

A National Curriculum in the United States?

If the United States is to develop a national curriculum, we must find ways to challenge students and teachers, preserve initiative, and maintain democratic control.

MARSHALL S. SMITH, JENNIFER A. O'DAY, AND DAVID K. COHEN

On April 18th George Bush renewed his claim to be the nation's Education President by announcing America 2000—a broad strategy for reforming U.S. schools in this last decade of the 20th century. One highlight of that plan is the development of a voluntary set of national tests, the American Achievement Tests, to be given in five core academic areas in the 4th, 8th, and 12th grades.

These tests, designed to monitor the country's progress toward achieving the President and governors' national education goals, mark a shift in American attitudes about national influences in education. Previously when public leaders and educators in the United States have discussed national tests and national curriculums, it has been in reference to the educational systems of other nations—the traditions of local control and state responsibility were thought to be the American way forever.

Now, for better or worse, the U.S. Department of Education, headed by former Tennessee Governor Lamar Alexander, is publicly calling for national testing. In private conversations, state and national leaders acknowledge that this activity and others like it are moving the country closer to a national curriculum. Moreover, such a movement is not without public support. According to the 21st Annual Gallup Poll, 77 percent of the public support mandatory national achievement testing and 69 percent support the use of a standard-

ized national curriculum.¹

We review in this article the developments that illustrate the current interest in a national curriculum and then explore the various forms a U.S. national curriculum might take. We examine a variety of design, governance, and transition options and consider whether there may be an American way to develop a national curriculum—a way that could preserve variety and initiative for teachers, as well as democratic control of education.

But first, we want to be clear about how we are using the terms *national* and *curriculum*. First, *national* needs to be distinguished from *federal*. While in the past there were few national education efforts that did not emanate from the federal government, there are now dozens of foundations, quasi-governmental organizations such as the National Academy of Sciences (NAS), business and education groups, and professional associations that sponsor reports about the condition of education in the nation and conceive and finance national reform initiatives. Second, we use the term *curriculum* to denote more than scope and sequence guidelines and textbooks; our broader definition encompasses all that gets taught, including content, skills, and intellectual orientation.

Recent Initiatives

America 2000 has not emerged in a vacuum. In the past 10 years, nationalizing

influences on education have sprung up on many fronts, including national goals, model curriculum frameworks, various national testing activities, and national efforts to reform teacher education and selection. Each of these may be seen as evidence of an overall trend in the direction of a national curriculum.

National Goals

Despite the framers' claims that a national curriculum will not be required to improve student achievement, two of the seven goals adopted by the President and governors in 1990 and incorporated in the America 2000 proposal could well accelerate movement in that direction. Goal III calls for all students to have "demonstrated competency in challenging subject matter including English, mathematics, science, history, and geography" by the year 2000; Goal IV declares that "by the year 2000, U.S. students will be first in the world in science and mathematics achievement." The goals emphasize "challenging subject matter" in specified disciplines; discuss the need for students to "demonstrate the ability to reason, solve problems, apply knowledge, and write and communicate effectively"; and call for the nation to "substantially increase the percentage of students who are competent in more than one language." Such objectives begin to sound like the seeds of curriculum specification. Moreover, if the schools are to assess "demonstrated competence," they will need appropriate evaluation tools (such as the American Achievement Tests), which in turn require the specification of the content to be assessed.

Curriculum Frameworks

Professional curriculum groups and associations have made the most noted efforts to spell out what all students in

the nation should know, and mathematics groups have led the movement. Both the National Council of Teachers of Mathematics (NCTM) and the NAS—in particular its Mathematical Sciences Education Board (MSEB)—have produced major reports setting out very similar expectations for K-12 mathematics instruction. The NCTM has gone the farthest, having developed a fairly specific framework that sets out the content, skills, and pedagogy it advocates for mathematics instruction. The ideas in these reports reflect a hard-won substantive consensus of those professionals most active in the two groups. Consensus documents are ordinarily conservative, but these pose a serious challenge to the existing curriculums and modes of instruction in the nation's schools.

