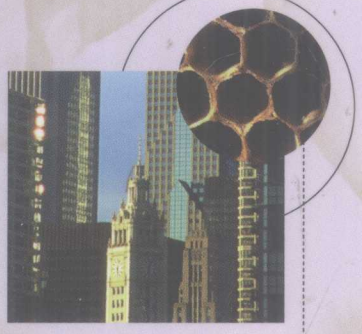
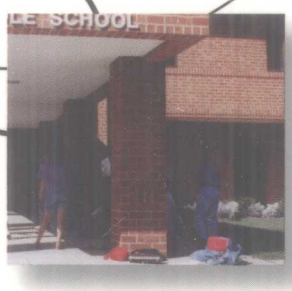
A Comprehensive Guide to

Designing Standards-Based Districts, Schools, and Classrooms



Robert J. Marzano and John S. Kendall



A Comprehensive Guide to

Designing Standards-Based Districts, Schools, and Classrooms

Robert J. Marzano and John S. Kendall

Association for Supervision and Curriculum Development
Alexandria, Virginia

Mid-continent Regional Educational Laboratory
Aurora, Colorado

Association for Supervision and Curriculum Development
1703 N. Beauregard St. • Alexandria, VA 22311-1714 USA
Telephone: 1-800-933-2723 or 703-578-9600 • Fax: 703-575-5400

2550 S. Parker Rd., Suite 500 • Aurora, Colorado 80014
Telephone: 303-337-0990 • Fax: 303-337-3005

Barbara B. Gaddy, Editor
Mary Lee Barton, Editor's Assistant
Jeanne Deak, Desktop Publisher
Shelly Wasson, Research Assistant
Jennifer Norford, Research Assistant
Lisa Schoch-Roberts, Research Assistant
Michael Shea, Research Assistant

Printed in the United States of America.

ASCD stock no.: 196215
ASCD member price: $24.95 nonmember price: $29.95

To order additional copies of this book, please contact ASCD.

Library of Congress Cataloging-in-Publication Data

Marzano, Robert J.
A comprehensive guide to designing standards-based districts, schools, and classrooms
Robert J. Marzano and John S. Kendall.
p. cm.
Includes bibliographical references (p.).
ISBN 0-87120-277-8 (pbk.)
1. Education—Standards—United States—Handbooks, manuals, etc. 2. Educational evaluation—United States—Handbooks, manuals, etc. 3. Educational accountability—United States—Handbooks, manuals, etc. 4. Grading and marking (Students)—United States—Handbooks, manuals, etc. 5. Educational change—United States—Handbooks, manuals, etc. I. Kendall, John S. II. Title.
LB3060.83.M37 1996 96-36835
279.158'0973—dc21 CIP

08 07 06 05 04 03 10 9 8 7 6 5 4 3

This book is dedicated to Ron Brandt.

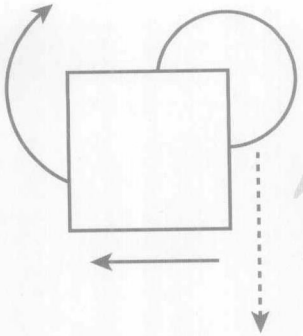
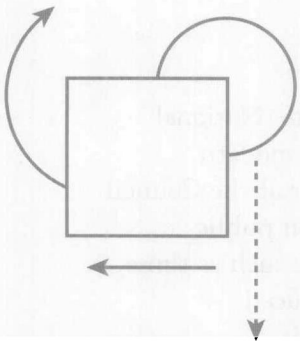


Table of Contents



Chapter 1

Why Do We Need Standards?

Many, if not most, educators are unaware of the impact the very discussion of standards, let alone the reorganization of schools around standards, has had on American education. Education policy analyst Anne Lewis (1995) notes that "whether lauded as a sign of progress or scorned as anathema" (p. 745), the standards movement is one of the most talked about issues in school reform. Researchers Robert Glaser and Robert Linn (1993) assert that it might be only in retrospect that we recognize the importance of the current discussion of standards in American education:

> In the recounting of our nation's drive toward educational reform, the last decade of this century will undoubtedly be identified as the time when a concentrated press for national education standards emerged. The press for standards was evidenced by the efforts of federal and state legislators, presidential and gubernatorial candidates, teacher and subject-matter specialists, councils, governmental agencies, and private foundations. (p. xiii)

When and where did the discussion of standards originate? What is the rationale for standards?

