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## *Standards-Based School Reform: Policy, Practice, and Performance*

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**T**HE YEARS between 1980 and 1994 saw a remarkable realignment in American education. During the 1980s, a conservative president vowed to abolish the federal Department of Education and turn schooling back to states and localities. But the Department of Education persisted, and Ronald Reagan's administration exerted an impressive nationalizing influence on public education. It helped to mobilize powerful national pressures for better academic performance, stiffer standards, and even national tests. In the 1980s conservatives began to push public education toward some sort of national and perhaps even federal system. Some even attacked local control of schools as a dangerously outmoded idea.

The same years also saw dramatic changes in ideas about the purposes and content of schooling. In the mid-1970s and early 1980s, school improvement had focused on the "basics."<sup>1</sup> By the end of Reagan's first term, however, researchers, school reformers, and advocates from business had begun to argue for more intellectually ambitious instruction. They contended that teaching and learning should be more deeply rooted in the disciplines and much more demanding. Teachers should help students to understand mathematical concepts, to interpret serious literature, to write creatively about their ideas and experiences, and to converse thoughtfully about history and social science. Reformers also began to argue that

This chapter has profited from the comments of several conference participants and from the persistent attention of Helen Ladd. I also owe James P. Spillane many thanks for his close reading of an earlier draft and many helpful suggestions.

1. In the 1970s and early 1980s, in response to worries about relaxed standards and weak performance by disadvantaged students, states and the federal government pressed basic skills instruction on schools, supporting the idea with technical assistance and enforcing it with standardized "minimum competency" tests. Those tests were America's first postwar brush with performance-oriented schooling.

schools and school systems should orient their work to the results that students achieve rather than to the resources that schools receive.

No less remarkable, reformers proposed fundamental changes in politics and policy to achieve these goals. Beginning with California, state education agencies began to exercise more central authority for instruction by devising and implementing intellectually ambitious curriculums and assessments. By Bill Clinton's inauguration, reform efforts that envisioned some version of coordinated change in instructional frameworks, curriculum, and assessment were under way in several dozen states. Reformers came to call this combination "systemic reform," and it entailed several key ideas: that instruction should be intellectually much more ambitious; that those ambitions should hold for all students; and that learning and teaching should be pressed in that direction by a coordinated set of instructional guidance mechanisms, including means to hold schools accountable for students' performance.<sup>2</sup> That vision of reform was given a central place in federal education policy in 1994 with the passage of Goals 2000 and the reauthorization of title 1.

Systemic reform rested on several key assumptions. First, reformers assumed or hoped that if state and federal education agencies set ambitious goals and created new instructional frameworks, curriculum, and assessments, then professionals would get the message and instruction would become more demanding and coherent. Reformers conceded that teachers would need help to learn, and most argued that schools should be made accountable for students' performance as measured in the new assessments.<sup>3</sup> But no state envisioned teacher education as the engine of reform. In most cases, the central focus was reserved for some combination of standards, curriculum, and assessments.

A second key assumption was that intellectually ambitious instruction was a reasonable enough goal for American public schools that reformers could propose attainment in a relatively short time—perhaps by the year 2000 or soon thereafter. That seemed quite astonishing, given the nation's long history of devotion to basic skills and relatively low-grade intellectual ambitions for most students. A third assumption was no less remarkable: that state and federal agencies could carry the burden of standards-based

2. O'Day and Smith (1993).

3. Most state and federal reformers seemed to accept some version of this idea. Various mechanisms to enhance accountability were included in the reforms, but they seem to play a central role only in Kentucky. The notion of accountability also is prominent in title 1 of the Elementary and Secondary Education Act and Goals 2000, though not tightly defined.

reform. This implied that they could quickly mobilize the capabilities to write and promulgate standards, devise instructional frameworks, compose assessments, and thus change teaching and learning. A fourth idea was that systemic reform would reduce inequality in educational achievement if disadvantaged students were held to the same high standards as everybody else and if schools could be made to improve education across the board.

Systemic reform, therefore, is broader than performance reward schemes, which focus on a single mechanism for change—incentives for improved student performance. Systemic reform embraces a linked set of mechanisms in instructional guidance that includes such incentives but reaches far beyond them. But both approaches involve a fundamental reorientation of public education toward results produced, rather than resources allocated, and toward somehow holding schools accountable for students' achievement.

Systemic reform is nothing if not ambitious. The present system of education is marked by weak and inconsistent standards, incoherent guidance for instruction, little consensus about goals, and great inequality in educational achievement. Systemic reformers envision the rapid creation of a system marked by strong and consistent standards, coherent guidance for instruction, strong consensus about goals, and much greater equality in educational achievement. That stark contrast frames the central issue in this chapter: will systemic reform succeed in fundamentally revising public schools, or will public education impose fundamental changes on systemic reform? My answers to this question are not conclusive, since the reform movement is young and much of the evidence is not yet in.<sup>4</sup> But a good deal

4. One main basis for my report is a continuing study of how intellectually ambitious state instructional policies develop and are enacted by state and local educators and teachers—a study conducted in more than a dozen districts in Michigan, California, and South Carolina. The districts range from large to small and from highly urban to semirural. They include several cities—one very large and several others of medium size—and two fairly conventional suburbs. All of the districts include schools in which there are an appreciable number of disadvantaged children, and more than half are heavily attended by such children. The research team of which I am a part has observed and interviewed in second and fifth grades, and in most cases we followed teachers' work for three to five years.

I am indebted to my colleagues in that study, including Deborah Lowenberg Ball, Carol Barnes, Jennifer Borman, James Bowker, Daniel Chazan, Pamela Geist, S. G. Grant, Ruth Heaton, Nancy Jennings, Nancy Knapp, Susan Luks, Steve Mattson, Penelope Peterson-Sue Poppink, Richard Prawat, Jeremy Price, Ralph Putnam, Janine Remillard, Peggy Ritterhouse, Angela Shojigreen-Downer, James Spillane, Sarah Theule-Lubienski, Karl Wheatle, and Suzanne Wilson. The study has been supported in part by Michigan State University and by grants to Michigan State University and the University of Michigan from the Peabody Charitable Trust (Grant No. 91-04343-000), the Carnegie Corporation of New York

of evidence has been collected, and I consider it in four areas: guidance for instruction, teaching practice, accountability and the political context, and conflicting goals.