Parallel reports recommending the content of science curriculums have been issued by the American Association for the Advancement of Science (AAAS), as part of its Project 2061, and by the NAS in the field of biology. Disagreement is greater in science than in math, but the intent of science educators to establish a challenging, engaging, and coherent curriculum for K-12 schools is the same as in mathematics. Professional curriculum groups in English and literature, in social studies/history, and in other content areas are considering content frameworks and standards of excellence to guide curriculum in their areas. A few states such as California may also have an influence on the national curriculum activities as they progress in their own efforts to develop demanding frameworks to guide instruction in their schools.

Even the advanced NCTM and MSEB specifications, however, prescribe far less content detail than the national curriculums of some other countries and some state curriculums in this country. The curricular specifications in these reports leave enormous room for unique local, school, and classroom interpreta-

tion. They also leave room for the elaboration of the standards (the levels of desired competence) by which student performance is to be judged, a task targeted for attention both by the governors' National Goals Panel, chaired by Roy Romer of Colorado, and by the President and Secretary's strategy in America 2000.

National Tests

In the Bush and Alexander plan, the American Achievement Tests will actually consist of a system of examinations to be administered by individual states or clusters of states. The purpose of the state-cluster examination would be to assess the progress of individual students and schools in the particular states within each cluster. A national anchor examination would then provide both a calibration mechanism, allowing comparisons among clusters of states, and a national focus on the common set of "New World Standards" called for by America 2000. In its broad outlines, this plan is similar to initial deliberations of the National Goals Panel on the question of a national examination system.

This is not the only proposal for a national test, however; a number of related ideas have been percolating among various groups spanning the elite of the business and political communities. These include the President's Advisory Committee on Education Policy, chaired by Alcoa CEO Paul O'Neill; the U.S. Secretary of Labor's Commission on Achieving Necessary Skills, chaired by former Secretary of Labor William Brock; and Educate America, chaired by former New Jersey Governor Thomas Kean.

The President's Advisory Committee, for example, has considered two models of a national examination. One version would norm the test to international standards, in the hope that comparisons would spur interest in dramatic educational reform. Other versions would base the con-

tent of the examinations on explicated syllabi and would give test results importance in students' lives—by making the results available to future employers or college admissions officers, for example. Either kind of national test, but especially the latter, would imply the existence of a well-developed content framework, one that implicitly would serve as a national curriculum framework.

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We need not wait for one of these tests to occur in order to feel the potential effect of a national test on the curriculum. We already have a national test, of sorts. But that test, the National Examination of Educational Progress (NAEP), has for years been jealously guarded from having any influence on the curriculum. Two important changes in the NAEP, however, are heightening the importance and influence of this testing program.

First, NAEP's developers have broadly publicized—and thus opened wide to public scrutiny—the content frameworks and proficiency standards on which the assessment is based. These frameworks and standards could be viewed as the beginnings of national

curriculum frameworks, for they set out the academic and intellectual substance of the only national educational assessments we have.

Second, NAEP is now moving to report its findings for each interested state, not just for the nation. In 1990, federal legislation permitted an experimental expansion of the 8th grade mathematics assessment to include not only a

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national sample but also samples from any interested state. Thirty-seven states participated. The results of this experiment have just been released. In 1992, the experiment will probably expand to add state-specific samples for 4th grade mathematics and reading. If this second phase of the experiment is successful, and if the political climate stays positive, all future NAEP assessments will likely take state as well as national samples (at the state's option). Finally, there now exists considerable pressure to extend NAEP down to the individual level, as an interim step in the development of the American Achievement

Tests.

Taken together, these changes could increase pressure on state policymakers to bring their state curriculums in line with NAEP's "national frameworks." NAEP data will increasingly be used for state-to-state comparisons, which will increase the pressure on policymakers to push for improvements in NAEP scores. Most likely, the better the fit between a state's curriculum and the NAEP frameworks, the better the state will look on the assessments. And if the NAEP is extended down to the individual level to provide information to parents about how their children are doing and to assess the efficiency of teachers and schools, the pressure on schools to conform to the NAEP frameworks will become even greater.

