction. But most instructional practice in the United States is quite traditional: Teachers and students spend most of their time with lectures, formal recitations, and worksheets. Intellectual demands generally are modest, and much of the work is dull. Only a modest fraction of public school teachers have deep knowledge of any academic subject. Hence, even if state or national agencies accumulated the infrastructure and influence required to steer teaching and learning, could they be steered so sharply away from long-established practice?

To answer these questions about how things might change, one must ask others about how they now work. How do instructional policies made in state and national agencies play out in local classrooms? What are the relations between policy and practice? What might it take to change them? Have central agencies ever tried to promote innovative and adventurous teaching? If so, with what results? These seem crucial issues for America today and tomorrow, but our knowledge about them is limited by what we did yesterday. The dispersed organization of American education renders the connections between policy and instruction inconsequential for all of our history. The topic barely enters educational inquiry because it seemed so distant from educational reality. There is little American evidence about the structure or consequences of much greater state or national control. Similarly, American disdain for intellectually challenging education has left us with only modest evidence on how such education might turn out in this nation’s schools. In order to learn much about such matters we must look beyond the U.S. education mainstream, and to studies of other national school systems.

We tackle the issues in four chunks. First, we probe the relations between state and national government on the one hand and instruction on the other. We explore how the structure and activities of central government affect classroom practice. But in some systems, key decisions about instruction, like what texts to read or what tests to use, are made by no central agency. Hence, in the second chunk of the essay we identify the specific sources of guidance for instruction, including tests, texts, and other things. We explore how such things interact with governance structures, and we probe their effects on classroom practice.

In the third chunk of the essay we scrutinize change in classroom practice. The recent U.S. reforms propose very ambitious shifts in instructional purposes, processes, and content: We inquire about the prospects for such change in teaching.

Finally, we consider nongovernmental influences on instruction. Recent reformers have proposed radical changes in policy, politics, and instructional guidance, seeing these as potent influences on classroom work. Yet studies of schooling here and abroad often suggest that social and cultural influences may be no less significant. For instance, some researchers report that Japanese families tend to support children’s hard work and academic achievement, while Americans tend not to. Such differences may account for many of the effects often ascribed to policy and institutions.

**GOVERNMENT STRUCTURE AND POLICY MAKING**

The formal institutions of government are widely supposed to shape the relations between education policy and instructional practice. In France and many other nations, central agencies have enormous authority and power (Holmes, 1979; Lewis, 1985). Ministries of education make most policy for local education, and they often do so in great detail. But the U.S. political system was specifically designed to frustrate central power. Authority in education was divided among state, local, and federal governments by an elaborate federal system, and it was divided within governments by the separation of powers. These divisions were carefully calculated to inhibit the coordinated action of government, and they gained strength from the country’s size and diversity (Kaufman, 1969).

The U.S. federal government thus has had relatively weak influence on education, as a matter of both law and tradition. But since World War II the central government has accumulated increasing influence on state and local decisions about funding, education for disadvantaged groups, civil rights and civil liberties in schools, research, and curriculum improvement. Despite these changes, direct federal governance of education is marginal. Federal agencies directly operate few schools and contribute only a little more than 6% of school operating budgets, on average (U.S. Bureau of the Census, 1989).

State governments are the constitutional center of U.S. education. But
most states delegated most authority to localities, for most of their history. States supported the establishment of public schools with enabling statutes and, sometimes, a bit of money in the 19th century, but most of the pressures to establish public schools lay outside of state government. There has been some variability in states’ influence in education. Hawaii has no local districts, and southern states have tended to be stronger than those elsewhere (Wirt & Kirst, 1982). But until 15 years ago the general pattern was extensive delegated state power. Most state agencies were small and weakly staffed (McDonnell & McLaughlin, 1982; Murphy, 1974). State governments have begun to exercise more power during the last decade (Cantor, 1980), but most are still far from what, in world perspective, could be called central control.

Such weakness in higher level agencies is quite unusual. In many nations the national ministry is the senior and often sole partner, managing all educational programs and paying most or all operating costs. In modern France, the schools have until recently been a creature of the national government in Paris, not of local or departmental governments (Cameron, Cowan, Holmes, Hurst, & McLean, 1984b; Holmes, 1979; Lewis, 1985). Even state or provincial governments in other federal systems have much greater power and authority. Australian state governments hold most constitutional authority in education, as they do in the United States. But the six Australian states also are the basic operating units in education (Boyd & Smart, 1987; Cameron, Cowan, Holmes, Hurst, McLean, 1984a). Each state operates all the public schools within its boundaries, performing all the functions that Americans associate with both state and local school government.

The United States thus has a remarkably fragmented governance system. Many important educational decisions are made in the nation’s roughly 110,000 individual schools (U.S. Bureau of the Census, 1989). These include decisions about educational programs, student assignment, teacher assignment, and resource allocation among students (Wirt & Kirst, 1982). One result is remarkable variation across schools (Cusick, 1983; Powell, Farrar, & Cohen, 1985). Recent efforts at local “restructuring” and “school-based management” will almost certainly enhance the influence of many schools.

Local districts are the fundamental governance agencies, by tradition and practice. There are some 15,000 local districts (U.S. Bureau of the Census, 1989), and their influence is extraordinary in world perspective. Despite the recent growth of state and national power, these districts make a great range of decisions, including those that bear on levels of funding, the nature of educational program, and the teachers to be hired (Travers & Westbury, 1989). Financial support for most U.S. schools is still tied to local tax bases and taxation decisions, which produces enormous varia-

tion in educational resources and, thus, instructional programs. The key role of local districts builds many differences into U.S. education (Firestone, 1989).

Individual schools and districts have had much less influence in many other nations (Travers & Westbury, 1989). The French and Singaporean ministries of education have until recently monopolized decisions about educational programs, teacher assignment, and resource allocation (Cameron, Cowan, Holmes, Hurst, & McLean, 1984b, 1984d). Local schools have had little leeway within central guidelines, a condition that some nations have begun trying to change (Cohen, 1990a; Resnick & Resnick, 1985, 1989). And many nations simply have no local districts. Australian state education departments deal directly with each school (Cameron et al., 1984a), although some use regional offices for some administrative purposes. Funding decisions typically are made by national or state agencies, greatly reducing or eliminating fiscal and programmatic variation among schools. Some nations with strong central governments do have local jurisdictions that are supposed to play a large role in education. The postwar Japanese constitution guarantees local authority in such educational decisions as teacher hiring and curriculum (Cameron, Cowan, Holmes, Hurst, & McLean, 1984c). But the influence of local prefectures is constrained both by the broad authority of national agencies and by centuries-old habits of deference to the center. The result limits educational variation of many sorts (Cameron et al., 1984c).

In most nations, the relations between policy and practice are framed by systems of central power or by a small number of powerful state or provincial governments. The authority of the state is immense and, in many cases, theoretically unlimited. Schools are creatures of the nation-state or the province, and usually were created in the process of consolidating those entities (Meyer, 1983; Ramirez & Rubison, 1979; Ramirez & Boli, 1987).

The connection between central power and public education is a world pattern to which the local mobilization of schooling in the United States is one of the few great exceptions. Despite growing state and federal power, local government still is the key element in U.S. schooling. And the relations between policy and practice are framed by sprawling government structures in which fragmented power and authority express a considered mistrust of government.

If government structure frames the formal relations between central policy and classroom practice, policy-making fills that frame with specific content. The two are often at odds. While the design of American government incarnates a deep mistrust of state power, the design of most education policy expressed an abiding hope for the power of government and a wish to harness it to social problem solving. Collisions between the
two were precipitated by the proliferation of state and federal education policies and programs in the last three decades. These included federal efforts to improve curriculum and instruction in the 1950s and early 1960s and to eliminate the racially dual school system throughout the South in the 1960s and 1970s. They also included federal and state efforts to improve education for disadvantaged students, to reform the education of handicapped students, to provide bilingual education for non-English-speaking students, and to ensure sex equity in schools across the nation. Nearly all of these policies and programs sought to solve problems that crossed jealously guarded jurisdictional boundaries among and within governments.

To speak of the relations between policy and practice in the United States is thus to speak both of collisions between policy and governance and of the consequences in educational institutions. Those collisions have affected the relations between policy and practice in several ways. New educational policies expanded central authority and drew the agencies of policy and practice closer together. But these policies did not commensurately reduce the autonomy of “lower level” agencies. The flood of state and federal policies and programs coursed through a large and loosely jointed governance system, and agencies throughout the system retained much of their operating independence. For instance, the states depend on localities for political support and policy execution, as any higher level agent depends on subordinates. State governments, therefore, should be constrained by what localities will accept. Yet the states often act with remarkable independence. The state education reforms of the last 10 years have in some respects been quite offensive to local educators, but many still have been enacted with little difficulty (Fuhrman, Clune, & Elmore, 1988). Similarly, the national government has only a modest constitutional role in education, and it has long deferred to state and local authorities. Nonetheless, federal agencies have taken various dramatic initiatives designed to greatly change state and local education. Many were taken over local and state opposition, some over fierce and even violent opposition (Orfield, 1969). Despite the constraints that lower level agencies can impose on their superiors, agencies above have regularly pushed far beyond the presumed limits.

The same phenomenon obtained in reverse: State and local autonomy has been only modestly constrained by higher level policy. Researchers have documented the states’ great flexibility in responding to the dramatic federal policies and programs of the 1950s and 1960s (Murphy, 1974). Researchers also have shown that local schools and districts retain considerable latitude in coping with state and federal policies (Berman & McLaughlin, 1977; McLaughlin, 1987). Despite the increasing flow of higher level requirements, advice, and inducements, lower level agencies have much room to interpret and respond. Relations among state, federal, and local agencies therefore remain quite attenuated despite decades of effort to bring them closer together. Centers of organization and governance are widely dispersed and weakly linked, despite the growth of policy. Central agencies can make serious demands on others with relative ease; they need only mobilize the political resources to enunciate a policy or begin a new program. But the costs of enforcing demands are much greater. A great distance remains between state or federal policy-making and local practice (Firestone, 1989).