## Guidance for Instruction

Systemic reformers seek more coherent and powerful state guidance for instruction, but power and authority have been extraordinarily dispersed in the U.S. education system. The school "system" is in some critical respects a nonsystem, a congeries of more than 100,000 schools situated in 15,000 independent local governments, 50 state governments and hundreds of intermediate and special district governments in between, as well as several federal agencies and countless private organizations. It is reasonable to wonder if proposals for high standards and instructional guidance could have a coherent effect on practice in such an incoherent system.

Although systemic reform has had significant effects, it does not seem to have made guidance for instruction more coherent. At the federal level, certain reforms made impressive progress between the mid-1980s and 1994. Chapter 1 (now title 1) was reauthorized in 1988, and it encouraged state and local programs to adopt intellectually more ambitious instructional goals for disadvantaged children. The governors met with President Bush at Charlottesville at roughly the same time and agreed on national education goals—an unprecedented idea. But after several years of partisan scrapping, congressional Democrats rejected President Bush's proposal, titled America 2000. Only in 1994, after Bill Clinton was elected president, was the Democratic version passed into law as Goals 2000.

From one vantage point, Goals 2000 seemed a giant step. Title 2 of the bill created a federal certification agency, the National Education Standards and Improvement Council (NESIC), for national content and performance standards, and title 3 created a program of grants to state education agencies to support the development of state instructional goals, state content and performance standards, and state and local plans to meet those

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standards. These steps would have been politically unimaginable just a few years earlier. But politics had not changed much at all in other respects, for Goals 2000 deferred broadly to states: NESIC was voluntary, and states could get their title 3 grants without meeting many requirements related to Goals 2000.

Title 1 was reauthorized again shortly after Goals 2000 became law, and this time it pushed much further toward systemic reform. It required state title 1 programs to set high instructional goals for students, to devise or adopt intellectually ambitious content and performance standards, and to create local programs that would push all students to high standards and hold schools accountable for the results. Title 1 is a roughly \$7 billion annual formula-grant program that operates in all states and more than 90 percent of all local districts, and it offers monies that states and localities want for the education of disadvantaged students. Reformers expected that state and local desire for title 1 funds would lead them in the direction of Goals 2000.<sup>5</sup>

### *Varied Reforms in the States*

Title 1 and Goals 2000 may mark the beginning of a fundamental shift in the federal role in schooling. But that will depend partly on what happens in the states, which so far has been a very mixed story. The state versions of these reforms made progress between the mid-1980s and 1994, as guidance for instruction moved in the direction of reform. For instance, California produced a series of ambitious new instructional frameworks in the core academic subjects between 1985 and 1994 and made large changes in the content and format of the state assessment program. Vermont made similarly impressive changes in assessment and other guidance for instruction, though educators there have relied on much more extensive professional involvement than did those in California. Kentucky drastically overhauled its entire school system in response to a court order, installing new systems of assessment, accountability, and professional development. Many other states have moved in the same direction—South Carolina, Arizona, New York, Connecticut, and Delaware among them—though with varying strategies and speeds.

In fact, differences among these states are as noteworthy as the similarities. For instance, Michigan—which for most of its history had a very de-

5. See Education Funding Research Council (1995).

centralized school system—moved toward more central guidance, but it did so in a much more piecemeal fashion than California, Kentucky, or Vermont, with few signs of the guiding vision of reform that could be found in those three states. Michigan revised its guidance for reading quite dramatically in the mid-1980s and a few years later revised the state reading tests, almost as an afterthought. Revisions in mathematics and science guidance and assessments followed several years later, but at roughly the same time the legislature initiated a core curriculum measure (Public Act 25) that required local districts to devise their own approaches to core subjects. Shortly thereafter, and for different reasons, the governor and legislature overhauled the state school finance system, which reduced local property taxes and increased the state's role in school finance. Thus Michigan moved toward reform in a distinctly disjointed manner.<sup>6</sup>

South Carolina, by contrast, seemed to move quickly from a well-established and highly centralized 1980s state program that pressed schools to teach facts and skills and rewarded them for test score gains, to a program in the early 1990s that focused on intellectually much more ambitious instruction within a more decentralized state structure. But the new system of frameworks and assessments is still incomplete, and important elements of the previous system remain on the books. The state did not dismantle its previous system of rewards for performance on statewide standardized tests, and at the moment it is unclear what sorts of performance will be rewarded.<sup>7</sup>

California differed from both Michigan and South Carolina. The state took an aggressive approach to developing new state guidance, and it sustained the clearest vision of intellectually ambitious instruction for the longest time—between 1985 and 1994. But the state education agency also changed its strategy and tactics for implementing that guidance several times. In mathematics it initially published a brief new framework in 1985 that offered innovative but very broad guidance. In 1992 the state authorities published a new framework that offered much more detailed and somewhat different guidance. In the mid-1980s state education leaders seemed to place most of their bets on changing textbooks through the state adoption system, but when that produced only modest changes, they promoted the development of alternative curriculum materials, an approach that seems to have done more to make dramatically revised curriculum

6. Cohen and others (forthcoming, chap. 7).

7. This report is based on several papers by members of the study mentioned in note 4 above, including Jennings, Spillane, and Borman (1995); Jennings and Spillane (1995).

available. Next, state officials gave much more emphasis to revising the state testing program, partly with the aim of increasing accountability: officials argued that once the assessments were changed and the results published, the low scores on more ambitious tests would “drive” school professionals to improve instruction. But that sort of accountability could work only if teachers noticed the results and decided to change, or if parents noticed and encouraged teachers to change, and, in either case, if teachers had the wherewithal to learn how to change.<sup>8</sup>

State guidance for instruction in systemic reform thus varies considerably. States differ in the comprehensiveness, speed, approach and depth of their reforms, and they have rather different histories. Systemic reform has brought a broad drift toward intellectually more ambitious instruction at the state level, but thus far it has not brought more coherence to state guidance for instruction.

### *Local Responses to Reform*

These points gain force from consideration of the local responses to systemic reform. The guidance for instruction that local central offices offer to schools has begun to shift in the direction of reform, but that shift has so far not been accompanied by greater local coherence in guidance for instruction, for districts' responses differ significantly within states, and schools' responses differ significantly within districts. Our research team observed these patterns in Michigan, California and South Carolina: a few districts aggressively tried to capitalize on the state reforms for their own reasons, a small fraction were indifferent, and most responded in piecemeal and modest fashion.