National Teacher Initiatives

A final area where a national curriculum may be taking shape is in the reform of teacher education and selection. The most germane example is the National Board for Professional Teaching Standards (NBPTS), a foundation-initiated group funded by private and public sources and governed by teachers, teacher educators, business people, and state and local government officials. The purpose of this board is to establish standards for teaching practice that would serve as a basis for a voluntary national exam; passing the exam would entitle a teacher to an advanced board certification credential. If teachers across the nation are to have equal opportunities to prepare for the assessments, the frameworks on which the exams are based must be made public; that is, teachers must be informed in advance of what they must know about pedagogy and their subject-matter area. This begins to suggest a national curriculum—albeit for teachers. Moreover, since the content on which teachers will be assessed is the content they would be expected to teach, the NBPTS assessment would assume that teachers across the country teach a common core of

knowledge and skills for students.

Coordination of Recent Initiatives

To date, the sponsors of the various activities just described have made only a few deliberate efforts to coordinate them.² These activities are exciting, but without coordination, they could be ineffective or even counterproductive. What if NBPTS, AAAS, and NAEP all based their efforts on different conceptions of what the curriculum's core science content should be? The result could be textbooks based on AAAS guidelines, teachers who studied a different body of material to become board certified, and a national test that held students and schools accountable for learning yet a third body of science knowledge. While such a situation may not be too much different from how things presently work, it is unlikely to dramatically improve education.

What Might a National Curriculum Look Like?

A national curriculum is not inevitable, but there clearly is movement in that direction. Would a national curriculum be a wise reform in the American context? Would it put an end to teacher creativity? To local control of schools? Would it mean rigid tracking of students based on a single test score?

The fact is, a "national curriculum" can mean different things—and in fact it does have different meanings in different countries. A range of possibilities exist in each of four areas: the extent of curriculum specificity, the quality and variety of curriculum materials, the role of national examinations, and the quality and effectiveness of teacher preparation.

Before setting out some of the options, we suggest three underlying principles for designing an American model. First, the purpose of such an important change in the educational governance of U.S. schools should be to sub-

stantially improve teaching and learning. Without this principle there is little point to changing the system.

Second, to be effective, national curriculum frameworks should be coordinated with systems of assessment, teacher training, instructional materials and other school resources, and policies that affect and support learning; and this coordination should promote both systemic coherence and local flexibility. Unless this principle is firmly followed, changes in the system will fail.

Finally, any new system should seek to preserve the very American system of "second chances." Without this third principle, the United States will have compromised its fundamental commitment to equality. These principles provide both a vision and a set of constraints for any major movement toward a national curriculum in the United States.

Nature of Curriculum Specifications

Many of the questions raised by the prospect of a national curriculum center on how detailed its content, skills, pedagogical, and sequence requirements would be. Similar questions have also recently been raised about the curriculum frameworks of many state systems. The design of the curriculum will determine whether it will require rigid uniformity or give teachers adequate leeway to try new methods and to pursue their favorite interests in various subjects. Four elements of the design are especially important:

Specificity of content. How much detail would a national curriculum specify? Would an English literature teacher be required to cover certain novels or a science teacher conduct specific experiments? International examples suggest a variety of possibilities—ranging from the more flexible NCTM guidelines, which emphasize student outcomes rather than instructional topics or strategies, to the more detailed Japanese model, which prescribes coverage not

only of topics but of certain instructional tasks as well. Somewhere between the two extremes lie the recent California frameworks, which indicate the important issues or concepts to be studied while also providing considerable flexibility regarding courses, topics, and pedagogical strategies.

Sequence and timing. Closely related to content specifications are time specifications—when particular content and skills are required or expected to be taught. Again, there is a range. In the past, France was known for rigid pacing of material—down to the month or even the week of instruction. Slightly looser is the Japanese elementary curriculum, which specifies only the year in which specific content must be taught. By contrast, the NCTM standards and most of the California frameworks are quite relaxed; those documents outline material to be covered within a three- or four-year range.

Depth and breadth. A third element of design concerns the depth and breadth of the curriculum. Should equal importance and time be given to every decade of U.S. history, and to each major content area in physics, biology, and chemistry? Although many recent observers have argued that schools should stress depth of understanding rather than wide and superficial content coverage, it is far easier to call for more focus and depth than to work it out in practice. We might all agree, for example, that high school history would be better if students focused heavily on the Civil War; but students would need to understand what happened in the decades leading up to the 1860s in order to understand the Civil War. As a consequence, an emphasis on depth might require more active coordination among teachers than is now practiced. Permitting teachers to deeply explore topics in which they have a strong interest, to emphasize the complexity and richness of content, and to provide students an opportunity for their own explorations would require a strategy that balances

breadth and depth across the grade levels.