Yet policy-making has complicated educational organization. In order to make contact with local educational organizations, state and federal agencies have had to bridge vast political chasms artfully designed to frustrate central power. To increase general governance authority in education was politically unthinkable for the federal government. What is more, federal agencies were weak. They had no general capacity in curriculum, instruction, school personnel, or assessment, since both the Constitution and political practice were thought to forbid it. State agencies had much more authority, but with a few exceptions they had little more capacity. A majority of states had delegated most operations to local governments and private test and text publishers. Traditions of decentralization, suspicions about central power, and deference to local authority meant that higher level authority could only grow by way of individual, freestanding programs, each of which promised to solve a specific educational problem (Bankston, 1982; Meyer, 1983). But these individual programs were located in agencies that had little general operating capacity in the “technical core” of education.

Hence, when weak federal and state agencies tried to implement such ambitious programs as Head Start and Title I of the Elementary and Secondary Education Act (1965), each program had to be outfitted with its own minimum core of administrative operations (budget, personnel, evaluation, and the like). Furthermore, each program had to coordinate operations across many levels of government, owing to the lack of general administrative capacity above the local level. And each policy or program had to do so in ways that did not require much capacity in such key areas of education as curriculum or instruction, since such things were regarded as off limits to central government. Lacking general central authority and capacity, leaders of each program had to establish their own systems. How else could they hope to mobilize tens or hundreds of thousands of educators, in hundreds or thousands of jurisdictions, across several levels of government?

Work in such policies and programs therefore was confined within specialized administrative subunits organized around oversight tasks within each program (Wise, 1979). Administrative capacity grew, but within pro-
grams rather than across entire governments. Administrative burdens therefore multiplied as the same or similar administrative work was repeated across programs (Bankston, 1982; Cohen, 1990a; Meyer, 1983; Rowan, 1982, 1983). Central agencies grew, but in a fragmented fashion (Clark, 1965; Scott & Meyer, 1983; Stackhouse, 1982). And the administrative expansion added little to central capacity in the core areas of education such as curriculum and instruction. The collisions between optimistic policies and cautiously designed government have produced fractured and duplicative administration.

These fractures were reflected in the organization of agencies outside of government. As policies and programs took shape, networks of interested agencies—advocacy organizations, professional groups, and special purpose research and development agencies, among others—grew up around them. Examples include the loose network that helped to build support for the legislative proposals that became P.L. 94-142 and Title I of the 1965 ESEA (now Chapter I). Each network has helped to coordinate and stabilize program operations and mobilize support for programs across governments and among many sorts of agencies (Cohen, 1982; Peterson, 1981; Peterson, Rabe, & Wong, 1986). Like the programs and policies that they grew up around, these policy networks are ingenious, for they support state and national efforts to solve local problems in a political system that was designed to frustrate such efforts (Kaufman, 1969). But these clever inventions also encourage political fragmentation and multiply administrative work (Bankston, 1982; Cohen, 1982; Meyer, 1983; Rogers & Whetten, 1982). For they support fractured authority within education agencies, as managers in each program attempt to build their own bridges across great political chasms. The ingenious devices that cope with fragmentation among governments tend to exacerbate fragmentation within them.

Collisions between cautious designs of government and hopeful designs for policy also complicated local educational practice, because administrative work grew as localities coped with increasing state and federal policies and programs. Since higher level authorities are so distant from local practice, they are rarely held accountable for their actions there. Hence state and federal initiatives were generated with little regard for the relations among them, or for their cumulative local effects (Kimbrough & Hill, 1981; Kirst, 1988; Wise, 1979). Indeed, some of the most potent local effects of state and federal programs or policies had no intended programmatic content. The best case in point is underfunded mandates. Federal legislation for handicapped students placed unaccustomed procedural and substantive burdens on local education agencies, but the legislation carried less than half the estimated costs of compliance. Initially, it was thought that full funding would soon follow, but it never did. Federal

requirements were never relaxed, though. Local and state school agencies had to allocate their own funds to this area of program support, often with grave results for other educational activities.

Yet requirements have limits. State and federal officials rarely can effectively oversee local program implementation. No state or federal education agencies have the inspectorates found in Britain, France, and their former colonies. At best, U.S. state and federal agencies use oversight-at-a-distance, such as written program evaluations, grant recipients' reports on operations, and the like. Such things multiply work without producing fruitful contacts among public servants at different levels of government (Burdach & Kagan, 1982). And local schools retain considerable autonomy. Administrators and teachers usually can tailor higher level programs to local purposes and conditions if they have the will and take the time (Berman & McLaughlin, 1977). Often they can cope with higher level directives simply by ignoring them. Inattention is a ubiquitous management tool (Kiesler & Sproull, 1982), and it can be especially efficient in a fragmented governance system.

These patterns contrast sharply with many foreign education systems. The ministries of education in France and Singapore deal with schools on a broad range of educational matters, as do the state departments of education in Australia and provincial governments in Germany. There are administrative subunits in these agencies, but they are broadly defined by the key areas of schools' operation (i.e., curriculum, instruction, personnel, and the like). The subunits have extensive general authority, and new initiatives typically subsist within them rather than being set aside in independent units, because the operating units make the key decisions about education and have the resources. That is what might be expected in nations founded on etatist traditions. Policy initiatives are not organized as though they were at war with government, or on the assumption that they can have little to do with the core operations of education.

The collisions between rapidly expanded policy-making and fragmented governance are a hallmark of U.S. education. Few nations have such dispersed authority and power in education, yet few have such intense higher level policy-making. Americans complain more than any other people about state interference with education and centralizing forces in schools, but authority and power are more dispersed here than in nearly any other nation. Perhaps that is why we complain more.

INSTRUCTIONAL GUIDANCE

State and federal governments have made many efforts to improve instruction. They offer financial aid to local districts, sponsor child health and nutrition programs, and support efforts to improve education for the disadvantaged. Yet such policies rarely make broad or close contact with
instruction. Teaching and learning are more directly affected by the texts that students and teachers use, the examinations that assess students' academic accomplishments, the standards teachers must satisfy in order to secure a post, and the like. These instruments comprise the means so far invented to guide classroom work. We lump them under the rubric of instructional guidance and sort them into five categories: (a) instructional frameworks, (b) instructional materials, (c) assessment of student performance, (d) oversight of instruction, and (e) requirements for teacher education and licensure.

Nations use these instruments very differently. In some cases guidance is designed and deployed by governments, while in others private agencies play a large role. Additionally, the arrangement of government-sponsored guidance varies greatly across nations (Broadfoot, 1983). And while all school systems adopt some stance toward guiding instruction, often that stance includes offering little advice.

Instructional guidance also mediates the effects of other policies that seek to affect practice, because the effects of all government policies that try to influence instruction—including those that do so by offering extra aid to the disadvantaged or holding schools "accountable"—are mediated by such things as instructional materials, teachers' professional capacities, and methods of student assessment. Intentionally or not, the aggregate of instructional guidance is a medium in and through which many other educational policies and programs operate.

In what follows we compare instructional guidance in the United States with its counterparts in other national school systems. We focus on the instruments of guidance; while these are governed in many different ways in national school systems, we do not try to describe that variety here. Instead we use a few key categories that describe variations in instructional guidance. These variations can be produced by many different governmental and administrative arrangements (see Porter, Floden, Freeman, Schmidt, & Schwille, 1988):

Consistency: Given different domains of guidance, one important issue concerns the extent of agreement within and among domains. In some systems instructional frameworks are consistent internally, and consistent with texts or teacher education. But in other systems they are not.

Specificity or prescriptiveness: Teaching and learning are complex enterprises, and there are many different ways to enact them. Teachers and students are offered clear and detailed guidance about content coverage or pedagogy in some systems, while in others guidance is very general or vague.

Authority and power: To offer guidance is not to decide what weight it carries. Advice for instruction is presented in ways that have great authority with students and teachers in some systems, but in others such advice is presented in ways that carry little weight.

Instructional Frameworks

Instructional frameworks are general designs for instruction (i.e., broad conceptions of the purposes, structure, and content of academic work). Frameworks can set the terms of reference for the entire enterprise. In some school systems they guide course structure and content, the nature of textbooks, the purposes and content of examinations, and the like. They can be quite prescriptive: in some former French and British colonies such frameworks offer extensive and focused guidance about instructional content, and in some cases approaches to teaching as well. In France many curriculum decisions are made in the national ministry of education (Horner, 1986), which often details the topics to be studied, the teaching materials and methods to be used, and even time allocations (Beauchamp & Beauchamp, 1972; Lewis, 1989). The Japanese central ministry issues frameworks for each subject (Kobayashi, 1984), prescribing content and detailing the sequence of topics (Kida, 1986; Organization for Economic Cooperation and Development, 1971).

Such guidance often seems to carry great authority and power. In France, many curriculum decisions are made by the national assembly, while others are ministry decrees. But authoritative guidance need not be governmental. In Holland it is offered by autonomous agencies that are supported by government but are not part of it.

Frameworks have been unusual in the United States. The most common instructional designs have been bare listings of course requirements by states or localities. Apart from the New York State Regents, it was long uncommon for state agencies to offer advice about the material to be covered within particular subject areas, or about the structure of courses. This passivity was not unique to state governments. Until quite recently, few local systems seemed to prescribe topics within courses or curricula. And guidelines about pedagogy have been even more rare. Relatively weak state and local guidance concerning course content and pedagogy has meant that students and teachers have had great latitude in shaping the content and purposes of their courses (Cusick, 1983; Porter et al., 1988; Powell, Farrar, & Cohen, 1985; Schwille et al., 1983, 1986; Sedlak, Wheeler, Pullin, & Cusick, 1986).