James Spillane has shown that change was fragmentary within districts.<sup>9</sup> Many local central offices sent mixed signals, since their offices included both reformers and traditionalists. Since many subunits in central offices have quite different missions, they tend to make use of higher-level policies in ways that fit with those missions. For instance, professional development administrators in one city school district saw the state reforms as just one of many possible sources of demand for their services and thus gave them a modest priority. But the district reading coordinator focused on the

8. Despite some ingenious efforts and a good deal of organizing, California education agencies had at best modest capacity to help teachers to change. This account is based on field notes from the study mentioned in note 4 above.

9. This account is drawn from Spillane (1993). See also Spillane (1996a).

extraordinary need for professional development if the reading reforms were to succeed. She tried to get local help with that task, but the central office curriculum leaders resisted the state reforms and refused fiscal support for her work because they believed that most students needed basic skills instruction. At the same time, administrators in the district's chapter 1 office took the state policy as an opportunity to change chapter 1 instruction significantly, including the initiation of a significant professional development effort for chapter 1 teachers and aides. Thus four subunits in the same central office—which incidentally had recently settled on a single mission statement—broadcast quite different messages about the new state policy to schools and teachers.<sup>10</sup>

That story was repeated with local variations in all three states. Scholars habitually write as though school districts are unitary and internally homogenous organizations, but they are not.<sup>11</sup> Administrators work in subunits that specialize in prior policies like title 1, bilingual education, or special education, or that reflect professional subspecialties like the reading curriculum, secondary education, or vocational education, or that reflect functional distinctions like budget, evaluation, or professional development. Organizational context does not determine everything, but it does shape perceptions and judgment. An internally fragmented local organization means that when state agencies send one message, the local office receives it in many different ways.<sup>12</sup>

Another final source of variation is differences among school principals within districts: some embrace reforms and use them as an opportunity to try to change instruction; others maintain their attachment to traditional classroom methods; and still others are neutral. Only one of the school systems that we studied made anything that might approach a serious and sustained effort to shape principals' decisions about instruction.

### *Reasons for Variability*

The very reforms that seek more coherence in instructional policy thus have helped to create more variety and less coherence. While there has been a broad movement toward intellectually more ambitious instruction, there also has been great variability within that movement. Looking across

10. See Spillane (1993).

11. Spillane (1996b).

12. For a general account of these organizational patterns in American education, see Cohen (1982); Cohen and Spillane (1992); and Spillane (1993).

districts, one used to see a fairly homogenous embrace of basic skills. Now, some districts employ "literature-based" curriculums in reading and "hands-on" approaches to mathematics while others retain more conservative approaches. One also can see significant differences within districts. Some districts, central subunits, and schools are working in much more ambitious ways than they did five years ago, many more have changed somewhat, many have changed only a little, and some not at all. Quite a few are displaying all of these reactions at once.

So far, then, the growth of state instructional policy has not constrained local instructional policymaking.<sup>13</sup> The states have used a diverse array of policy instruments—new instructional standards or frameworks, new curriculum guidance, revised testing programs, and even revamped professional education—but local educational authorities have continued to act as though they had undiminished authority to make instructional policy. Some have rewritten local standards or frameworks, revised professional education, and changed testing programs; others have continued as before. Stronger state guidance for instruction has not reduced local instructional policymaking or weakened local school governance. Local school policymaking generally is more active and influential now than it was in the late 1960s and early 1970s, despite more active state guidance for instruction.

That pattern of growing activity everywhere owes a good deal to the fragmented organization of schooling, for it tends to amplify differences in what educators make of the messages that flow around them.<sup>14</sup> Although states have all the formal authority in schooling, they usually delegate most of it to localities, most of which delegate a great deal to individual schools, which until very recently left many decisions to teachers. Governments also are divided by the separation of powers: since legislative, executive, and judicial branches of state and federal governments respond to different incentives and operate in different ways, professionals working in them often see the same issues differently. Local schools embody elements of that division, with full-time professional executives struggling to work with the part-time legislatures known as school boards. Finally, chronic distrust of government and carefully designed weakness in it has opened a large role for private-sector organizations to do much of the work that state agencies do in Asia and Europe, including such central matters as student assessment, materials development, and text publishing.

13. See Cohen (1982); Fuhrman, Clune, and Elmore (1988); Fuhrman and Elmore (1990); Spillane (1996a).

14. Scott and Meyer (1983); see also Schwille and others (1983).

As reform ideas became popular and played through this fragmented structure, they were picked up by an astonishing variety of organizations—all concerned with schools, but each in its own way. Many organizations responded by offering their own programs for systemic reform, their own ideas about standards, goals, and curriculum, and their own views of how to achieve greater coherence. The result was a veritable deluge of critiques, reform ideas, proposals, and materials.<sup>15</sup> Although much of it tended in the same very broad direction of higher standards and greater coherence, the aggregate was a blizzard of different and often conflicting ideas. The result resembled the disease as much as the cure.<sup>16</sup>

A second explanation for more varied guidance for instruction is that state reform proposals often point in several different directions at once, because they embody divergent political tendencies. For example, South Carolina's recent systemic reforms prominently featured an effort by the state education agency to strengthen and streamline state guidance for instruction, yet at the same time the state legislature adopted a scheme to decentralize state government and increase individual schools' influence and involvement.<sup>17</sup> It also sought to bypass district central offices, channel some state funds directly to schools, and make the decisionmaking process at each unit of government more participatory by involving representatives of various interest groups in governing the schools. This reform package moved in several directions at once. If the decentralize-and-enhance-school-influence elements of the reforms were to succeed, they would run counter to the streamline-governance-and-enhance-state-influence elements.

Systemic reform seems likely to carry these contending tendencies into practice. More school-level power and participation in hope of strengthening individual schools' capacity for improvement could be consistent with streamlining and simplifying governance, if it were balanced by large sub-

15. Although government is one source of the deluge, the private sector has been no less important. Ideas, materials, services, and proposals flood into local districts from nongovernmental sources—such as the education professions, university researchers, and text and test publishers—and the private sector in American education is no more coherent than government. Many private organizations create and merchandise tests, school texts, and supplementary materials, all of which typically are unrelated. Some private organizations try to reduce taxes while others organize to promote changes in the curriculum. All these and many other private organizations cluster around the fragmented formal governance structure of public education, performing a great variety of essential and peripheral functions while adding to the complexity of policy, politics, and administration.