Local flexibility. The final component concerns the flexibility allowed to districts, schools, and teachers. This flexibility might stem from having only a proportion of the overall curriculum determined nationally—for example, a national core might include only some subject areas or some topics within sub-

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ject areas, with others left open to states and localities. The fraction of the curriculum that forms the core could range from the very modest to practically everything. Other forms of flexibility could include offering localities and states choices among key issues or topics within national curriculum frameworks or permitting alternative emphases among topics to be covered.

A final and more troublesome approach to flexibility would be to allow districts and schools to adopt different frameworks for students in different curriculum tracks. Although curriculum tracking presently occurs in U.S. high schools, our system of giving students second and even third opportunities to move among tracks is quite different from the routine and rigid streaming into college and noncollege paths common in other nations. Moreover, we expect that if the core of the curriculum were common throughout the nation, if teachers

and students alike were held to common expectations, and if the resources and support structures (teacher training, materials development) were available to all groups on a relatively equal basis, then advantaged and disadvantaged students in U.S. schools would be less likely to receive radically different curriculums. Under such conditions, a high-quality national curriculum that in-

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corporates second and third chances for student success actually has the potential for fostering equity and decreasing distinctions among groups in educational outcomes.

Where along these various continuums should a U.S. national curriculum lie? In this diverse country, particularly at a time when so many observers stress the link between improved education and respecting the professional authority of teachers to tailor content to student needs, a national curriculum would have to balance national direction with local discretion.

Curriculum Materials

The unflattering critiques of standard American instructional materials—particularly textbooks—are legion. A well-conceived national curriculum should trigger development of high-quality instructional materials based on the curricular frameworks. But does this also mean that the variety of acceptable materials would be limited? Does it mean that the federal government will write

curriculum materials and tell local districts and teachers to use them? A range of possibilities exists.

In some countries, the education ministry has virtually total control over the development and selection of materials. In others, national ministries establish curriculum standards and either commission the development of materials that meet the standards or rely on the profit motive of private developers to produce materials that schools can use to meet the standards. In nations such as the Netherlands and Australia, a quasi-governmental body reviews private publishers' products. In a U.S. system, which would probably try to maximize selection freedom, a national review board of this latter type could perhaps offer advisory opinions on materials (and thus stimulate private developers to compete for the board's seal of approval), but allow the state, district, or teacher to make the final selection.

Student Examinations

The nature and administration of student examinations within a national curriculum structure will depend in large part on the purposes those exams are designed to serve. For many Americans, the notion of a national examination system conjures up images of rigidly tracked secondary schools, the result, for example, of the "eleven plus" exams formerly used in Great Britain; of months of grueling study, as for the Baccalauréat taken upon graduation from the French lycée; or worse yet, of the "examination hell" experienced by many Japanese middle and high school students.

Certainly the most common use of national examinations is for student accountability and placement. And in cases where stakes run high for students—determining, for example, entrance to college, to academic high schools, or to desired occupations—and where second chances are few or nonexistent, anxiety levels also run high. Many American observers would prefer

to minimize such repercussions in any national testing system developed here. Were national examinations to have consequences for college entry or job prospects here, our nation would probably consider many options for students, such as opportunities to retake exams or alternative methods of acquiring examination credentials.

There are, however, positive lessons to be gleaned from the national school examinations of other industrially developed nations. The first and central lesson is this: if exams are used to motivate students to be more serious about their studies, then the content of the exams must be very closely tied to the curriculums of the schools. Students in other countries are motivated to prepare for the exams by studying the material in their syllabi; "studying for the exams" thus takes years and is generally indistinguishable from regular schoolwork. In this regard, although they have more consequences for students' lives, the national exams of other countries are similar to the Advanced Placement (AP) exams in the United States, or the New York State Regents exams. In contrast, the high stakes of the SAT tests in this country have little effect on performance in school or on student learning in general, because they are designed to be largely independent of school curriculums.

A second lesson from the experience of other nations is that exams can be designed to reflect whatever flexibility exists within the national curriculum. For example, in England a system for equating examination questions has been developed to allow for regional differences in the makeup of the examination, with national standards retained.