A few states recently have moved more aggressively into instructional design. Florida, South Carolina, and a few other southern states instituted statewide basic skills curricula in efforts to improve students' performance during the past decade. These included guidance for content coverage and pacing, and at least implicitly for teacher education. Several states have published evaluations that claim gains in student achievement,
although no independent evaluations seem to have been done. At the same
time, several other states have pressed guidance for a radically different
sort of content. In 1985, California issued the first of a series of curriculum
frameworks that were intended to make teaching and learning intellectually
much more ambitious and demanding. Arizona and Michigan have
taken some similar steps, as has Connecticut.

Some local school systems also began to move toward instructional
frameworks in the 1970s and 1980s, with the news that test scores were
decreasing and mounting demands that schools get “back to the basics.”
Local districts came under unfamiliar pressure to improve performance,
and some began to devise minimum instructional programs in response—
Washington, DC, Chicago, and Philadelphia among them. There is little
systematic research on these matters, so we cannot gauge the depth or
extent of these changes. Additionally, several cities that adopted such
schemes recently announced their demise. But officials in a few districts
that we recently visited reported a move to greater central control.
Schools can no longer determine their own instructional programs, and
central offices have written rudimentary curriculum frameworks, usually
blueprints for “essential skills.”

Instructional Materials

Texts and other materials are found in all systems, but the extent of
guidance for their content and use varies enormously. In many systems,
the national ministry sets the terms of reference for text content, and/or
authorizes the textbooks to be used based on curriculum frameworks
(Kida, 1986; OECD, 1973). In such cases, there is a good deal of consistency
between the guidance teachers receive from textbooks and from
national curriculum frameworks. In some nations ministries actually publish
texts, while in others texts are privately published. But in either event,
materials are closely tied to curriculum frameworks.

Decisions about instructional materials have been much more frag-
mented in the United States. Since there have been few instructional
frameworks until recently, publishers had little or no consistent, content-
oriented guidance. Instead, they were guided by what had been done
before, by official and unofficial expressions of state or local preferences,
and by their own sense of the market. Texts have improved in many ways
over those that were available in the 1920s, but most commentators regard
most texts as intellectually shallow. Many states and localities officially
adopt textbooks, and Americans often have thought this to be highly
prescriptive for instruction. But lacking much official guidance for topic
coverage within texts, save for such matters as evolution, these texts seem
not to have been highly prescriptive for topic coverage (Floden et al.,
1988). Researchers report that many texts mention many more topics than
could be dealt with, which leaves open extensive topic choice by teachers
(Tyson-Bernstein, 1988). Additionally, there seem to be appreciable in-
consistencies in content coverage among the different texts for most sub-
jects at most grade levels (Freeman et al., 1983). Hence texts have offered
many opportunities for teachers and students to vary the content they
cover (Freeman & Porter, 1989; Porter et al., 1988; Schwille et al., 1983).

As several states recently moved toward more explicit instructional
designs, they tried to make them count for textbooks. California used its
new curriculum frameworks in mathematics, and in literature and lan-
guage arts, to press publishers to revise texts. Publishers were told that
if they did not make satisfactory revisions their texts would not be ap-
proved for adoption. But the state’s guidance still was general. The math-
ematics framework, for instance, offered little specific guidance about
topic coverage. Casual comparisons of the new and old literature and
language arts texts with the revised framework suggest that the state has
won some significant changes, although systematic analysis remains to
be done. Studies of the mathematics texts and framework suggest only
modest change thus far (Putnam, Heaton, Prawat, & Remillard, in press).

Some local districts also have begun trying to promote greater consist-
ency between instructional frameworks and materials. Several that de-
vised such frameworks also specified the knowledge and skills that stu-
dents and teachers should cover in texts and other materials, often doing
so in compilations of “essential skills.” In at least one case, local officials
tied their guidance to recently published texts that seemed to fit with the
local instructional frameworks. The district specified the material to be
covered in the common text, and when it should be covered. This con-
stitutes an extraordinary change for U.S. schools, but we have found no
studies that gauge its breadth or depth.

Assessment of Results

Assessment of instructional results is an essential element of instruc-
tional guidance in most school systems. Though assessment practices are
changing in European systems (Kellaghan & Madaus, 1991; Madaus,
1991), many nations tie assessment closely to curriculum. In France and
many former French and British colonies, examinations are referenced
to national curricula, instructional frameworks, or both. The examinations
thus provide both a visible target for instruction and a means of checking
its results (Madaus, 1991; Resnick & Resnick, 1985, 1989). The nature of
assessment in these cases varies greatly among nations, but it all differs
from American approaches. The examinations probe students’ perfor-
mance in specific curricula. Many systems mix multiple-choice questions
with extended essay or problem-solving performances, though some—
Japan, for instance—rely entirely on multiple-choice questions (Cheney,
1991). In contrast, U.S. schools employ standardized tests that are referenced to national norms and are designed to be independent of curricula. Performance has been limited to answering multiple-choice questions (Noah & Eckstein, 1989).

In France, Great Britain, and Japan, examinations count in very specific ways. Students’ promotion and further education depend partly or entirely on their exam performance (Eckstein & Noah, 1989). Indeed, many school systems that employ examinations are highly selective, and the exams are the key agent of selection (Kellaghan & Madaus, 1991). In Singapore, exams are used to make nearly irrevocable decisions about streaming in both the primary and secondary grades and thus to influence decisions about students’ careers and further education. This use of examinations sharply limits students’ opportunities to recoup earlier poor performances. The United States lacks such a selective examination system, which is one reason why students here have more “second chances” than they do in any other nation. But the use of examinations for student selection does enhance the examinations’ authority (Madaus, 1988, 1991; Madaus & Kellaghan, 1991; Resnick & Resnick, 1985, 1989). In New South Wales, Australia, for example, students’ performance on the school leaving exam determines their opportunities for further education. Differences of a tenth of a point in exam scores can be crucial. In Japan, scores on both national secondary school leaving exams and university entrance exams determine which high school students will go on to university and determine the quality and prestige of the universities that students will attend (Ohta, 1986; OECD, 1973; White, 1987). Secondary schools’ prestige also is tied to students’ success in examinations for prestigious universities (OECD, 1971). The social and economic significance of exam performance offers many incentives for students and teachers to take exams seriously.

Matters are very different in the United States. There is a great deal of assessment, but it has an uncertain bearing on instruction. One reason is that most tests have been designed to minimize their sensitivity to specific curricula (Madaus, 1989; Resnick & Resnick, 1985; Smith & O’Day, 1990). What is more, many different tests are designed, published, and marketed by many different private testing agencies. And most decisions about which test to use have been made by thousands of local and state school agencies, each of which adopts tests of its own liking independent of the others’ decisions. All of this has made for inconsistent guidance from assessment.

Variation in content coverage has been another source of inconsistency in the guidance that U.S. tests offer for instruction. Standardized tests often have been seen as interchangeable, but one of the few careful studies of topical agreement among tests raised doubts about that view. Focusing on several leading fourth-grade mathematics tests, the authors observed that “our findings challenge . . . the assumption that standardized achievement tests may be used interchangeably” (Freeman et al., 1983). They maintain that these tests are topically inconsistent and thus differentially sensitive to content coverage.

Inconsistency has been further enhanced by the widespread local practice of using one publisher’s test in one grade and others in other grades. This problem has been magnified by the increase in testing during the past several decades, as local and state-sponsored minimum competency and essential skills tests have spread. American students are now tested much more often than they were 20 years ago, but they are tested with more different tests.

Thus, established U.S. approaches to assessment would have impeded consistency among the elements of instructional guidance, had consistency been sought. Until recently, however, it was not. The guidance for instruction that tests offered was general, and probably more a matter of the form of knowledge (i.e., it exists in multiple-choice formats and is either right or wrong) than its content. This guidance also was vague, since the test results were rarely known. Test results were kept from teachers, partly on the designers’ view that they were not designed to guide instruction.

Indeed, decisions about test design, marketing, and adoption typically have been made apart from knowledge of specific school curricula, teacher education, and the like. Test theory and practice have held that such independence is crucial to test validity, but this has further weakened consistency between tests and instructional materials. Research seems to bear out the weak relations between the subject matter content of standardized tests and of tests. Several investigators concluded: “If a fourth-grade teacher limits instruction to one of the four books analyzed, students will have an adequate opportunity to learn or to review less than half of all topics that will be tested” (Freeman et al., 1983).

To the extent that tests have guided instruction, then, they have done so inconsistently. This has weakened the instructional authority of the tests. It is thus not surprising that many teachers report they rarely take test results into account in instruction (Flenor, Porter, Schmidt, & Freeman, 1978; MacRury, Nagy, & Traub, 1987; Ruddell, 1985; Salmon-Cox, 1981; Sproull & Zubrow, 1981).

But two qualifications are in order. First, there have been a few exceptions to these patterns, notably the New York State Regents exams and the Advanced Placement Program (AP). The AP program is a special subsystem within public education in which high-achieving students take advanced courses. The AP exams seem to strongly influence instruction, in part because they are tied to a suggested curriculum and readings. The
exams also seem to be taken seriously by most students and teachers, partly because the scores count for college entrance as well as college course taking. But these have been anomalies in American education (Powell, 1991).

Second, the patterns described above have begun to change. Rising public interest in testing and other political pressures led many states and localities to begin publishing scores in the early 1970s, after decades of secrecy. By now, many do so as a matter of course and often conviction. State and local school agencies also increasingly turned to tests in efforts to improve instruction. The favored method was to institute “accountability” schemes, often based on minimum competency tests. Many of these schemes included only a high school graduation requirement, but some also included tests for promotion. Some were hastily contrived under political pressure. The tests often were adapted from standardized norm-referenced tests designed for other purposes.

