

Educational Standards

To Standardize or to Customize Learning?

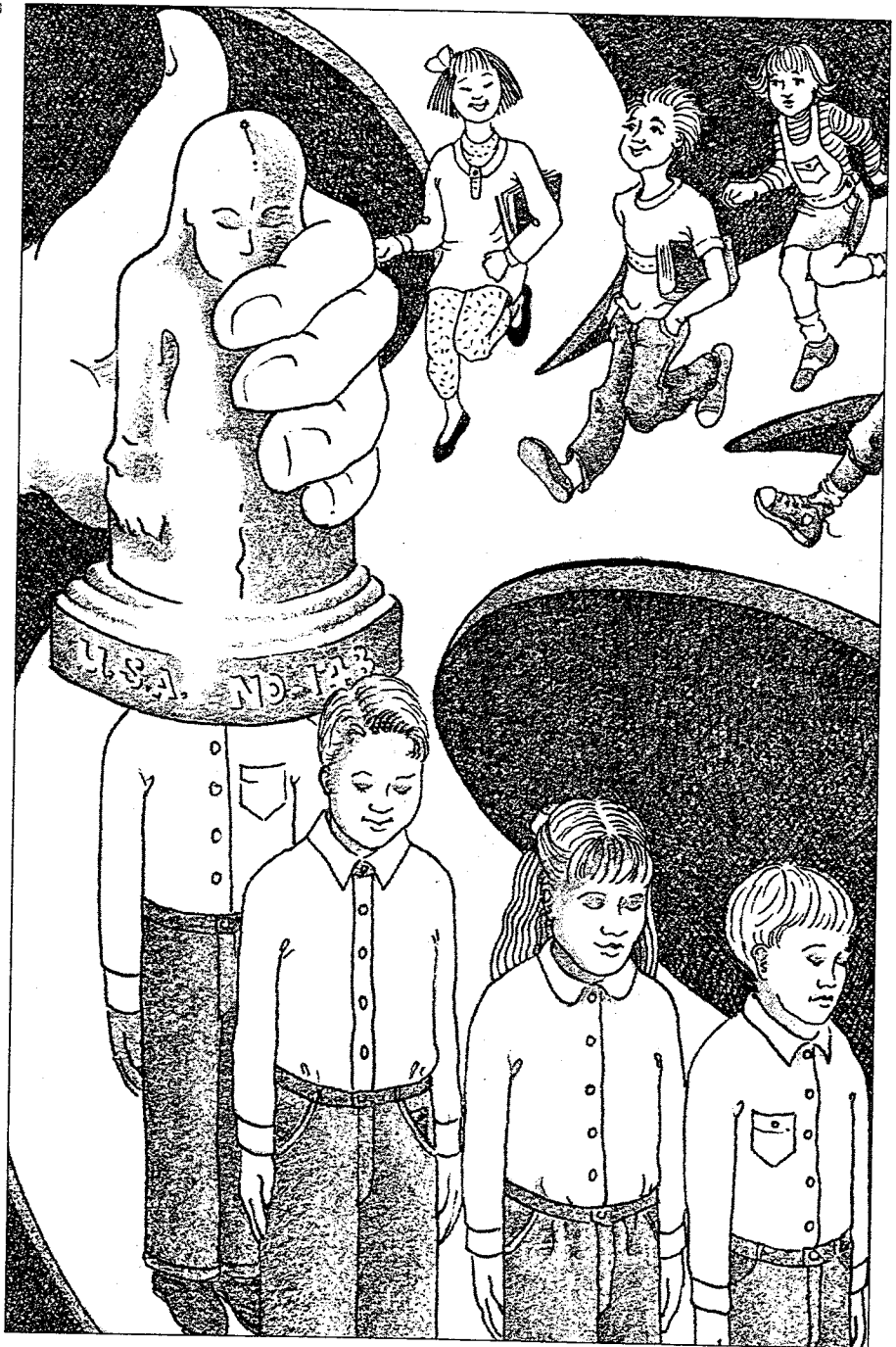
BY CHARLES M. REIGELUTH

Standards, properly conceived, are just one necessary, but not sufficient, part of a comprehensive redesign of a very complex education system, Mr. Reigeluth notes. If not properly conceived, standards can do far more harm than good.