16. For a fuller account of this phenomenon, see Cohen and Spillane (1992).

17. See O'Day and Smith (1993).

tractions from local, state and federal governance and policy.<sup>18</sup> But politicians find it much easier to add than to subtract. Agencies scheduled for reduction or elimination always have advocates and often do something useful. Addition without subtraction produces efforts to simplify that also complicate and efforts to decentralize that also centralize.<sup>19</sup>

A third source of incoherence in the response to reform has been the reform ideas themselves. While reformers agree that more demanding standards are desirable, they hold different views about what such standards are, how they might be developed and used, and how they might affect education. For instance, ideas about the way to realize new standards of performance vary wildly. Many reformers argue for the "alignment" of assessment, curriculum, and instruction, but some believe that alignment should be defined and enacted one school at a time, while others contend that it should be accomplished for all schools together statewide or district-wide, by integrating the content and methodology of tests, curriculum frameworks, and teacher education and texts and requiring professional compliance.<sup>20</sup> Still others try to blend the two visions. Such disagreement extends to nearly all elements of the reform agenda.

That sort of disagreement arises both from the different conceptions of educational change that are embraced by various advocates of reform and from the weakly specified reform agenda. Even in mathematics, where the National Council of Teachers of Mathematics (NCTM) standards are commonly believed to mark unprecedented agreement about the purposes and methods of better education, practitioners and policymakers hold many different ideas about what the standards mean and what they suggest for practice. One reason for such different ideas is that the NCTM standards are phrased in general terms. That is no oversight, for the ambitious and complex instruction that NCTM wants to encourage could not be closely specified without being transformed into something much less am-

18. O'Day and Smith (1993).

19. One can find parallel instances in almost all state reform efforts. Late in 1993 the Michigan legislature passed a large package of reform legislation. In certain respects it expanded state influence in curriculum and sought to clarify lines of responsibility over matters of curriculum and instruction. But Public Acts 335 and 339 also reflected a deep tension between efforts to simplify instructional governance by establishing stronger state-level leadership over curriculum and instructional matters and efforts to preserve local control on these matters. See Thompson, Spillane, and Cohen (1994).

20. The differences are quite sharp. Clune (1993) and Darling-Hammond (1996) both favor some sort of decentralized reform process. But O'Day and Smith (1993) advocate a much more structured and "systemic" process of change that would have significant uniformities, at least within states.

tionous and complex.<sup>21</sup> But general guidance necessarily encourages ambiguity and disagreement about what it entails for state and local implementation and classroom instruction.<sup>22</sup>

Systemic reform thus has begun to change guidance for instruction in American education, nudging it in the direction of more ambitious goals, higher standards, new assessments, and more substantial curriculums. But American education has also begun to change systemic reform, turning proposals for leaner, more focused, and more coherent guidance for instruction into a gathering babel of reform ideas and practices. That should be no surprise, for American government was designed to frustrate exactly the sort of coordinated action within and among governments that systemic reformers seek. But the consequences are troubling. The growth of new public and private organizations in education since the 1950s has been fragmented and diffuse, spawning more agencies and increasing political and administrative traffic without greatly increasing the capacity for instruction.<sup>23</sup>

One irony in this story is that carefully designed barriers within American government have kept public education agencies weak as they have grown in the wake of expanding policy.<sup>24</sup> Another is that while advocates of systemic reform speak of reducing and streamlining government, even the strongest state and local agencies have only modest capacity in such central areas as curriculum, assessment, and teacher development. The recent reforms could not succeed unless state and local governments and pri-

21. There are other consequences of weak specification. For example, the ambitious new NCTM standards assume that adopting teachers and students would need a good deal of room to devise academic tasks, revise lessons, and improvise responses to each others' work; but all that would be attended by much uncertainty. In order to make good use of the standards teachers also would need much deeper knowledge of mathematics, of mathematics teaching, and of students' mathematics learning than most American teachers now have. They would require rather different beliefs and professional values than most American teachers now hold with respect to these matters, and they would need ways to work together on mathematics instruction—that is, social and professional structures that could enable teachers to engage in continuing professional work concerning what the standards might mean and how they might be enacted. Lacking such knowledge, beliefs, and collective work, most teachers would be free to interpret the standards as they liked.

22. There is much more that reformers could do without great additional specification. They could, for example, offer many examples of key reform practices; these would further simplify the reform in particular domains without offering recipes, rules, or requirements. Such examples could greatly increase the richness of advice about reform without restricting practitioners' work.

23. See Scott and Meyer (1983).

24. That result has been observed in past reforms. See Cohen (1982).

vate-sector agencies became vastly more knowledgeable and effective, which they hardly could do by becoming smaller.<sup>25</sup>

A final irony is that education governance has moved toward systemic reform while also moving away from it. Many observers expected that more pressure for coherence at the state level would diminish local action and bring localities into line with state guidance, for they think of power as a zero-sum game. But that view is more an expression of Americans' abiding skepticism about government than a result of careful observation. In this case, as in others before it, power, organization, and activity expanded at several levels of government at once, frustrating reformers' ambitions in some respects while beginning to realize them in others.

## Teaching and Reform

Advocates of systemic reform propose radical change in the nature of instruction, but the agents of change on whom they must rely are the very teachers and administrators whose work reformers find so inadequate. Reformers want students to be active problem solvers rather than passive absorbers. They want teachers to coach and conduct rather than to pour knowledge into passive brains. In these ways and others the reforms envision an instructional revolution. But most classroom work was relatively didactic and routinized on the eve of reform, as it had been for generations before. Teachers are the problem that policy must solve, for their modest knowledge and skills are one important reason why most instruction has been relatively didactic and unambitious. But teachers also are the agents on whom policy must rely to solve that problem.

One plausible criterion for the success of systemic reform in changing practice is teachers' awareness of new policy directions, and by that measure the new state policies are doing well, for many teachers have heard about them. For example, in California in 1994, 44 percent of elementary teachers reported that they "had read much or all of the 1992 mathematics framework," which is remarkable after only two years.<sup>26</sup> Another criterion

25. Cohen (1982); Spillane (1996a).

26. These data arise from a survey of California elementary school teachers sponsored by NSF (Grant No. ESI-9153834) and jointly carried out by Joan Talbert at Stanford University, Deborah L. Ball, Penelope Peterson, and Suzanne Wilson at Michigan State University, and myself at the University of Michigan. The data analysis reported here has been done by Heather Hill at the University of Michigan. The percentages are based on an unweighted sample and may change slightly when sampling weights are applied.

for success is practitioners' attitudes toward the reforms, and here again there are strong signs of progress. In the same 1994 survey of California elementary school teachers, 51.6 percent reported that they were "positive" or "strongly positive" about the state's new standards and assessments for mathematics. Only 4 percent report a negative view of the state's new standards and assessments, and the remainder are neutral or have no opinion.