State and local use of tests to guide instruction marked a dramatic turn in assessment practices. But the fragmentation characteristic of U.S. education was evident here as well. Many minimum competency tests were unrelated to other elements of instructional guidance, such as curriculum. The tests effectively became the curriculum in some cases (Darling-Hammond & Wise, 1985). Recently, however, that has begun to change as well, as some publishers have brought out test series that are accompanied by criterion-referenced test systems. These link curriculum and instruction to testing. In several cities that we have studied, these test and text series are the heart of the instructional program. Students’ performance is monitored by regular testing keyed to text pages, and sometimes students are retested until they achieve “mastery.” We have discovered no studies that probe the frequency of such practices, though they seem to be found chiefly in cities with many disadvantaged students. In such cases, tests offer much more specific and prescriptive guidance than ordinarily has been the case in the United States.

How does such testing affect instruction? There has been surprisingly little research on the issue. Several researchers assert that the tests have had a powerful effect on teaching (Darling-Hammond, 1987; Darling-Hammond & Wise, 1985; Resnick & Resnick, 1989; Romberg, Zarinnia, & Williams, 1989). Competency tests are said to drive instruction in a mechanical and simplistic direction. Teachers orient instruction to the test items, and if students do poorly on the test, remediation consists of drill on the items they do not know (Kreitzer, Madaus, & Haney, 1989; Madaus, 1988). A recent U.S. Department of Education report claims that “accountability systems ... are very powerful policy tools that have changed school-level planning and teaching activities” (OERI, 1988, p. 31).

But it also is often said that these claims only hold for situations in which the tests carry “high stakes” (i.e., that they count for students’ academic progress, or for schools or teachers). This condition does not hold for many minimum competency testing programs (Ellwein, Glass, & Smith, 1988), or for many students in high stakes testing programs. It also seems to be accepted that such tests are much more likely to affect poor and minority group children, since more advantaged students pass the tests with little effort. These considerations suggest that the effects of minimum competency testing have been quite uneven, and are salient for a particular segment of the school population. Additionally, we do not know how salient the tests have been, because there have been no observational studies of teachers’ responses to tests. The little research on competency testing thus far is based on interviews with teachers who describe the effects of testing in rather general terms, and the evidence they present is very mixed (OERI, 1988; Romberg, Zarinnia, & Williams, 1989).

The effects of testing have been complicated by recent reforms. Minimum competency testing has come under sharp attack, and standardized testing itself is the object of unprecedented criticism. Several states recently have begun to use novel testing programs in efforts to strengthen and radically change guidance for instruction. The California state education department has begun revising its statewide testing program in an effort to “align” the state’s tests with its ambitious new curriculum frameworks. State officials hope that if the tests are changed to assess thinking and understanding rather than facts and memorization, they will “drive” instruction in the new directions. Connecticut has been making similar changes, although it seems to rely on tests much more than on instructional designs. Florida has dropped its minimum competency testing program in favor of a radically different approach to reform. Proposals for authentic assessments and performance assessments have become common, and many educational agencies claim to be implementing them. This ferment is quite unprecedented, but the developments are so recent that little is known about the operation of innovative assessments, let alone their effects.

Monitoring Instruction

The inspection of students’ work, the observation of teaching, and other sorts of monitoring constitute a fourth type of instructional guidance. Monitoring also varies dramatically among nations. French and British central school agencies long included inspectorates, whose duties extended to checking on the topics that teachers covered, their pedagogy, and the materials they used. British inspectors visited schools to maintain standards of work and offer advice on content and pedagogy, though this role has fallen into disuse in Britain (Lawton & Gordon, 1987). They still publish reports and conduct continuing professional education for teach-
ers (Lawton & Gordon). Such arrangements are common in one form or another in many former French and British colonies.

Monitoring has been extremely modest and inconsistent in the United States. Few states and localities systematically monitored either teachers’ coverage of curriculum or the quality of classroom work. There were no education inspectorates, nor was it common for principals to keep tabs on students’ and teachers’ academic work (Schwille et al., 1983). Indeed, it was uncommon for students to keep the detailed records that would permit such monitoring. Even if such records were kept, few principals involved themselves in instruction. Hence there have been few checks on what materials are used, how they are used, or what instruction is provided. In this respect, U.S. teachers have had quite extraordinary autonomy.

Many observers believe that U.S. teachers nonetheless teach more or less the same thing anyway. They often point to the use of textbooks, believing that the text determines instruction in most classrooms. If teachers use the same texts, it is expected that they will teach the same thing. Though there has been little research on this matter, the assumed homogeneity of content coverage is unsupported by the available evidence. Even when teachers use the same texts, their content coverage seems to vary greatly (Putnam et al., in press; Schwille et al., 1983). The authors of one study concluded that “this investigation challenge[s] the popular notion that the content of math instruction in a given elementary school is essentially equal to the textbook being used” (Freeman & Porter, 1989, p. 418).

There are some recent signs of change. Many state and local systems attempt to monitor instruction with minimum competency tests, though the evidence suggests that these efforts are quite inconsistent and often ineffective. But at least one local school system that we visited went further: As it adopted more centralized instructional guidance, the district also devised a way to monitor teachers’ coverage. Teachers fill out forms that report chapter and page coverage in required texts, and the forms are read by principals and central office officials. Some states also have begun monitoring of a sort. South Carolina has used test scores to identify both low-performing schools and districts that need special attention, and high-performing schools and districts that can be released from various state requirements. But there are few studies of these schemes, and we could find no investigations of their effects on instruction.

**Teacher Education and Licensing**

Guidance for instruction in this realm also varies greatly among nations. In many countries, the guidance offered by teacher education is quite consistent with other sorts of guidance. One key connection is with the schools’ curriculum; for instance, in Singapore, teachers’ professional education is closely tied to the curriculum of the schools. Additionally, in many nations the requirements for licensure are national rather than local, and teacher education is consistent across institutions. That seems to be true at the national level in France, partly because the ministry’s inspectors play a central role in the preparation of elementary school teachers in the Ecole Normale (Lewis, 1985). This tends to create consistency in the professional education of teachers and in the messages they receive from different elements of the system.

Such guidance is more of a hodgepodge in the United States. States are the agency for licensure of virtually all occupations; however, unlike medicine, teacher certification requirements are inconsistent across states and often within them. Chicago and New York City, for instance, have different certification requirements than do the states in which they are located. The interstate differences are so considerable that one recent study concluded that “a teacher certified in one state is unlikely to meet the certification requirements in another” (Haggstrom, Darling-Hammond, & Grissmer, 1988, p. 12).

Most requirements for certification focus on teachers’ education, and virtually all connect higher education. But the state agencies, which certification standards are remote from the colleges and universities that conduct most teacher education. Moreover, certification agencies usually have little connection with the state agencies that govern colleges and universities. Certification agencies, in addition, have tended to act purely in terms of course requirements rather than course content or students’ performance. Hence there is room for considerable variation in how colleges and universities interpret the same requirements.

Another source of inconsistency is the loose relation between college and university requirements for teacher education and the schools’ curriculum. Schools’ curricula vary within states, as well as within local districts. The variety of local instructional programs cannot be accounted for by teacher education departments. And in many cases members of those departments regard the schools’ curriculum as a collection of errors that intending teachers must learn to avoid.

Against this background, the mere idea of consistent guidance for teacher education and licensing seems revolutionary. Yet, recently there have been moves in that direction. Most notable is the National Board for Professional Teaching Standards (NBPTS), which has begun efforts to develop a voluntary national examination system for teachers. If successful, this could lead to a partial national system for teacher certification, which could profoundly affect teacher education.
Instructional Guidance: An Overview

Instructional guidance in the United States has been inconsistent and diffuse. Many private and public agencies issue advice for instruction, but few take account of each other's advice. Hence much guidance for instruction has been unrelated, divergent, or contradictory. It also has been largely decoupled from government. Public agencies have extensive authority to guide instruction, but they delegate most of it to private firms or local schools. The influence of U.S. school governments pales when compared with central or provincial agencies elsewhere.

Instructional guidance also filters the effects of other initiatives that aim to influence classrooms. Prolific and inconsistent guidance in the United States has muffled and diffused such initiatives. Since government officials could not turn to an established system of guidance in efforts to shape instruction, individual programs or policies could not exert a powerful and consistent influence on instruction. Each program or policy was on its own, each competing with a buzz of other advice. Federal and state policymakers dealt with this problem by trying to mobilize special arrangements (e.g., program guidelines, evaluation, and technical assistance). But these are ancillary to the core instruments of guidance, and have been no more than modestly influential.

The result is paradoxical. Public and private agencies prolifically produce guidance, more than in societies with much more potent advice for instruction. But this does not press instruction in any consistent direction, because when guidance is inconsistent and diffuse, no single test, curriculum, or policy or program is likely to have a broad or marked effect. Many teachers and students are aware of different sorts of advice, but few are keenly aware of most of it. Many know that most guidance is either weakly supported or contradicted by other advice and that much can safely be ignored. The din of diverse, often inconsistent, and generally weak guidance opens considerable latitude to those who work within it.

Teachers' habits and decisions are important in any system of instruction. But absent plain and strong guidance, they become unusually important. The result in U.S. classrooms is curiously mixed. The forms of instruction are generally traditional, and the intellectual level usually is low, but the specific content is remarkably variable. There are many reasons for the variation, including differences in students' inclinations and teachers' judgment. But one additional reason is that students' and teachers' preferences are not informed by a plain system of common purposes and content. Classrooms around the world are of course traditional in form as well, often much more so than in the United States. But classrooms here exhibit a distinctive sort of diffuse, academically relaxed tradi-

ditionalism. Yet the content is highly variable. Teachers' work is guided more by inherited practices and individual decisions than by any clear and common view of what is to be covered, how it is to be covered, and why. In this sense, American schools have the worst of both worlds.