THE EDUCATIONAL standards movement has gained much public visibility. The topic has been extensively covered in the *Kappan* (June 1995), in *Educational Researcher* (November 1996), and in *Educational Leadership* (March 1995). Rigorous educational standards have been strongly advocated by many people, both within and outside the education establishment, including the participants at the recent National Education Summit, who were primarily U.S. governors and business leaders. And many states have passed or are considering legislation establishing educational standards. Clearly, this is an important issue that is likely to affect all who have a stake in public education.

Partly for this reason, there are also many cautionary voices about educational standards. Some voices ask us to consider whether standards should be mandatory or voluntary. Some raise the questions of who should define the standards (e.g., the government or professional associations such as the National Council of Teachers of Math-

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ematics) and on what level (national, state, or local). Other voices express concern that the standards movement will lead to test-driven instruction¹ or will impede the move toward thematic or interdisciplinary instruction. And still others caution that higher academic standards are necessary but not sufficient for improving public education.²

Differing Conceptions Of Standards

The picture grows even more complicated because different people have different conceptions of standards. For example, Darrell Sabers and Donna Sabers identify "hire" standards (those set by business leaders to ensure that students are employable), "higher" standards (government leaders' more rigorous standards to maintain world-class status for the U.S.), and "high" standards (educators' expectations for high levels of student achievement).³ Anne Lewis identifies content standards, performance standards, opportunity-to-learn standards, and world-class standards.⁴ And the variety of conceptions goes on.

These differing conceptions of standards stem from the differing reasons that people want standards. Business leaders with whom I have spoken in Indiana seem most interested in ensuring that the high school graduates they hire are able to read, write, and compute. They expect to provide job training but not basic skills education. "Hire" standards seem to be conceptualized as minimum standards to ensure competence in basic skills for all students, and they are regarded more as mandatory than as voluntary.

In contrast, government leaders seem more interested in improving U.S. students' world rankings, which requires far more than ensuring the attainment of basic skills. For example, the New Standards (a joint effort of the National Center on Education and the Economy and the Learning Research and Development Center) seem intended as a tool for education reform to help schools "work as systems whose parts are focused on coherent, consistent, publicly articulated goals" because "a centrally articulated set of goals, even if vaguely stated, plays important roles: It organizes the development of exams and curriculums, informs textbook writing, and determines the direction of teacher training."⁵

On the other hand, many educators seem more interested in standards as a vehicle

for professionalizing teaching. As Matthew Gandal of the American Federation of Teachers put it, "The basic premise here is that once these standards and monitoring practices are up and running, teachers and schools can be freed from traditionally burdensome rules and given the flexibility to determine the best ways to help their students achieve at higher levels."⁶ Still other people have other purposes for advocating standards.

Two Uses of Standards

Given all these purposes and conceptions of educational standards, as well as the cautionary voices about them, what is a reasonable stance to take on standards? To address this question, it is helpful to understand that standards can be used in two very different ways that represent very different views of education, each of which can be applied to any of the purposes described earlier. They can be used as tools for standardization — to help make all students alike. Or they can be used as tools for customization — to help meet individual students' needs. Sabers and Sabers lament, "Unfortunately, most of the discussions about standards have centered on their importance. Less effort has been expended on what they should be, and little thought seems to have been given to the consequences of their implementation."⁷ This article addresses both questions in terms of the broader issue of standardizing or customizing education.

Consequences of Uniform Standards

At the National Education Summit in 1996 educational standards were characterized as tools for standardization, a view that also prevails in many of the articles on standards. Martin Covington states, "After reading the Summit statement one is left with the impression that achievement standards are best thought to be imposed equally on all children, irrespective of ability or circumstance."⁸ This seems particularly ironic, given that many business leaders are evolving their companies from standardization to customization.⁹ The terms "uniform standards" and "common standards" are often applied to this conception of standards. But what are the likely consequences of conceiving of educational standards in this way?

First, because students differ greatly in

ability (ranging from severely learning disabled to highly gifted), as well as in mastery of learning skills, prior knowledge, home environment, and so forth, it seems likely that standards that are challenging for some students will be easy for others. Therefore, uniform standards cannot be uniformly challenging (rigorous) for all students and cannot attain the frequently stated goal of standards: to accelerate student performance.