Still another criterion for success is practitioners' awareness and conversation, for if the new ideas seep into teachers' and administrators' knowledge and discussions, there may be some basis for understanding and thus further change. By that criterion as well, the reforms have made significant progress. Many teachers report that they have learned to think and talk about reading and mathematics differently as the reformers' vision has gained currency within education. For instance, 54 percent of California elementary school teachers were able to distinguish quite accurately between leading reform ideas and other conceptions of mathematics instruction.<sup>27</sup> Most of the teachers studied in Michigan also reported that they now use the new reading ideas and view reading in more complex terms. They also seem to have a better sense of how deeply children can think about what they read than teachers did fifteen years ago, and they seem to appreciate how readers' knowledge and experience can shape the sense they make of text.<sup>28</sup>

A more stringent criterion of success is incorporation into practice, but even there the reforms have made progress. Many teachers report that they are using the new ideas in instruction. In reading, for example, many no longer use basal reading texts, but instead use what they refer to as "real" books and stories. Some recent reading texts no longer entail ability grouping, and the once ubiquitous reading groups have disappeared from some classrooms. One also finds improved texts and other materials in mathematics. Many teachers report that they expect their students to make sense of their assignments, and many use the language of mathematical understanding to describe their purposes and methods. For example, in the survey of elementary school teachers in California, more than 90 percent report that they use at least one set of the new curriculum materials that are

27. The criterion here was that teachers had to get two or fewer incorrect answers on a thirteen-item list of quite diverse ideas about mathematics teaching.

28. These conclusions are based on studies of more than sixty teachers in a dozen districts in three states. For detailed studies of a few of these teachers, see Jennings (1996); Spillane (1995); Grant (1994).

associated with the reforms. Even when the most popular and easiest to use materials are excluded, 65 percent still used at least one set of reform-oriented materials.<sup>29</sup> These are impressive results when viewed in light of earlier reports on the retention of traditional instruction in U.S. classrooms.<sup>30</sup>

But the results are not uniformly impressive. While many teachers do use a new language to describe what they are doing, they use that language in remarkably different ways. Many report that they have adopted "whole language" approach to reading instruction, but some take this to mean that reading is best learned by dealing with real literature and entire texts rather than studying component facts and skills in isolation, while to others it means employing bits of literature and allowing children only a superficial acquaintance with texts. A broad drift toward more thoughtful instruction and the use of more demanding and interesting materials has been accompanied by considerable variability in teachers' interpretation of the new policies.

Second, there are large differences of opinion about the extent and significance of change in teaching. Teachers often say that their changes are dramatic, reporting great progress in a short time and often describing the journey as a revolution. But when reformers view such changes in light of their new goals for instruction, they report that teaching has changed little or not at all.

Third, observational studies reveal that changes in math instruction are not as extensive as those in reading and language arts. One reason for the difference is that teachers are much more literate than they are numerate and thus are able to use innovative reading materials much more extensively.<sup>31</sup> Another is that schools and school systems have many more resources to use to help teachers improve reading instruction than to help them in math. Although state and national reformers think that the mathematics reforms are far ahead because the national mathematics frameworks are so impressive, the math reforms also are far behind because the

29. The full list of curriculum materials was Elementary Mathematician, Family Math, AIMS, Math Their Way, Math in Stride, Logo Geometry, Beyond Activities (such as Polyhedra), Mathematics Replacement Unit Projects (including Math by All Means, Math Excursions 2, Seeing Fractions, Used Numbers, and My Travels with Gulliver), Arithmetic Teacher, and Mathematics Teacher. In the second case, Math Their Way and AIMS were the excluded items.

30. For example, see Welch (1979).

31. See Price, Ball, and Luks (1995); Ball and Cohen (1996); Spillane (1995).



state and local capacity to improve mathematics instruction is so much thinner than in reading.

There are several explanations for the variability in teachers' response to the reforms. Some echo the issues in state and local guidance for instruction, for teachers work in the same fragmented system of schooling that I described earlier, and their knowledge of reform is partly mediated through those organizations. In the city school system discussed above, for instance, the central office subunits—curriculum staff, reading coordinator, chapter 1 office—issued conflicting messages about state reforms to teachers in the district. Teachers who worked with the reading coordinator got time to hear and read about the new policy, including the state documents that were used to promote it. Chapter 1 teachers got much more extensive professional development as well as reading about the new state policy. But regular teachers in the schools eventually got only brief after-school workshops at their home schools at the year's end, in which only a few of the policy ideas could be summarized. Moreover, regular classroom teachers also heard constantly from the district's carefully coordinated system to promote basic skills instruction in all schools, in which all teachers used the same texts and the same tests, and in which teachers were required to test students, to record scores on monitoring sheets, and to report students' progress regularly to their principal. Principals also were required to discuss these with each teacher and to report on the sheets to central administrators.<sup>32</sup>

Teachers' learning about the new state policy also was influenced by managers in individual schools, whose stance toward reform differs quite dramatically. In the same city school system, for example, one elementary principal shielded teachers from the system's basic skills-oriented instructional guidance system so they could teach in a less rigid fashion. He encouraged teachers to use more literature and in the late 1980s helped one to write a grant proposal to use more literature, which she won and proceeded to implement. (Significantly, the proposal went to the reading coordinator in the central office.) In 1990 the principal successfully lobbied the central office to let the entire school faculty try out a new "literature-based" reading text series, which encouraged many teachers toward the reforms.<sup>33</sup> In sharp contrast, other principals in the same system continued to push basic skills instruction. Similarly, while several elementary school principals in an affluent and progressive suburban district in the same state

resisted pressures from top district administrators to reform reading instruction, other principals in the same district supported the reforms. Despite powerful leadership for reform in the central office, the resisting principals allowed teachers to continue in the established, basic-skills approach to instruction, or they allowed school reading coordinators to do similar things. In the United States, many teachers can find ways to work their will in classrooms despite formal subordination to higher-level authorities, in part because there is so little local infrastructure to support higher-level guidance.