Our point is not that instructional guidance has been irrelevant in U.S. schools. Rather, it has been relevant only when someone chose to notice it and to do something about it. In a sense, this is true anywhere: Teachers in Singaporean or French schools must notice guidance and choose to do something about it before it can shape instruction. But the consistency, prescriptiveness, and authority of instructional guidance in such places increases the chances that teachers will notice the same advice. In contrast, teachers' and students' autonomy have been enhanced in the United States because they work in such a diffuse system of instructional guidance. The classroom doors beyond which teachers labor are no thicker here than elsewhere, but teachers in the United States receive fewer strong and consistent messages about content and pedagogy. Hence, they and their students have found it relatively easy to pursue their own preferences once the doors have closed behind them.

The situation has begun to change as recent school reformers seek to cure the ills of U.S. education by mobilizing more consistent guidance for instruction. We know little about the effects of these efforts, but the cures bear an uncanny resemblance to the disease. Several states are trying to promote some form of consistent guidance, but quite naturally do so independently of each other. Many localities are trying to promote some version of consistent guidance, but do so with no reference to each other or to state policy. Federal education officials recently have begun trying to create more consistent guidance for instruction, but their efforts so far have been independent of many state and local endeavors. Several national groups—the National Governors Association, NBPTS, the National Council of Teachers of Mathematics, and others—also are trying to promote more consistent guidance. Each, of course, is carrying on independently of the rest, and none are much related to state and local efforts. Some professional associations also have taken up the idea, as have several academic disciplines; however, there is modest contact among these endeavors as well, and little relation to state and local initiatives. We live in a blizzard of different, divergent, and often inconsistent efforts to create more consistent guidance.

There also are deep divisions over the content of the recent reforms. Proposals for more lively and demanding instruction are circulating in various political, disciplinary, and educational circles, but there are many versions of the new ideas. These novel schemes also compete with established ideas and practices, for "back to basics," "effective schools,"
and “direct instruction” all are alive, well, and firmly rooted in school and classroom practice.

All of this is par for the American course. Government structure has not been changed by recent reforms, nor has political practice. The power of our ingeniously fragmented political system is evident even in efforts to cure fragmentation. Some attack fragmentation as a barrier to more effective instruction, but others celebrate it as a source of vitality in American institutions. Similarly, today’s disagreements about the aims and methods of education are only the most recent expression of old tensions between our practical and anti-intellectual bent and our occasionally more elevated aspirations. The dispute has deep roots in both popular culture and the institutions of education, and it would be astonishing if it were settled easily or soon.

**Effects of Instructional Guidance**

If instructional guidance is worth noticing, it must be because it makes a difference to teaching and learning. Does it?

Many educators around the world would think the answer obvious and affirmative. That guidance affects instruction is the working assumption of many European and Asian school systems. But many U.S. social scientists argue that it is difficult or impossible to steer education toward consistent practices or results, owing to weak knowledge of educational processes and other uncertainties (Berlak & Berlak, 1981; Flioden & Clark, 1988; Jackson, 1968; Lampert, 1985; Lortie, 1975). John Meyer and his associates contend that school systems therefore create elaborate rituals, building a “logic of confidence” to replace evidence of rational relations between educational resources and processes on the one hand, and results on the other (Scott & Meyer, 1983). School systems “buffer” themselves by offering evidence on attendance and degrees instead of evidence on performance. Oddly, there is little evidence of these contending assumptions. For all the variation in instructional guidance, there is little research on its effects.

**Teaching**

Many scholars assert that guidance affects teaching. In writing of the effects of the French Baccalaureat examinations, for instance, Patricia Broadfoot notes that “examination questions virtually become the [schools’] syllabus” (Broadfoot, 1984). But guidance from one source can be offset by guidance from another. Hence we put the issue more specifically: Is teaching more consistent in school systems with more consistent instructional guidance? The only direct way to answer this question would be to connect evidence on the structure and content of guidance in education systems to evidence on teaching within them. The only study that permits such comparisons is the Second International Mathematics Study (SIMS). And while SIMS contained evidence on math teaching and curriculum for 15 nations, it offered little data on system structure. David Stevenson and David Baker compiled such data, focusing on the degree of central curriculum control. They tied this to SIMS data on the consistency of topic coverage among teachers within nations. They found that cross-national differences in the degree of central curriculum control were positively related to consistency in the topics that teachers reported they taught. Teachers in nations with more centralized curriculum control reported greater agreement on topics taught than did teachers in systems with less central control. More centrally controlled systems also had fewer teachers who reported teaching few of the prescribed curriculum. There was less within-system variation in the amount of mathematics instruction in systems with more national curriculum control than in those with local or provincial control. Finally, teachers in more locally controlled systems were more likely to report that they adjusted instruction to local conditions, including their perceptions of students’ ability and mastery of mathematics (Stevenson & Baker, 1991). While modest, these differences all suggest an effect of consistent guidance. But Stevenson and Baker point out that they had no direct measures of consistency in guidance.

SIMS seems to be the only data set in which system-level effects can be explored, but instructional guidance operates at many levels of education. Many recent studies of school effectiveness have focused attention on school-level consistency in guidance. While the studies are of varying quality, they show that schools differ widely with respect to consistency in instruction. Some adopt a laissez-faire style, permit diverse offerings and approaches, and thus create many choices for teachers about what to teach and how, and for students about what to study and how much. Others offer more consistent instructional guidance, thus limiting both instructional offerings and faculty and student choices (Bryk, Lee, & Smith, 1990; Cusick, 1983; Powell et al., 1985).

What explains the effects of instructional guidance on teaching? Researchers who study individual schools offer varied answers to the question. Some point to school heads’ leadership in forging consensus about goals and methods. Others focus on school “climate” or shared norms for instruction among faculty and students (Bryk et al., 1990). Levels of faculty collegiality and cooperation sometimes are offered as another sort of guidance for teaching (Purkey & Smith, 1983). But other analysts point as much to structural as cultural factors: that is, some schools are committed to less differentiation in the curriculum and thus to fewer choices for students and teachers, creating more consistency by organizing the curriculum around a common core of courses (Powell et al., 1985). Not
surprisingly, such schools tend to be smaller (Bryk et al., 1990), which suggests another influence on consistency. Researchers who study school systems offer a different sort of answer: More central control of curriculum produces more consistent topic coverage (Stevenson & Baker, 1991). But it is possible that such consistency only expresses what teachers learned as students. If elementary and secondary schools are the prime agencies of teacher education, as many scholars argue, then the curriculum that teachers present may reflect their earlier school learning, rather than current official directives. The difference could be consequential for reform. If official directives are a potent influence on teachers’ actions, then recent state and national reforms might quickly affect classroom work. But if consistency is more the result of inattentive curricular hand-me-downs, then changes in policy could take much longer to find their way into classroom practice.

Learning

Our interest in the effect of instructional guidance on teaching is partly instrumental: We want to know whether it affects learning. There is, unfortunately, no cross-national evidence on this issue, nor do we expect anything persuasive very soon. For researchers would have to connect evidence on the large structure of educational systems with evidence on the fine structure of teaching, and connect both of those to learning. Furthermore, they would have to do so across many different nations with different school systems. It would be an immensely complex task to make those connections while also taking other salient influences into account. If the prior history of research on school effects is any precedent, knowledge will grow slowly.

But many U.S. schools have tried to improve learning by increasing guidance for instruction, and many researchers have investigated the effects. One body of evidence arises from studies associated with the movement for “effective schools.” Researchers reported that students’ achievement improved, or was higher than expected, in schools in which leaders focused on common goals and faculty had high expectations for students (Purkey & Smith, 1983; Rowan, 1990). But these studies usually involved only a few schools, and most offered very limited data on school organization and culture (Purkey & Smith).

More systematic evidence on the effects of school-level guidance arises from reanalyses of the High School and Beyond data set. Bryk and Driscoll (1988) probed the relations between various measures of schools as “communities” and students’ performance. Community included shared values, common curriculum and other activities, and an ethos of “caring” for students. Schools that were high on these dimensions had significantly lower dropout rates and absenteeism and slightly higher gains in mathematics achievement. Lee and Bryk (1989) used the same data set to probe differences in schools’ constraint of curricular choices. Schools that channeled most work into a common curriculum created consistency by increasing the amount of work that students did in common. Lee and Bryk argued that such schools tended to reduce performance differences among students over time, particularly for minority-group students. In a later article they wrote that schools can “minimize the normal differentiation effects that accompany wide latitude in course choices. . . . Initial differences among students’ [performance] can be either amplified or constrained” (Bryk et al., 1990, p. 178).

John Chubb and Terry Moe also reanalyzed High School and Beyond and stressed consistent instructional guidance even more. They argued that high-performing high schools are marked by “coherence,” in which principals “provide a clear vision of where the schools are going . . . [and] encourage cooperation and collegiality.” They opine that these attributes add up to “organizational coherence” (Chubb & Moe, 1990, p. 91). They also found that students performed better when school staffs had a coherent vision of academic goals and were collegial and cooperative, although the magnitude of the effect was quite modest.

What can we conclude about the effects of instructional guidance? For one thing, consistency means somewhat different things, or is a construct with quite different dimensions. One line of thought focuses on culture and values, another on the organization of curriculum choice, and a third on leadership. For another, most research on the effects of instructional guidance is recent, and the evidence is modest. One cross-national study seems to show that more central curriculum control is modestly associated with greater topical consistency in teaching, and various U.S. school studies claim that more consistent instructional guidance is associated with more consistent instruction. But there are no field studies that make a convincing case for the causal power of guidance, and no cross-system studies connect consistency at the system level with student performance. Both are crucial gaps. A diverse body of research seems to show that more consistent instruction and instructional guidance in schools are associated with higher student achievement. But the causal ambiguities remain, and there are significant problems in inferences from schools to systems. Additionally, most studies reveal only modest effects, yet scholars argue fiercely about them (Witte, 1990).