Second, as Covington puts it, "If students cannot now measure up to old, presumably less demanding standards, increased demands seem pointless."¹⁰ To the extent that uniform standards are applied, even with high-stakes accountability, they will most likely lead to more frustration for students and teachers and more high school dropouts, unless great emphasis is placed on improving educational processes. This will require considerable investment in professional development (intensive rather than piecemeal), in powerful learning resources (largely technological), and in systemic change (largely in the roles of teachers, learners, and administrators). Yet there is little talk about seeing that such investments accompany the new standards, and without them the new standards may well do more harm than good.

A third consequence of higher uniform standards — especially if high-stakes accountability is attached to them — is that teachers will feel forced to devote more time to whatever the standards call for, regardless of whether or not they, their students, and their students' parents believe that those standards are important. This will make the education system less flexible at a time when many policy makers and educators alike are calling for more flexibility. The Education Commission of the States, which advises state legislatures and the same governors who attended the National Education Summit, has pointed out:

The demands on public education are changing in many ways: demographically, economically, politically. To adapt to these changes, public education must be flexible. In a more ordered and less demanding time, it made sense for American states and localities to seek the efficiencies of a uniform model of education. . . .

While flexibility is no panacea, it offers several advantages over a more rigid system of education. Autonomy allows schools to be more responsive to parents' wishes and students' needs.¹¹

Similarly, given their frequently exclusive emphasis on academic achievement, higher uniform standards will probably mean that less time will be devoted to the important nonacademic missions that schools serve.¹² The 1996 Phi Delta Kappa/Gallup poll of public attitudes toward the public schools revealed considerable support for nonacademic purposes of public schools.¹³

Daniel Goleman has made a persuasive case that a small investment in emotional- and social-development programs in the public schools can have a powerful influence on reducing violence, teen pregnancy, drug dependence, depression, and many other social problems that end up costing us far more than such programs, and he describes schools in which successful efforts of this nature have been designed and implemented.¹⁴ There is a danger that a focus on academic standards with high-stakes accountability will impede the development and spread of such programs, even though the public feels they are important.

Uniform standards may be appropriate for business — a manufacturer wants all its microwave ovens to meet specified standards of quality. That's good. But to what extent do we want all students to be alike? Of course, there are certain basic skills we want all students to master, but should all students be required or expected to attain them at exactly the same age or grade level? To use a travel analogy, standards for manufacturing are comparable to a single destination for all travelers to reach, whereas standards for education are more like milestones on many never-ending journeys whereby different travelers may go to many different places. We must be careful not to overgeneralize what works well for business.

Based on a careful analysis of consequences, it seems that uniform or common higher standards could have considerable negative consequences for public education. But standards could instead have considerable positive consequences. How must they be operationalized for this to happen?

Principles for Using Standards To Customize Education

Martin Covington helps to capture a critical factor in the ways standards can be operationalized: "The urging of tougher achievement standards on American

schools [is] a recommendation that is part of a broader strategy of *intensification* . . . that is, simply continuing to do what has been done for years, but more of it — lengthening the school day, requiring more homework, and the like."¹⁵ For standards to have a positive effect on meeting student needs, we must think of them as serving a purpose other than the intensification of the currently predominant standardization approach to education.¹⁶

If the goal of the standards movement is to accelerate learning for *all* students, especially low-achieving students, then we must recognize that different students learn at different rates. Yet our current system is characterized by grade levels with classes and classrooms in which all students typically learn the same thing at the same time. By holding time constant, we force achievement to vary among students, with the consequence that the low-achieving ones gradually accumulate deficits in learning that handicap them in their future learning endeavors. Our current time-based system serves the function of sorting students, and we have developed norm-based testing (grading on a curve) and tracking as additional tools to that end. A focus on sorting students may have met an important need during the industrial age, when we needed large numbers of people for assembly-line jobs, but it is antithetical to helping all students achieve "hire, higher, or high" standards. So the very structure of our education system works against the goals of the standards movement.

To refocus our education system on meeting high standards, however you conceptualize them, we must no longer hold time constant; we must allow students the time they need to meet each standard. But to hold back the faster learners while the slower ones reach the standard would be to lower the standards for those students. So we must look for alternatives to our current mindset that can conceive only of classes and classrooms in which all students learn the same thing at the same time.