Teachers' learning about policy is also shaped by the social circumstances in which they work, and those vary amazingly in America. Compared with France, Japan, or most other developed nations, the United States is a remarkably diverse society with extraordinarily unequal schools. Schools that enroll the children of extremely poor immigrants from Latin America or Asia—in which more than two dozen languages are spoken, in which many students speak little or no English, and in which families are desperately poor—often sit near schools that enroll students from well-to-do and educationally advantaged families. Educators in the disadvantaged schools see state systemic reforms as another complicating element in their struggles with the problems of an extraordinarily diverse and needy student body, while educators in more privileged schools see the same state policies as a minor element in their efforts to keep up with parents' elevated expectations.

These circumstances help to explain school-to-school differences in teachers' responses to the reforms. But S. G. Grant has shown that teachers' responses often vary as much within schools as among them. Even teachers who work in the same school and have access to the same view of the policy from local central offices and principals often respond rather differently.<sup>34</sup> For example, a relatively unconventional fifth grade teacher in a city school, who had long used literature in her classes and felt quite comfortable with it, viewed the state's new reading policy as confirmation of what she had done all along and reported little change in her approach to reading instruction. Although she accepted the district's basic skills orientation, she said that it did not get in the way of using literature. But a third grade teacher in the same school, with the same amount of teaching experience as the fifth grade teacher, reported that the district's basic skills orientation kept her from using literature as the new policies proposed.

32. See Spillane (1993).

33. Grant (1994).

34. Grant (1994).

Teachers' varying experience, knowledge, and sense of efficacy influence what they notice about policy, how they interpret it, and what they do.<sup>35</sup>

But another explanation for differences within schools in teachers' response to reform is that teachers' opportunities to learn vary. Teachers in one elementary school had the same officially sponsored professional development, but responded entirely differently. One aggressively sought out additional privately sponsored summer and weekend workshops on reading reform, read books and articles about whole language, and used the experiences and materials to turn her reading curriculum into a remarkably lively and challenging experience for students. Another learned to pay more attention to students' understanding of text, but otherwise adopted little of the reading reforms. A third argued that he was already doing everything that the reforms suggested—although observers saw a very traditional approach to reading—and concentrated his search outside the school on ideas about “affective” education. A fourth, who already had been using literature extensively for years, interpreted the reform as an opportunity to learn process writing, found suitable materials, and used them to revamp her writing curriculum; her reading instruction changed little or not at all.<sup>36</sup> These teachers not only brought very different knowledge and professional experience to the reforms, but they also made very different use of official and unofficial opportunities to learn. In the United States, *reformers, not the teachers, are the source of reform, and official policy is only one among many sources of new ideas.*

Classroom instruction has begun to change as teachers respond to systemic reform, but systemic reform has begun to change as ambitious new guidance for instruction has filtered through teachers' knowledge, beliefs, and practices. American public education contains few social and professional structures that would help teachers to continue to learn about teaching and learning, and most teachers' professional education does not prepare them to deal in a polished way with this kind of intellectually challenging content. Teachers thus approach the reforms with little knowledge of the sorts of instruction that reformers desire, and have few of the personal and professional resources with which to monitor their own activity, to notice inappropriate work, and take corrective action. As a result, initial differences of interpretation tend to float free, and teachers' varied knowledge persists as a relatively unexamined influence on instruction. The combination of weakly specified policies, decentralized decisionmak-

ing, and little systematic and sustained professional work on instruction leaves teachers great latitude to assign different meanings to new policies and to respond idiosyncratically. American teachers have moved toward systemic reform, but in a distinctively disjointed and individualistic fashion.

## Politics and Performance

Standards-based reform is notable for the notion that schools should be made responsible for student performance. California officials, like many others around the country, declared that a revised state assessment program would “drive” instruction toward intellectually ambitious work in mathematics by focusing attention on results. Many states set about devising ways to keep track of which schools were boosting achievement, in order to reward those that did well and penalize those that did not.<sup>37</sup>

The idea of accountability for performance has broad appeal, but designing and implementing such schemes turns out to be a rich stew of politics, technical and ethical problems, and ideological conflict. As a result, in practice accountability often turns out to be less clear and more complex than it seems to be in theory. Kentucky is one of the few states in which explicit rewards and punishments for professionals have been attached to students' performance, probably because the reform there was ordered by a court rather than devised through political bargaining in the legislature or executive branch. Such bargaining has been central to reform in Vermont, where complex negotiations among the chief state school officer, teachers, parents, local officials, and legislators have been a continuing element in reform. Early ideas about holding teachers accountable for students' test results were soft-pedaled as teachers and others began to realize how novel and demanding the new assessments would be, how much teachers and others had to learn, and how difficult it could be to make teachers accountable for teaching things they had not had time to learn. In Vermont, as elsewhere, it has not been easy to balance teachers' concerns about stiff accountability requirements against pressures for performance.

37. Rather than substituting markets and consumer choice for state-administered schooling, these schemes would augment the state administration of schooling with scientific assessments of educational effectiveness and schedules of rewards and sanctions. Accountability is seen as an effort to improve the operation of schools within a state-maintained framework, not as a way to change the framework.

35. Cohen and others (forthcoming, chap. 6).

36. See Grant (1994).

The political difficulties of settling on a version of accountability were plainly on view in Michigan. In the late 1980s and early 1990s, state education officials revised their reading and math assessments but initially attached no specific rewards or sanctions to results. They did leave in place an earlier system for publishing test scores for districts and schools, on the apparent assumption that public opinion would be a sufficient agent to correct poor performance. Within a few years, however, the legislature mandated a high school-leaving exam that would preclude graduation if students failed. But that did not command enough political support to last, perhaps because the prospect of high failure rates was unsettling. In its place the state created several different sorts of high school degrees depending on test scores, a more forgiving approach than no degrees for those who failed. But shortly thereafter the legislature and governor adopted new school accreditation procedures, which—after the state education department wrote regulations—threatened local school systems with the loss of 5 percent of their state funds for any school in which fewer than 65 percent of students performed satisfactorily on the state tests. This requirement seemed to catch educators' attention, and many schools and districts scrambled to boost students' scores. But after a few years it seems that this modest performance reward program may be thrown overboard by a more conservative state legislature and state school board in favor of ideas about accountability that focus on local control, charter schools, and parental choice.<sup>38</sup> This sort of signal switching has become common in state education policy.