Even if the studies were more extensive and convincing, there is another problem: The measure of student achievement in all this research has been traditional standardized tests. These tests entail a version of academic accomplishment that is said to depend heavily on recall of isolated facts and mastery of routine mental operations. This is just the sort of work that recent reformers wish schools to put aside in favor of more
sophisticated endeavors. Can we assume that a positive effect of consistent guidance on such tests would hold for more challenging versions of achievement? It seems doubtful. Some would argue that the ambitious academic work recent reformers seek would be inimical to consistent guidance. With Theodore Sizer, they would say that if schools are to cultivate sophisticated and independent instruction, they must be sophisticated and independent.

Do we conclude that instructional guidance affects teaching and learning? Plainly it does, somehow. But how? Are the effects of guidance fragmentary or systemic? Specifically, are teaching and learning more consistent in systems that have more consistent guidance for instruction? Evidence on this question is thin. There is some support for the idea in one cross-national study, as well as in many smaller studies of schools. But these studies are limited in many ways, and the authors of the cross-national study caution their readers against making too much of the results (Stevenson & Baker, 1991). There is, for example, no evidence that would permit us to distinguish the effects of formal guidance from teachers' earlier learning. Research on this matter does not offer much support for recent U.S. efforts to use instructional guidance to press teaching and learning toward greater consistency.

CHANGE IN TEACHING

Uncertainty about the effects of instructional guidance looms even larger when we consider the content of guidance that reformers wish to offer teachers and students. For they propose to transform teaching and learning from relatively dull and routine practices into exciting and intellectually demanding ones. To this end, many argue for novel assessments that are tied both to new curriculum frameworks and to radically revised instructional materials. The combination is seen as a way to dramatically change learning and teaching. Would that happen? The studies discussed thus far have little to say on this point, for they all concern the present and past operations of schools and school systems. What do we know about how teachers might change in response to more consistent and ambitious guidance for their work?

Precious little, if we want a direct answer. We have found no studies of school systems that attempted to shift from local autonomy and traditional teaching to more centrally controlled and intellectually ambitious instruction. None of the national school systems that currently exhibit great consistency suddenly changed from fragmented to consistent operations. Some evolved over the course of several centuries, while others were hastily created in the wake of colonization. But in neither case were teachers required to change from well-established traditional practice to novel and much more adventurous practice.

There have been some studies of efforts to turn teaching in a much more adventurous direction. Larry Cuban found that American classrooms remained traditional despite progressive reforms (Cuban, 1984). He argued that teaching changes at a glacial pace and in fragmentary fashion. In most cases, teachers borrowed bits and pieces of progressive ideas and practices and integrated them into standard classroom formats. That conclusion fits with the work of other investigators in the United States and the United Kingdom who studied various efforts to push teaching in more ambitious and adventurous directions. All concluded that efforts to make teaching more ambitious produced change at the margins but little else (Goodlad, Klein, & Associates, 1974; Popkewitz, Tabachnick, & Wehlage, 1982; Stevens, 1912).

It might be objected that progressivism was only a program. There were many ideas, books, articles, and pamphlets, some professors teaching courses, and even a few teacher education agencies devoted to the "new education." But there were no curricula, no assessments, and no instructional frameworks that might have helped teachers to learn a different pedagogy. From this perspective, the 1950s curriculum reforms were an improvement, for teachers had new texts as well as opportunities to learn about the new curricula. Some of the new texts were widely adopted, and many teachers took advantage of opportunities to learn. But reports of great change in teaching were few and far between. Some teachers seem to have dramatically changed their approach to instruction in the early years of reform, but many more struggled to understand and change (Sarason, 1977). Most teachers seemed to make only marginal changes, grafting bits of reform ideas and practices onto established, traditional teaching. There is indirect evidence that these were major changes for the teachers involved (Cohen, 1990b; Cohen & Ball, 1991). But the difficulty of such change was not appreciated by most of those involved (Sarason, 1981). Measures that might have supported more change thus were not contemplated, much less taken. And changed educational priorities soon swept away opportunities for teachers to learn more. A subsequent NSF-sponsored study found few classroom traces of the curriculum reforms (Stake & Easley, 1978).

Would not the recent reforms be much more potent? Instead of new texts and opportunities for further education, there would be an entire guidance system—new instructional frameworks that were reflected in novel sorts of assessment, in new curriculum materials, and in new approaches to teacher licensing and education. Would not "systemic reform" (Smith & O'Day, 1990) offer much more structure for teaching, much richer opportunities for teacher learning, and a chance for professional community in teaching? Would not more direction offer more support and pressure for change?
The idea has some appeal. But if greater structure and consistency would offer a more substantial basis for change in teaching, it does not follow that change would be easy or swift, for the greater structure would frame new and ambitious purposes, content, and methods. The agenda for teacher change would be vast, even with greater guidance. Consider, for example, studies of the “new math” in Europe. Some European school systems that adopted the new math had more consistent guidance for instruction than did others or the United States. But those differences did not seem to affect change in teaching. The research is spotty, but the most detailed study argued that the processes of reform were strikingly similar across systems with very different structures (Moon, 1986). Reports about change in teaching also were quite homogeneous across systems. Participants and researchers reported that classroom practice changed only a little, and for the most part in fragmentary ways (Damerow, 1980; Howson, 1980: Moon; Oldham, 1980a, 1980b; Van der Blij, Hilding, & Weinzeig, 1980). The new math seemed to fare little differently in the French system of consistent guidance structures than in the less consistent British or U.S. systems (Welch, 1979).

We are inclined to think that some versions of systemic reform could offer more support for radical change in teaching than purely decentralized arrangements. But there is no evidence on the relative rates or depth of change under various organizational conditions. More important, there is growing evidence of several fundamental obstacles to the changes that reformers currently urge, none of which are structural in nature. One concerns teachers’ knowledge. The recent reforms demand a depth and sophistication in teachers’ grasp of academic subjects that is far beyond most public school teachers. For instance, while math is a leading area in the current reforms, most elementary school teachers have a very modest understanding of the mathematics they teach (Post, Taylor, Harel, Behr, & Lesh, 1988; Thompson, 1984). They would need to learn a great deal more if the reforms were to have any chance of success. More important, teachers would have to shed established modes of understanding and adopt more modern, constructivist versions of knowledge. Such change is not just a matter of learning more—it could fairly be termed a revolution. Scholarship in several fields has shown that intellectual revolutions are very difficult to foment (Cohen, 1990b; Cohen & Ball, 1991; Fiske & Taylor, 1984; Kuhn, 1970; Markus & Zajone, 1985; Nisbett & Ross, 1980).

Another obstacle lies in teaching. Even if teachers knew all that they needed, the reforms propose that students become active, engaged, and collaborative. If so, classroom roles would have to change radically. Teachers would have to rely on students to produce much more instruction, and students would have to think and act in ways they rarely do.

Teachers would have to become coaches or conductors and abandon more familiar and didactic roles in which they “tell knowledge” to students (Lampert, 1988; Newmann, 1988; Roehler & Duffy, 1988; Scardamalia, Bereiter, & Steinbach, 1984; Sizer, 1984). Researchers have studied only a few efforts at such change, but they report unusual difficulty, for teachers must manage very complex interactions about very complex ideas in rapid-fire fashion. The uncertainties of teaching multiply phenomenally, as does teachers’ vulnerability (Cohen, 1988; Cuban, 1984; Lampert, 1988; Newmann, 1988; Roehler & Duffy, 1988).

Since the recent reforms would require much teacher learning, they would require many changes in teachers’ opportunities to learn. That is a third obstacle to change. Those who presently teach would need many educational opportunities on the job, as well as off it, in colleges, universities, and other agencies. Yet few schools now offer teachers many chances to learn on the job, and what they do offer is generally deemed weak at best. Most continuing education in universities has a dismal reputation among teachers and researchers. In addition, intending teachers would require fundamentally revamped undergraduate disciplinary and professional education. Few intending elementary teachers can major in an academic subject, and few intending teachers of any sort can learn new approaches to subject matter or pedagogy, since college and university educators rarely teach as reformers now intend (Boyer, 1987; Cuban, 1984; Cohen, 1988; McKeachie, Pintrich, Lin, & Smith, 1986).

More consistent guidance for instruction could not solve these problems. Under some conditions, too complex to spell out here, such guidance might help to solve them. But fundamental change in teaching also would require fundamental reform of the education of intending and practicing teachers, and equally fundamental changes in schools and universities to support such learning. Even with those reforms, deep change in teaching probably would be slow and difficult.

**BEYOND FORMAL STRUCTURE**

Guidance for instruction never stands alone. School systems consist not only in rules and formal structures, but also in beliefs about authority, habits of deference and resistance, and knowledge about how things work. Culture and social organization intertwine with formal structure in these systems. Many school systems that offer consistent guidance for instruction are situated in societies in which culture and other social circumstances seem to support academic effort. In contrast, U.S. society and culture seem to undermine academic effort. The success of school systems in Europe and Asia thus may owe more to the influences of culture and society than government or system structure. If so, the nearly exclusive
attention to system structure in the current U.S. reform movement may be misplaced.

**Social Circumstances of Schooling**

Higher education and business firms are the two largest consumers of schooling in most societies. Hence their consumption patterns send signals concerning the qualities and accomplishments that they find desirable in students. The consumption patterns of American colleges and universities send mixed but generally weak signals about the importance of strong academic performance. Only a small group of highly selective colleges and universities has demanding admissions standards. A much larger fraction has very modest requirements: Students need only a thin record of academic accomplishment in high school, often only a C or low B average, to be acceptable for admission. Only high school graduation is required for admission in still another large group of institutions. And not even high school graduation is required in another large group. There is something to celebrate in this, for many students can have a second or third chance to make good despite previous failures. But these arrangements also signal that high school students need not work hard in order to get into college or university (Bishop, 1989; Powell et al., 1985; Trow, 1961, 1988). It is thus irrational for most students who aspire to higher education to work very hard in high school, for only a few have a chance to enter a highly selective college or university. Their opportunities lie instead at less selective institutions, where much less high school work is required for admission (Powell et al., 1985; Trow, 1988). It therefore is irrational for high school teachers to press those students to try hard and do their best work, for the students need not push themselves in order to push ahead.