Another purpose for a system of national exams would be as an instrument of system accountability, that is, for providing yardsticks of the quality—and equality—of the education provided to students by schools and teachers. In this model, a national examination could be used to evaluate the effectiveness of particular schools and thereby

motivate teachers and administrators to find the best ways to teach the national curriculum. For a national exam to have much effect on the quality of schooling, however, three conditions would have to exist. First, the tests would have to reflect the content of the national curriculum; schools and teachers could not legitimately be held accountable for student learning on material that is divorced from what they are expected to teach. Second, teachers would have to be given ample opportunity to learn and develop expertise in the content of the courses they are expected to teach. Third, for the accountability system to have teeth, the tests must carry institutional and professional consequences. For example, if a national exam reflected poorly on a particular school, technical assistance and opportunities for improvement might be provided as remedies.

A third purpose of national exams, integrally tied to the first two, is to provide *curricular reinforcement* for national content goals. In this regard, it is important to realize that if there is a national "high stakes" exam, that exam will likely affect the curriculum, whether or not it was intended to do so. Without careful planning and development, national exams could lock teachers into prescribed formulas for "successful" teaching or into such narrowly defined content that their professional expertise and intellectual enthusiasm are undermined. Nor would exams that reinforce rote algorithmic learning lead to educational improvement. The link between the content tested and the content we wish students to learn is critical. In England, where over the years much attention has been given to the development of national examinations, some observers have criticized the practice of "using an examination as a curriculum rather than a means of evaluating a curriculum."³ In the United States, this should signal caution in developing a national test before the desired curricular content of our schools is discussed adequately.

Teacher Professional Development

High quality and challenging curriculum frameworks, instructional materials, and tests alone will not greatly improve American education unless teachers know and can teach the curriculum. Enormous investment would be required to prepare teachers through preservice and inservice education to teach the new curriculums and meet the new standards. It is possible that the introduction of a demanding national curriculum would be the very stimulus needed to bring about major improvements in today's inadequate system of teacher professional development. The structure provided by new curriculum frameworks for students would help to organize a common knowledge base for teachers, around which teacher education programs, licensing examinations, and inservice programs could be configured. A critical side benefit would flow from this newly coherent system of teacher preparation: Teachers everywhere would come to share a common language of teaching.

By consciously rather than haphazardly moving toward a national curriculum, we may be able to replace what has become a de facto national curriculum of basic skills with a richer, more challenging curriculum—and increase the likelihood that this richer curriculum would be accessible to *all* children, not just those lucky enough to attend the nation's best schools. Finally, a national exam could add needed performance incentives for everyone in the education world, especially students; and the results of the exam would provide all of us with important information necessary to continually improve the education we provide. But the history and current structure of American education require that we address two additional questions: How would we govern a national curriculum, when school governance until now has been largely a state and local matter? And how might the United States convert to a coherent curriculum when our current system of educa-

tion is so incoherent and fragmented?

Governance

Would a national curriculum require a national school system? Would a national curriculum supplant the authority that states and localities now exercise?

It might. But it might not.

Exams can be designed to reflect whatever flexibility exists within the national curriculum.

First, a curriculum that included ample room for local variations on national themes would preserve considerable autonomy for local schools and districts. Second, much authority in education is now delegated away by state and local school systems. Most substantive decisions about textbooks and assessment, for instance, are made by private publishers. Districts and states select texts and tests they wish to use, but fundamental decisions about how to define students' knowledge are largely made by private agencies. Finally, almost all of the decisions about the content, quality, and standards of the preservice training of teachers are entirely out of the hands of K-12 education and left to relatively autonomous state and private systems.

It could be different. Suppose the key decisions about the content and structure of tests and texts were made by an agency or set of agencies interested in education, not profits. Such an agency could:

- work with the public and with edu-

cation professionals and content experts to devise frameworks and set and coordinate standards of quality and content for texts, other materials, student assessment, and teacher education;

- conduct the research and development required to produce models of the sorts of examinations, texts, and student and teacher education curriculums that would meet the standards;

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- monitor and report on the quality of commercial or other efforts to use these models to produce curriculums, exams, and texts to these standards;

- organize continuing consultation to monitor and revise standards of quality and content.