We need customization to replace standardization, in order to have an education system that is focused on learning (attaining high standards) rather than on sorting.¹⁷ This does not mean that the basic standards for faster learners should be different from those for slower learners; rather it means that we should not expect all students to meet the standards within the same time frames. Further rationale for

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this conclusion is provided by differences in developmental rates for learners of the same age, differences in opportunities to learn outside of school, differences in prior knowledge and skills, differences in interests, and many other factors.

Depending on how they are conceived, standards can be used to foster either a standardized approach to education (a sorting-focused system) or a customized approach (a learning-focused system). The following are some principles that reflect a role for standards in a learning-focused (customized, learner-centered, results-oriented) approach to education.

Standards as levels of attainment. Standards should represent levels of attainment, with many different levels in each area of competence. As Gandal put it, "We can establish challenging standards without sacrificing rigor by developing multiple levels of achievement for each content standard."¹⁸ These levels of achievement are similar to the notion of different performance standards for a given content standard. And different content standards also frequently represent different levels of complexity. Students, then, advance to progressively higher standards in different areas of competence.

Standards without timetables. Standards should not be tied to age levels or time in any way. This idea represents the greatest departure from common or uniform standards. Some standards may be common

in the sense that all students should eventually attain them (e.g., basic skills), but no standards should be common in the sense that all students should be required to attain them at the same age. Moreover, many standards should not be required of all students; they should represent areas in which students may pursue their interests and develop their unique talents. Options are as important a feature of automobile manufacture as standards are. As Covington states:

Striving for excellence — that is, maximizing the intellectual potential of each student — is the most legitimate of all academic goals and, happily, the one on which all interested parties can most likely agree. However, this kind of excellence is best promoted when achievement standards are applied flexibly, according to the gifts and experiences of each child, not imposed uniformly in procrustean ways across all children. . . . Standards and standardization are not the same thing, nor can equivalency substitute for excellence.¹⁹

Standards in all areas. Standards should be identified in all areas of learning and human development — nonacademic as well as academic. They should pertain to civic concerns as well as workplace preparation. They should address the needs of communities as well as those of students. As Mary McCaslin put it, "Achievement is *one* aspect of being a student; failure to recognize the larger arena within which achievement is pursued is to risk attainment of Summit goals."²⁰ The National Education Summit concluded that "standards can be effective only if they represent what parents, employers, educators, and community members believe children should learn and be able to do."²¹ For standards to be effective in a learning-focused education system, this statement should be qualified so that these stakeholders do not come to believe that a certain attainment is important for all children. Several observers have expressed concern that "the sheer bulk of some of the [new education standards] will make it difficult for schools to put together a coordinated curriculum."²² However, for a learning-focused, customized education system, such a high level of specification will help educators to generate a variety of educational resources and to keep track of learners' differing attainments, though technological tools will be important for managing this diversity.

Choice within limits. Gary Natriello has advocated that standards be "challenging yet attainable to students who differ in ability."²³ How can this be accomplished? Teachers, parents, and students should be allowed to decide when a given standard is appropriate ("challenging yet attainable") for a child during the child's development, within certain limits. Those limits should be in accordance with the general principle that attainments highly valued by the community or the state (such as mandatory basic skills) should be pursued in a timely fashion. Teachers, parents, and students should also be allowed some degree of choice as to which standards to pursue, beyond those deemed essential by the community or the state.

Learning-focused instructional processes. Standards must be accompanied by instructional processes that allow children to continue to work on the attainment of a standard until it is reached. Standards must be tools for "success for all students," not tools to propagate the traditional focus on sorting students. Even in business, the focus is on preventing defects in a product and immediately correcting those that do occur. As Rhona Weinstein put it, "Without appropriate pedagogy as well as systemic support, tough standards and punitive accountability will hold children and teachers accountable without providing the means to successfully meet those standards."²⁴

So what would an appropriate pedagogy and systemic support look like? To enable children to continue to work on a standard until it is reached, the pedagogy must be flexible enough to allow different students to be working on different standards at the same time. This means that the teacher's role must change from being a "sage on the stage" to being a "guide on the side" — a coach, a mentor. For this approach to work, there must be much more reliance on team-based learning, self-regulated learning, and advanced technology as tools for customized learning. We have much to learn to fully develop the potential of this kind of pedagogy, yet important inroads have already been made.²⁵

As Weinstein indicated, to be successful, this kind of pedagogy must be accompanied by systemic support. It may not be useful to think in terms of teachers working alone in self-contained classrooms with the day divided into periods (or even blocks) and age-based grade levels. Again, we have much to learn about how to redesign the

"system" to support a learning-focused pedagogy. But when we look at schools that have been successful in helping all students reach higher standards, such as Central Park East²⁶ and Weld County School District 6 in Greeley and Evans, Colorado,²⁷ we find that a statement of standards was not among the most important factors; a learner-centered (customized) focus was, including a learning-focused pedagogy and systemic support.