One reason states change course so often is shifts in fashion and response to changing pressures. But another reason is that it is very difficult to design and enact accountability schemes. It is, for instance, difficult to devise new standards, tests, and information systems that are usable, effective, and professionally defensible. And even if design and implementation problems can be solved, it is not guaranteed that school systems, businesses, and universities will take the new accountability systems seriously.<sup>39</sup> The chapter by Richard Elmore, Susan Fuhrman, and Charles Ablemann in this volume reveals that when analysts in Kentucky and Mississippi sought to create professionally defensible schemes they created such complexity that teachers and parents found the schemes extremely difficult to understand and use. If parents and teachers cannot make sense

of the evidence about accountability, it is difficult to see how the scheme could have the desired effects.<sup>40</sup>

But even if defensible and usable state accountability schemes were created tomorrow, the critical question would be how local schools, teachers and students would respond. Local response to the accountability requirements associated with California's new tests has so far been modest, and many teachers are not well informed about them. In the 1994 survey that I discussed earlier, only 37 percent of elementary teachers reported that they "have had adequate opportunities to learn about the mathematics test. Only 24 percent reported that they knew enough about the new assessment to explain it to another teacher or parent. One reason may be that the state tests are administered in only three of twelve grades. Although students' performance in any grade is influenced by their work in the preceding grades, the state's scheme contains no incentives for teachers in those preceding or following grades to pay specific attention to the new tests. The incentives to improve performance based on such scores seem likely to remain diffuse and relatively weak unless all teachers in a school are somehow made to feel responsible for what students do on the tests.

That would entail quite an unusual degree of professional interdependence in American public schools. One elementary principal in a southern California district tried. She used test scores to call her teachers' attention to weaknesses in students' performance in a school whose enrollment is about 40 percent eligible for title 1. She collected the faculty in small groups to discuss the scores and formulate strategies for improving them. She then organized faculty members to look for helpful materials and instructional strategies and followed up with meetings to check on implementation. Similarly, one principal of an elementary school in a middle-class section of a Rust Belt city organized his faculty to move its reading program in the direction of the reforms when parents began to complain because te-

40. For a fuller discussion of this point, see Cohen (1996).

41. Evidence on the effects of new accountability measures on learning is thin and inconclusive. Reading scores went down in Michigan when more demanding new assessments were phased in, as did mathematics scores in California. Both results were expected because the new assessments held students to higher standards of performance than had been common in their schoolwork. But when Michigan recently added a new mathematics assessment, scores seemed to improve, though no explanations were forthcoming. Kentucky presents a mixed picture: some schools have improved on the new assessments but others have not, and observers reported that the improved schools tend to be in more cosmopolitan and advantaged areas. Without more substantial trend data and evidence on test security and instruction, it would be unwise to interpret these results.

38. Cohen and others (forthcoming, chap. 7).

39. See Cohen and Spillane (1992).

scores on the first new state reading assessment showed that reading comprehension scores had slipped.

But these cases are unusual. Many other principals in these districts and states made no such move. In some cases the lack of action is due to the lack of pressure for action: although most Americans report deep dissatisfaction with public education, most also express deep satisfaction with the public school in their neighborhood. Neighborhoods with worse schools and greater dissatisfaction tend to have parents who are less able to organize to seek school improvement. Finally, schools that are in trouble often lack the leadership that would enable them to respond constructively to accountability requirements.

The most critical problems in the local response to new accountability requirements go far beyond the creation of usable and professionally defensible state systems. Adequate local response to such systems is likely to include helping principals to learn how to understand and attend to both assessment results and parent concerns, improving teachers' and principals' capacity to respond to more demanding assessments, removing those who cannot improve, and mobilizing parents to help students. Solving such problems would bring reformers to the very core of public schools—personnel policy, the management of instruction, and the enhancement of professional capacity. Few accountability schemes make provision for such things.

Incentives are not automatic; they can only work if they work through professionals and schools. All of the relevant evidence suggests that American schools' educational capabilities to respond constructively are seriously limited and would have to be greatly enhanced if professionals in failing schools were to acquire the wherewithal for a constructive response to performance rewards. Of course, some state accountability schemes may never reach the point at which local response would become an issue, because they will explode or peter out before then. American schools already are quite accountable, for local officials in the United States are elected to preside over schools and can be turned out of office if they fail to satisfy voters, something that is quite unusual elsewhere in the world. Systemic reform would graft technical designs intended to hold school professionals accountable for student performance onto existing democratic political designs for holding citizen-legislators more broadly accountable, but many policymakers and politicians prefer political to performance accountability. Members of the new Republican majority in Congress and many statehouses seem much less interested in versions of accountability

that are related to academic performance and much more interested in versions that are related to local control, choice, and charter schools.

A version of that problem recently erupted over California's accountability scheme, where a radical revision of the California assessment program (CAP) provoked a political firestorm. State officials had been trying to revise the state assessment since the late 1980s, and had an unusually capable state agency staff to help, but the assessment budget was limited and officials had committed themselves to very ambitious revisions and a tight schedule. As a result, when the state went ahead with a dramatic new math assessment program in the early 1990s, officials lacked many elements of a sensible plan. They were not able to familiarize most local practitioners with the revised assessment; they were not able to help many teachers learn more about the material assessed; nor were they able to inform many parents and other concerned citizens about the assessment. Indeed, the state was not able to score more than a sample of student responses or analyze and report on more than a fraction of students' performances, let alone work with local practitioners to improve their understanding of the results and what they might entail for instruction.

These constraints might not have been so troublesome if Americans were not deeply divided about instruction and poorly informed about mathematics, if schools were not locally controlled, if teachers were not poorly educated, and if most students had done better on the new math assessment. But given those conditions, the new test only inflamed a difficult situation and gave conservative political organizers a made-to-order issue. After heated political debate, Governor Pete Wilson canceled the state testing program. Rather than "driving" the process of reform ahead as reformers had confidently predicted, the new assessment drove it backward, or into the ground.

Systemic reform has given new prominence to the idea that schools should be responsible for students' performance, and many states have adopted some sort of accountability scheme. But only a few states have mobilized penalties and rewards for school professionals that are more potent than the publication of test scores.<sup>42</sup> And no state so far seems to have devised a scheme that meets modest standards—intelligibility, technical feasibility, and professional defensibility—and that has boosted performance.