A similar situation holds for the employment practices of most U.S. businesses. Few firms seem to ask for students' high school transcripts or references from teachers when considering them for employment. And even when firms do request transcripts, only a tiny fraction of schools supply them (Bishop, 1989). The lack of employer interest deters students from thinking that grades, effort, or behavior count for jobs and deters teachers from thinking that their judgments about students can make a difference (Rosenbaum & Kariya, 1989). Hence it would be irrational for students who intend leaving high school for work to do their best in school. Thinking deeply is difficult, and only a small fraction of students seem intrinsically motivated to do it. If students can get jobs without even presenting evidence about their grades, school behavior, and teachers' evaluation of their work, why should they work hard?

These patterns are unusual. Colleges and universities in Japan, France, and many other nations lay great weight on students' performance in high school or on high school leaving and university entrance exams. If students wish to enter university, it is essential to work hard in school and get good grades, prepare for the exams, or both (Rosenbaum & Kariya, 1987). There are many troublesome features of such systems, including the exclusion of able students who do not do well on exams. But these systems leave no doubt about the importance of hard work and good school performance.

Employers in many nations also pay close attention to students' secondary school records in hiring decisions. This is true in Japan; New South Wales, Australia; Singapore; and West Germany (Bishop, 1987, 1989; Clark, 1985; Kariya & Rosenbaum, 1987; Rosenbaum & Kariya, 1989). Employers routinely review transcripts and teacher references when high school graduates or early school leavers apply for jobs. In some cases, schools and employers work closely in placing students in apprenticeship or regular work situations. Teachers know these things, as do students. It is understood that students who do not apply themselves and behave decently in school will have difficulty finding good jobs. There are important rewards for academic effort and good behavior, even for students who have no ambitions for further education.

**Culture**

Incentives are not the whole story. The values attached to learning and teaching differ among societies, as do attitudes toward authority and habits of child rearing. Such beliefs, values, and habits may support the guidance that issues from formal agencies in some cases and subvert it in others.

Americans have long been ambivalent about academic work. Anti-intellectualism is a prominent feature in American culture (Hofstadter, 1963), and we are inclined to value experience over formal education. Americans also value practical rather than intellectual content within formal education (e.g., learning to "get along") and job-related knowledge and skills (Cusick, 1983; Lynd & Lynd, 1929; Powell et al., 1985). Eighty-one percent of the respondents in a recent Gallup poll said that the "chief reasons" people want their children to get a formal education are job opportunities, preparation for a better life, better-paying jobs, and financial security. Only 15% said that the chief reason was to become more knowledgeable or to learn to think and understand (Elam & Gallup, 1989). Relatively few American mothers report working closely with their children on academic tasks or offering support for hard work and success in school (Stevenson et al., 1985; Stevenson, Lee, & Stigler, 1986).

Intellectual work and academic accomplishment appear to be more highly regarded in other societies. In Japan and China, for instance, parents take education very seriously and hold teachers in high esteem. In-
vestigators report that Japanese mothers play a central role in their children’s academic success (Holloway, Kashiwagi, Hess, & Hiroshi, 1986; Lebra, 1976; Shimahara, 1986; White, 1987). They encourage children and work closely with them on assignments, creating an environment conducive to learning (Holloway et al.; Stevenson et al., 1985; Stevenson & Lee, 1990; White, 1987). Similar practices are found among Chinese parents (Stevenson & Lee). Japanese and Chinese mothers also seem to hold higher standards for their children and to have more realistic evaluations of their achievement than American mothers (Stevenson & Lee).

Family life and values thus seem to support successful schooling in Japan while impeding it in the United States. One researcher noted that “it would be quite impossible to take account of Japanese formal education without recognising that—in many ways—it lives in close symbiosis with that culture” (King, 1986, p. 75; see also White, 1987). American commentators often have offered complementary explanations of weak work in school here (Coleman, 1961; Cusick, 1983; Lynd & Lynd, 1929; Powell et al., 1985).

Habits of association and attitudes toward authority also may help to explain why formal guidance for instruction seems to be treated more seriously in some societies than in others. Since Alexis de Tocqueville, observers have noted Americans’ distinctive individualism, their preoccupation with personal autonomy, and their focus on individual expression and development. These qualities often have been contrasted with more cooperative and deferential behavior in other societies, in which people seem more preoccupied with how they can fit in, work with others, and advance collective values.

For instance, Japanese teachers carefully foster cooperative work on common tasks, build habits of collaboration and conflict resolution, and teach accommodation to group preferences. They exercise great patience in encouraging students to work with groups, and use groups to regulate behavior, manage conflict, and support desired attitudes. In the process, Japanese teachers accommodate “discipline” problems that would be intolerable to most Americans. But they build many centers of support for the values and behavior they wish to inculcate rather than assuming the entire burden themselves. Many “discipline” problems are therefore managed by other students rather than the teacher alone (Boocock, 1989; Peak, 1989).

American teachers instead foster individual work on individual tasks. They cultivate little or no group activity and rarely build group strength. They do not support accommodation to group preferences but tend to impose their own preferences. They manage all discipline problems themselves and have little patience with misbehavior. American students learn little about alternative ways to manage conflict or about collaborative work.

Thomas Rohlen (1989) framed these comparisons in a broad analysis of differences in organizational life. He viewed Japanese classrooms as marked by more respect and deference than those in the United States but as less hierarchical and teacher centered. The Japanese emphasis on accommodation to group values and cooperative work helps to explain the coexistence of two things that strike Americans as inconsistent: deference to authority and enormous capacity for productive work in decentralized organizations. Rohlen notes that these qualities are found in all sorts of organizations, from primary classrooms to business and government.

The result is an overall social structure that is in many respects centrifugal in terms of affiliation and the capacity to order events. Social contexts and organizations are built up from the bottom (or the outside), so to speak, in a way that invests the peripheral entities with great stability. The locus of social order is in the lower-level, subordinate groupings. . . . These entities gain a degree of autonomy from the fact that internally they are strengthened by the pattern of attachment we are considering. (Rohlen, 1989, pp. 31–32)

Americans have few alternatives between individualism and imposed authority. We often fluctuate between centralized hierarchies and decentralization. The result makes it difficult for central authority to succeed, while also precluding the development of alternatives.

How does this bear on our analysis? The remarkable consistency in Japanese education may owe as much to deference to authority, habits of accommodation, and extraordinary pressures for cooperation at all levels as to formal guidance. Rohlen’s account also suggests caution about the prospects for much more potent guidance for instruction in the United States, for it might be crippled by our habit of alternatively embracing central authority and fiercely resisting it.

**CONCLUSION**

Most schemes for fundamental change present a paradox. They offer appealing visions of a new order but therefore also contain a devastating critique of existing realities. If pursued, these critiques reveal the lack of many capacities that would be required to realize and sustain the new vision. Reformers can imagine a better world in which those capacities would be created, but their problem is more practical—how to create the new world when those capacities are lacking?

Recent reform proposals offer a version of this puzzle, for they entail two dramatic departures from American political and instructional practice. One is that schools should promote a new instructional order marked
by deep comprehension of academic subjects, in which students are active learners rather than passive recipients and in which teachers practice a much more thoughtful and demanding pedagogy. The other departure is radical reform in school governance and instructional guidance to produce the desired changes in classrooms. These reforms include a national examination or testing system, national curricula, a national system of teacher certification, and many equally dramatic reforms at the state level. Although different in important ways, all of these plans and proposals move sharply toward greater state, national, or federal control of education. All seek to realize new and ambitious sorts of teaching and learning in ordinary classrooms. Hence all represent an effort to much more powerfully guide instructional practice with policy.

These are astonishing, even revolutionary, proposals and are appealing in many respects. But we have pointed to weak capacities for change in several crucial departments.

One is politics. Reformers seek much greater state, national, or federal control of education and a consequent tightening of the links between central policy and local practice. But the entire fragmented apparatus of American government weighs against such ventures. Past efforts at tightening the links between policy and instruction by increasing central control have met with extremely limited success and produced organizational side-effects that have greatly complicated governance and administration. The reforms sketched above seem unlikely to succeed unless the government and organization of U.S. education is either greatly streamlined or simply bypassed. Streamlining has much appeal, including relief from the burdens consequent upon past efforts to reform local practice with state or federal policy. But streamlining would entail an unprecedented reduction of existing policies and programs, and thus a reduction in existing governmental authorities at all levels. It would spell the end of many state and local government functions in education, even though it could ease many administrative and organizational problems. What would induce local and state officials to accept the diminishment or demise of their domains? Visions of a better school system? Barring fiscal catastrophe or a sustained mass movement for fundamental change in education, we see no sign of the requisite inducements.

Bypassing government appeals to many partly because the prospects for streamlining seem so bleak. The creation of nongovernmental or quasigovernmental authorities that may design a national examination system already is under way. A similar course of action has been taken by NBPTS in its efforts to create a national system of teacher examination and certification. Such bypass operations have great short-run appeal, for avoiding government sponsorship and operations could greatly ease the work of designing and developing national education systems of one sort or another. But the systems thus created would only work in the medium and long run if government were streamlined, for national curricula, examinations, or teacher certification systems could operate efficiently only if many extant policies and programs regarding testing, curriculum, instruction, and teacher licensing fell into disuse. Of course, that would require many existing state and local government authorities to fade away (i.e., streamlining), the difficulties of which we just touched upon.