Unfortunately, much of the discussion of standards seems to assume a "magic bullet" mentality that overlooks the considerable complexity and systemic interdependencies that will strongly influence our ability to help all students reach high standards of excellence.

Performance-based measures. A standard should, if possible, be specific enough to be measurable. But we must recognize that some standards cannot truly be measured until many years after schooling takes place, such as certain standards in civic education or in parenting. And there are some standards for which any cost-effective measure will inevitably be unreliable, such as standards for attitudes about, say, the importance of reading or the arts. Nevertheless, aside from these relatively rare problems, a standard should be specific enough to be measurable. But how specific is specific enough?

Sabers and Sabers propose that "too much specificity drastically limits the domain of behaviors and tasks relevant to the measurement of success."²⁸ Is this always a bad thing? Certainly for some types of learning it is useful to maintain a broad domain of behaviors and tasks that can indicate success. But are there not other types of learning for which it is important to limit the domain to some extent, perhaps more so in a customized system than in a standardized system? It seems reasonable that different types of learning should have different degrees to which the domain of behaviors and tasks is limited, with some appropriately being considerably limited. And to the extent that the domain is not very limited for a standard, there should be a variety of kinds of performance-based measures for determining whether or not the standard has been met.

Certification of standards. Given that there exists a wide variety of standards within a wide variety of areas, and given that students have different needs, interests, and talents, it seems reasonable that different types of degrees or certificates should be

offered for different combinations of standards. An extreme for customizing the certification of standards met would be a personal portfolio, which provides such an overwhelming amount of information that no two students' "certification" would be exactly alike. The opposite extreme is our current high school diploma, which tells you so little about what a given student has actually learned that it makes most students look alike. But there could be intermediate degrees of certification that are in essence "package deals" that indicate that the student has reached certain determined standards in certain determined areas.

Positive incentives for meeting standards. Standards should be accompanied by positive, not negative, incentives. Monetary sanctions and rigid controls in particular are likely to produce the opposite of the desired effect of elevating the standards that students are able to attain.²⁹

Limitations of standards. Elliot Eisner has pointed out that "standards do not represent the most important ends we seek in education. . . . We seek work that displays ingenuity, complexity, and the student's personal signature."³⁰ So we should find ways to represent those grander ends in our specifications of what is important to teach and assess. Eisner talks much about the value of criteria in lieu of standards for assessing (and presumably coaching the attainment of) these important educational ends.

The Broader Context

It seems that, in spite of many different conceptions of standards, there is consensus that the major purpose of standards is to accelerate student learning and performance. But this can be done only by getting students to spend more time actively mentally engaged in learning. Perhaps the two most important conditions for active mental engagement are the intensity of motivation to learn and the quality of the instructional support for learning. And, as was discussed above, common, uniform standards are actually likely to be counterproductive with regard to both of these conditions. To support the goal of accelerating learning and performance, we need standards that support customization rather than standardization in education.

But even such standards are not sufficient to create either of the conditions for

active mental engagement. Also needed are significant stakeholder-designed changes in the use of time, talent, and technology — time in the form of allowing students the time they need to reach each standard; talent in the form of changing the roles of students, teachers, and administrators (which requires a sustained program of professional development); and technology in the form of providing teachers and students with more powerful tools for learning. These changes in turn need to be supported by changes in the ways schools, school districts, and state education agencies are organized, administered, and governed, so as to provide appropriate systemic supports. As David Cohen put it, "Standards should be understood as one tool for helping the entire education system to learn and improve, not as the kingpin of change or as the occasion to decide for our time what the content of education should be and what level of achievement will be acceptable."³¹

Standards, properly conceived, are just one necessary, but not sufficient, part of a comprehensive redesign of a very complex education system, as the exemplary effort in Weld County School District 6 in Colorado aptly demonstrates. If not properly conceived, standards can do far more harm than good. As Martin Maehr and Jane Maehr put it, "Emphasizing standards is an all too ready, all too quick solution to a much more complex issue."³² We must recognize this complexity, use standards to support customization rather than standardization, and address all the interrelated parts of the system (e.g., instructional processes, assessment, and systemic supports). Otherwise, the standards movement will inevitably end up as yet another wave of reform that came and went without any positive impact on student learning.