Such an agency or group of agencies would not be a primary producer of materials. Rather it would define the public interest in such materials and support the original development of materials, exams, and the like. The agency need not usurp any authority that states and localities now exercise; it need only reoccupy some of the territory now delegated to private firms. If things worked well, the result would be a much better array of materials, exams, and so on. And that would give states and localities

better choices than they have now.

To whom would such an agency be accountable? Many imagine a national curriculum agency would be a creature of the federal government. But Americans seem unlikely to assign the responsibility for local curriculum to a federal bureaucracy, and federal agencies probably could not maintain the flexibility or the insulation from fluctuations in political priorities such work would require. A second alternative is a consortium of state governments, but state politics are no less fickle than federal politics.

Organized education professionals are a third alternative. They would bring considerable knowledge and skill to the governance of a national curriculum, and no national curriculum could be effectively devised if professional educators were not deeply involved. But professional organizations alone are an unsatisfactory choice. Relying on teachers and administrators alone would provide a conservative approach because they are, almost by definition, rooted in current practice. But also, for all their importance, professionals are not the only important players in education: business, community leaders, and parents are also key and should be involved in governance as well.

Mixed control would probably be the best way to govern a national curriculum. This would require the invention of an institution or set of institutions that would lie on the boundaries among government, the professions, and private institutions. Post-World War II American politics provides several examples of such agencies: Comsat, the National Academy of Sciences, and the early sponsorship of NAEP. More recently, the National Board for Professional Teaching Standards provides a model of a private, not-for-profit corporation that is governed by a broadly representative board.

One strength of such agencies is that they can remain somewhat insulated from the daily shifts in political winds, while still representing many of the

groups. Another strength is that unlike government agencies, agencies like NBPTS can receive funding support from a variety of private and public sources. As a result, they can mobilize resources from many quarters, something that would be difficult for more conventional agencies, but which is essential for this project: education professionals have much of the technical and educational expertise, but government and business have much of the money. Some business people have managerial know-how that is rare among educators. Mixed governance could help to mobilize broad participation of public and private sponsors.

As new national arrangements for curriculum and testing development and for teacher preparation are phased in, existing bureaucracies could be streamlined and reduced. Indeed, if they were not dramatically reduced, the proposals just outlined would increase problems in education—by adding layers of agencies to the many that already exist.

Getting There from Here

How could America move to a more coherent curriculum when arrangements are now so fragmented?

Converting to a national curriculum would be very complex. Major challenges lie in inventing new curriculum frameworks, producing new and more thoughtful books and materials, creating a new assessment system (organized around examinations rather than standardized tests), and designing new approaches to both teacher education and teacher assessment.

Although there are some developments in all these areas, current efforts have not been coordinated. Any one of the development tasks would require a major effort; but coordinating all of them would be an enormous undertaking, doubtless the largest R&D project ever in education. And there is an additional complication: any national curriculum would have to be developed in

ways that would balance nationwide standards and content with local needs and initiative.

Clearly, conversion would not be simply a technical endeavor. The invention of new examinations and curriculum would pose daunting technical problems, but it also would raise difficult issues in epistemology, the philosophy of the disciplines, and politics. Additionally, the development work would be largely a matter of building social and intellectual capacities—and would thus entail a major educational effort.

Though many educators and parents would welcome such changes, many more would find them puzzling, difficult, and disturbing. Conversion to a national curriculum could only succeed if the work of conversion were conceived and undertaken as a grand, cooperative learning venture. Such an enterprise would fail miserably if it were conceived and organized chiefly as a technical process of developing new exams and materials and then "disseminating" or "implementing" them. Moreover, Americans would have to build elements of a new education system while the established (and very fragmented) system was still operating.

We believe it is possible to develop a national curriculum that involves teachers and students in much more demanding and exciting work, that preserves local and professional initiative, and that maintains democratic control over education. The process will not be easy, quick, or cheap; if Americans want educational reform on the cheap, a national curriculum would be a mistake. □

¹S. M. Elam and A. M. Gallup, (September 1989), "The 21st Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," *Phi Delta Kappan* 71,1: 41-56.

²One notable exception is the attempt at coordination between NAEP and NCTM in the development of the NAEP mathematics framework. Another is the effort by the

NBPTS to coordinate its work with the NCTM effort.

³D. Lawton, (1989), *Education, Culture, and the National Curriculum*. (London: Hodder and Stoughton), p. 74.

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