Instructional practice is a second realm in which the capacity for change is weak. Reformers seek much more thoughtful, adventurous, and demanding teaching and learning, and they envision new instructional guidance to produce it. But nearly the entire corpus of instructional practice weighs against it. Teachers and students spend most of their time with lectures, recitations, and worksheets. Intellectual demands generally are modest, and a great deal of the work is dull. Only a modest fraction of public school teachers have deep knowledge of any academic subject. Research and experience both show that past efforts to fundamentally change teaching have had modest effects at best. Most often, they have resulted in fragmentary adoption of new practices, translation of new practices into old ones, or both.

Solutions to these capacity problems would require fundamental re-development in education. An intellectually ambitious system of instructional guidance would be one key element, but few Americans have had the education or experience that would prepare them to understand such guidance or put it to appropriate use. To build new capacities for education would be to reeducate many Americans. That is obviously true for teachers, but teachers' efforts would not prosper if parents and political leaders did not understand and support their work. Additionally, few teachers work in schools that could support radically different approaches to instruction, let alone teachers' efforts to learn such things. Building new capacity would require that schools become places in which teachers could learn and teach very differently.

Such re-development would be an immensely ambitious endeavor. The creation of new instructional guidance arrangements would be an extraordinary research and development task, surely the largest ever in U.S. education. For example, new examinations would have to be invented, to assess a broader range of academic knowledge and skills than conventional tests. The exams also would assess students' skill and knowledge in more diverse ways (e.g., writing essays in English, explaining and justifying answers in chemistry, and offering non-numerical representations of mathematical problem solving). Because examinations of this sort would invite students to use and display a broad range of knowledge and skill (Nickerson, 1989), the results would be difficult and time-consuming to evaluate, especially for a large and diverse population. Such
things are possible, and approximations can be found here and there in the United States and some other nations (Resnick & Resnick, 1989). But the approach has been little tried in the United States, and Americans have little experience. Specialists are just beginning to invent examples, and a few states are beginning to experiment with them (California State Department of Education, 1985). A few problems with such exams have been suggested (Porter, 1990), but many others are likely to appear if they actually are developed and widely used.

New curricula also would be needed for any guidance system keyed to deep understanding of academic subjects. Instructional frameworks would have to be devised, along with curriculum guides that focused attention on key elements of each academic subject. Texts and other materials that effectively opened access to those topics would have to be composed. These materials would have to be accessible to a large and diverse population of teachers and learners, and they would be most useful if designed in a way that teachers could learn from them while teaching, preparing to teach, and reconsidering their teaching. Such materials would be most helpful to teachers and students if subject coverage was integrated across the grades. Though such things seem possible, they are entirely unfamiliar in the United States. A few states are just beginning to develop more demanding and thoughtful curricula. It seems reasonable to expect that such a novel endeavor would take a long time to develop and longer to mature.

Neither new exams nor new curricula would work unless teachers understood them, and as things now stand, most teachers would not. This problem might be solved in part if teachers were extensively involved in building new frameworks, curricula, and assessments, and in grading students’ work. Such activities could be extraordinarily educative if they were designed with that end in view, but to do so would greatly complicate the development tasks. Additionally, these activities would reach only a fraction of the teaching force, and would touch only part of the reeducation need. Teacher education itself would have to be greatly improved, which would require fundamental changes in college and university education. Both professional and subject matter education would have to be deepened and focused much more closely on the content of schooling, and university teaching would have to radically improve. Such changes are daunting to contemplate, but they might be encouraged by the sort of examination system that the National Board for Professional Teaching Standards has proposed. If intending teachers’ grasp of subject matter and pedagogy could fairly be assessed, then the exams might offer college and university programs sensible targets for their educational efforts. If the targets were accepted, if teacher education programs were revised accordingly, and if school systems used the exam results as hiring criteria, the quality of teaching might be greatly improved. But note that such changes would be immense: The examinations do not now exist, and it would take colleges and universities at least a generation to make the required instructional reforms. The National Board is just beginning to develop some exams, and current estimates are that it will take at least 3 years to produce an initial prototype in a single subject for a grade or two. The NBPTS staff hopes that a full set of examinations might be developed by the year 1997, though no one really knows how long it will take. Here too Americans are relatively inexperienced. Even if the exams were developed roughly on schedule, it would be prudent to assume that many adjustments would be required as the exams came into use. And only a handful of professors have given any thought to the reforms of higher education that might dramatically improve the education of intending teachers.

It would be no mean feat to solve any one of these research and development problems by itself. But the recent reforms are “systemic”; that is, they seek to link assessment of students’ performance to the content and form of curriculum guides and course materials, and to tie both of them to teacher education. Hence the research and development tasks sketched above should be undertaken jointly. That would be an extraordinarily demanding and time-consuming effort. It is another reason we believe that devising a guidance system to support deep understanding of academic subjects would be a huge endeavor.

If changes in instructional guidance are crucial, they would not work all by themselves. Americans are well used to local control of education, and they have been less and less inclined to defer to teachers. Radical reform of instruction would be unlikely to get very far unless parents and political leaders supported it. Yet to do so these Americans would have to embrace very different conceptions of knowledge, teaching, learning, and schooling than they currently do. That is possible. For instance, administrators, political leaders, and parents could learn about new examinations by participating in their development, in field trials, and in revisions. Though such work probably would increase conflict in the short run, it might increase the long-run chances that the finished exams would be understood, accepted, and used appropriately. But the learning would be a great change for parents and political leaders, no less large or difficult than for teachers and students. And to give administrators, parents, and politicians opportunities to learn would complicate, slow down, and alter the development of new exams.

Finally, the reforms that we have been discussing would require changes in individual school operations and organization. One reason is that teachers and administrators would have a great deal to learn. It is unlikely they could offer the intellectually ambitious instruction that re-
formers seek unless they had ample time to learn on the job. Another reason is that the new instruction would be much more complex and demanding than the common fare in schools today. It is unlikely that teachers could do such work unless they had the autonomy to make complicated decisions, to work with colleagues, and to revise as they went. Still another reason is that teachers could hardly contribute to the development of a common instructional system unless they had much more time and opportunities to work with others in education beyond their school. These considerations suggest radical changes in schools and school operations, so that they offered more opportunities to learn on the job and greater autonomy for school professionals. But how could that be done in the context of reforms that entail much greater central authority and power? Not easily, unless the reforms were carefully designed to enhance such autonomy, and unless the capacities to exercise it were nurtured at all levels of education. Marshall Smith and Jennifer O’Day (1990) have sensibly argued that systemic reform would require a combination of “bottom-up” and “top-down” change. But given the present organization of U.S. schools and school governments, and the work habits of policymakers, teachers, and administrators, that would be a great change indeed.

These observations suggest that the recent reforms might have more chances of success if the entire venture were conceived and executed as a great educational enterprise, one in which state and national leaders had as much to learn as teachers and students. That seems appropriate to a set of proposals that would require such radical change in individuals and institutions, and the cultivation of so many new capacities. But the recent reforms began to catch America’s imagination just as economic and social problems began to further constrain the capacities for change. States and localities are struggling with a massive fiscal crisis, and many confront staggering social problems.

What happens when grand visions of change collide with limited capacities? The most common consequences are incremental alteration at the margin of institutions and practices, or self-defeating results, or both. For example, education reformers could relatively easily add streamlining mandates and a layer of streamlining agencies to the existing accumulation of mandates and organizations. But they would find it much more difficult and costly to replace the present cluttered and fragmented structure with one that was much simpler and more powerful. Similarly, bypass operations could easily add complexity rather than reducing it. For governments would not sit still. Experience suggests that they would respond by regulating the bypassing agencies, or by finding roles for themselves in interpreting and managing the functions generated by the bypassing agencies, or by taking over the bypass agencies without closing down the authorities that were to have been bypassed, or some combination of the above. In this event efforts to increase simplicity and clarity might well further complicate and confuse matters.

Similarly, it would be relatively easy and cheap for reformers to add mandates for more thoughtful teaching and learning on top of extant mandates for teaching basic skills, informing students about drugs and AIDS, not to mention remedial education, bilingual education, and programs for cooperative learning and improving students’ self-concepts. It would be much more difficult and costly to replace the present cluttered and fragmented accumulation of instructional guidance with a system that was simpler, more focused, and more powerful. It would be even more difficult to redevelop education in ways that would enable most educators to take good advantage of such changes.

But uncommon results are always possible. For instance, the recent reforms might succeed by a sort of osmosis. If reformers kept up the pressure for several decades, much more consistent and demanding instruction might result. Indeed, the extraordinary fragmentation of American institutions may create a porosity that permits such change. Something like that sort of osmosis seems to have occurred in the spread of basic skills instruction during the 1970s and 1980s. More time and pressure would be required for the more difficult reforms that we have discussed here, and most reform movements in education are notoriously brief, but the fragmentation of American government could open many opportunities to persistent reformers.

We also may underestimate the ingenuity of policymakers and educators. Perhaps they will seize on the growing social and financial crisis to turn schools in the direction that reformers wish. Streamlining, simplification, and consistency could be appealing slogans in an era of falling budgets and rising problems. Perhaps the crippling legacy of the Reagan years in public finance and the economy will become an opportunity to press ahead with its nationalizing legacy in education.

No one knows how the story will turn out. But in most cases, today is the best guide to tomorrow. If American politics and education run true to form, reformers will do better at addition than subtraction. They will introduce many different schemes to make education more consistent, but they will be less able to produce consistency among those schemes, to greatly reduce the clutter of previous programs and policies, or to fundamentally change teaching. If so, current efforts to reduce fragmentation would only add several new and unrelated layers of educational requirements and instructional refinements on top of many old and inconsistent layers. The new ideas would have their day, but only at the expense of further clutter and inconsistency.
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