1. Theodore Sizer, "Making the Grade," *Washington Post Education Review*, 2 April 1995, p. 12.

2. See, for example, Angela R. Taylor, "Conditions for American Children, Youth, and Families: Are We 'World Class'?" *Educational Researcher*, November 1996, pp. 10-12.

3. Darrell L. Sabers and Donna S. Sabers, "Conceptualizing, Measuring, and Implementing Higher (High or Hire) Standards," *Educational Researcher*, November 1996, pp. 19-21.

4. Anne C. Lewis, "An Overview of the Standards Movement," *Phi Delta Kappan*, June 1995, pp. 744-50.

5. Lauren Resnick and Kate Nolan, "Where in the World Are World-Class Standards?" *Educational Leadership*, March 1995, p. 7.

6. Matthew Gandal, "Not All Standards Are Created Equal," *Educational Leadership*, March 1995, p. 16.

7. Sabers and Sabers, p. 21.

8. Martin V. Covington, "The Myth of Intensification," *Educational Researcher*, November 1996, p. 24.

9. See, for example, Michael Hammer and James Champy, *Reengineering the Corporation* (New York: HarperBusiness, 1993).

10. Covington, p. 24.

11. Education Commission of the States, "About ECS" (<http://www.ecs.org>).

12. Mary McCaslin, "The Problem of Problem Representation: The Summit's Conception of Student," *Educational Researcher*, November 1996, pp. 13-15.

13. Stanley M. Elam, Lowell C. Rose, and Alec M. Gallup, "The 28th Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes Toward the Public Schools," *Phi Delta Kappan*, September 1996, p. 56.

14. Daniel Goleman, *Emotional Intelligence: Why It Can Matter More than I.Q.* (New York: Bantam Books, 1995).

15. Covington, p. 24.

16. Rhona Weinstein, "High Standards in a Tracked System of Schooling: For Which Students and with What Educational Supports?" *Educational Researcher*, November 1996, pp. 16-19.

17. For more about the differences between an education system focused on sorting and one focused on learning, see Charles M. Reigeluth, "The Imperative for Systemic Change," in idem and Robert J. Garfinkle, eds., *Systemic Change in Education* (Englewood Cliffs, N.J.: Educational Technology Publications, 1994), pp. 3-11.

18. Gandal, p. 20.

19. Covington, pp. 24-25.

20. McCaslin, p. 13.

21. Thomas L. Good, "Educational Researchers Comment on the Educational Summit and Other Policy Proclamations for 1983-1996," *Educational Researcher*, November 1996, p. 5.

22. Chris Phipo, "Calling the Play-by-Play on Standards," *Phi Delta Kappan*, February 1996, p. 398.

23. Gary Natriello, "Diverting Attention from Conditions in American Schools," *Educational Researcher*, November 1996, p. 7.

24. Weinstein, p. 18.

25. For a broad sample of what has been learned, see Charles M. Reigeluth, ed., *Instructional-Design Theories and Models*, vol. 2 (Hillsdale, N.J.: Erlbaum, forthcoming).

26. Deborah Meier, *The Power of Their Ideas* (Boston: Beacon Press, 1995).

27. Tim Waters, Don Burger, and Susan Burger, "Moving Up Before Moving On," *Educational Leadership*, March 1995, pp. 35-40.

28. Sabers and Sabers, p. 20.

29. Education Commission of the States, op. cit.

30. Elliot Eisner, "Why Standards May Not Improve Schools," *Educational Leadership*, February 1993, p. 22.

31. David Cohen, "What Standards for National Standards?" *Phi Delta Kappan*, June 1995, p. 756.

32. Martin L. Maehr and Jane M. Maehr, "Schools Aren't as Good as They Used to Be: They Never Were," *Educational Researcher*, November 1996, p. 23.