42. No other school system in the world holds professionals responsible; students are instead held accountable for their performance. See Noah (1994).

States have only recently begun this complex undertaking, and more encouraging results may be forthcoming. However, such results would be possible only if states stayed the course, and that will be difficult. Efforts to hold professionals accountable for students' performance will work only if they can be grafted onto an older and more deeply rooted form of accountability in which voters hold elected officials accountable for schools' performance. Such a graft could only work if the elected politicians who govern public education were able to give money, attention, and other resources to a complex professional and technical development process over a long time, to abstain from their long-established habits of frequent legislative and executive action, and to resist responding to many constituency pressures in the meantime. It will be no less difficult for policymakers to mobilize the resources than to adopt political abstinence.

## The Goals of School Reform

My report thus far covers the period that ended on November 7, 1994, the date on which Republicans took control of the U.S. Congress, as well as many governorships and state legislatures. These electoral victories capped several years of conservative political organizing—including organizing against systemic reform. Congressional Republicans decided to do away with the National Education Standards and Improvement Council (title 2 of Goals 2000), and the relevant House appropriations subcommittee then proposed to eliminate entirely funding for all of Goals 2000 and to slash spending for title 1. More than a dozen Republican governors and state legislatures have begun major deregulation efforts—including efforts to repeal or cut back dramatically state education codes and to disestablish state education departments—that would partly or entirely dismantle the systemic reforms that states had been constructing.

It is much too soon to know how much success these efforts will have, but it would be surprising if the wars about instruction did not continue. Americans have thrown themselves into pitched battles over their schools' purposes since at least the 1830s; in fact, American education can be read as an intermittent argument between progressive and conservative views of knowledge, teaching, and authority. In one tradition schools have been portrayed as agencies that could sustain democracy and eliminate poverty by cultivating critical thinking, intellectual independence, mutual under-

standing, and respect among students. In the other, schools have been portrayed as agencies that should preserve political order by cultivating obedience and respect for authority in a curriculum that centered on accepting academic and divine authority and memorizing facts and skills. These two traditions took shape at the very beginning of public education and they differ on virtually every point, from the nature of democracy to the character of cognition. Progress toward one vision of instruction has tended to incite reactions from the other.

Systemic reformers have acted as though government could create new standards and pedagogy oriented to critical thinking and intellectual independence without making allowances either for the historic divisions in American opinion or for Americans' appetite for mortal combat about these issues. Like the curriculum reforms of the late 1950s and early 1960s, systemic reform was advocated mostly by education professionals and members of political elites. As many observers noted, it had no "popular roots." Systemic reformers did not seriously try either to mobilize broad popular support or to frame their program in ways that might avoid the most crippling attacks. Inattention to such matters might be less troublesome in nations with centralized systems that are dominated by education ministries and professionals, but it was a critical weakness in a nation with decentralized government, traditions of local control of schools, weak professionalism, and persistent, popular ideological polarization around education. Reformers are learning once again that schools are political theaters for playing out contrary visions of childhood, culture, history, and identity, as well as places for studying subjects and learning lessons.

## Conclusion

Standards-based reform has nudged educators toward more ambitious goals, higher standards, new assessments, and more substantial curriculum. Many states have begun to develop new accountability arrangements. But American education also has begun to change standards-based reforms. This country's unusually fragmented organization of schooling has helped to turn proposals to make education more lean, focused, coherent, and demanding into an astonishing profusion of ideas and practices. Moreover, efforts to devise new systems of professional accountability have run into serious technical problems and hostile political reactions from the inherited system of electoral accountability.

Readers may wish for a report on whether systemic reform is a success, but the jury is still out. This effort at root-and-branch change is less than a decade old—just a beginning for such an ambitious endeavor. Much more experience would be required before any fair judgment could be made about the implementation and effects of standards-based reform, and it remains to be seen if systemic reform will endure.

My account does suggest two central problems that would face continued enactment of systemic reform and widespread adoption of schemes that reward performance, should they endure. One is an appreciable lack of professional capacity to respond constructively to serious efforts of any sort to improve instruction. That is broadly true in public education, and it is especially true for the schools in which improvement is most needed—many of which chiefly enroll disadvantaged students.<sup>43</sup> Standards-based reform is unlikely to succeed unless reformers are able to augment or supplant a standards-and-accountability approach with one that offers educators and others concerned with schooling many more incentives and opportunities to learn. It would take much sustained and sophisticated work to devise and enact the arrangements required to accomplish this goal.

Roughly the same thing could be said of performance rewards. The success of such schemes depends heavily on whether state or local school systems could enhance the capacity of the worst schools to respond constructively to more powerful incentives, for those would be the schools least likely to be able to respond well on their own. But precisely because of the educational weaknesses that reformers wish to correct, state and local systems have at best only modest professional capacity to solve this problem.<sup>44</sup>

Politics is a second problem that faces these reforms. Standards-based reform has been promoted as though it was chiefly a matter of policy, but policy cannot work unless it is situated in an enabling politics. That is especially true in the United States, where fragmented government and contentious politics create many opportunities to oppose policies, and where cultural and political divisions create fertile ground for oppositional movements. Such opportunities and divisions are much less common in more centralized political systems with more deferential political cultures. As a

43. For instance, though most teachers appear to believe that their students can learn, those who teach students from disadvantaged circumstances tend to believe that their charges are less able to learn than other students. See U.S. Department of Education (1993, pp. 235–40).

44. See Cohen (1996) for the development of this point.

result, America displays few signs of the political patience, trust of professionals, and willingness to learn that standards based reform would require from politics, politicians, and the public. The picture for reform is not entirely bleak: some states have retained much of the structure of standards-based reform even as others have begun to retreat, and some business groups have begun to rally to support standards-based reform.<sup>45</sup> But sustained conflict impedes development of the patience, improved professionalism, and capacity to learn that reform would require.

Political turbulence has been an intermittent hallmark of American education. If a movement to promote performance rewards somehow gathered the momentum that systemic reform did in the decade just past, it probably would provoke much the same sorts of passionate political controversy and opposition that has marked standards-based reform, though for somewhat different reasons. There is no way to know how things would turn out for such a movement, but it seems likely that no movement for fundamental change can make dramatic progress unless reformers find ways to depoliticize education while building a broader constituency for their ideas. That would take sustained and sophisticated work, which is unfortunately rare in public education.

45. "Business Backs School Standards," *Ann Arbor News*, September 6, 1995, p. 1.

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