A Brief History Of The Modern Standards Movement

Former Assistant Secretary of Education Diane Ravitch is commonly recognized as one of the chief architects of the modern standards movement. In her book *National Standards in American Education: A Citizens Guide* (1995), Ravitch explains the rationale for standards in a straightforward manner:

> Americans . . . expect strict standards to govern construction of buildings, bridges, highways, and tunnels; shoddy work would put lives at risk. They expect stringent standards to protect their drinking water, the food they eat, and the air they breathe. . . . Standards are created because they improve the activity of life. (pp. 8-9)

Ravitch (1995) asserts that just as standards improve the daily lives of Americans, so, too, will they improve the effectiveness of American education: "Standards can improve achievement by clearly defining what is to be taught and what kind of performance is expected" (p. 25).

Many educators see the publication of the now-famous report *A Nation at Risk* (National Commission on Excellence in Education, 1983) as the initiating event of the modern standards movement. Ramsay Seldon, director of the State Assessment Center at the Council of Chief State School Officers, notes that after this highly damaging exposé on public education, educators set out to change what they could through new policies, such as those that increased the rigor of graduation requirements. When these efforts produced disappointing results, education leaders turned to national goals and standards:

> We found that this first wave of reform didn't have dramatic effects. So there was a feeling of urgency that the education system needed to be stronger, and that in addition to what states and districts and individual schools were doing—we needed a stronger presence at the national level. . . . We recognized that we didn't need a national curriculum, so national goals and voluntary national standards came to be seen as a good mechanism for providing a focus. (in O'Neil, 1995, p. 12)

Researcher Lorrie Shepard also cites *A Nation at Risk* as a critical factor in the modern standards movement. Shepard (1993) notes that with the publication of the report, the rhetoric of education reform changed drastically. Proponents of reform began to make a close link between the financial security and economic competitiveness of the nation and our educational system. Who will soon forget the chilling words often quoted from *A Nation at Risk*: "The educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and a people. . . . We have, in effect been committing an act of unthinking, unilateral educational disarmament" (National Commission on Excellence in Education, 1983, p. 5).

These growing concerns about the educational preparation of the nation's youth prompted President Bush and the nation's governors to call an education summit in Charlottesville, Virginia in September, 1989. Shepard (1993) explains that at this summit, President Bush and the nation's governors, including then-governor Bill Clinton, agreed on six broad goals for education to be reached by the year 2000. These goals and the rationale for them are published under the title *The National Education Goals Report: Building a Nation of Learners* (National Education Goals Panel [NEGP], 1991). Two of those goals (3 and 4) related specifically to academic achievement:

> **Goal 3:** By the year 2000, American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter, including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.
>
> **Goal 4:** By the year 2000, U.S. students will be first in the world in science and mathematics achievement. (p. 4)

Soon after the summit, two groups were established to implement the new education goals: the National Education Goals Panel (NEGP) and the National Council on Education Standards and Testing (NCEST). Collectively, these two groups were charged with addressing unprecedented questions regarding American education such as, What is the subject matter to be addressed? What types of assessments should be used? What standards of performance should be set?

These efforts engendered a flurry of activity from national subject-matter organizations to establish standards in their respective areas. Many of these groups looked for guidance from the National Council of Teachers of Mathematics (NCTM), which preempted the public mandate for standards by publishing *Curriculum and Evaluation Standards for School Mathematics* in 1989. As *Education Week* reporter Karen Diegmueller (1995) explains, the NCTM standards "redefined the study of math so that topics and concepts would be introduced at an earlier age, and students would view math as a relevant problem-solving discipline rather than as a set of obscure formulas to be memorized" (p. 5). The National Academy of Sciences used the apparent success of the NCTM standards as the impetus for urging Secretary of Education Lamar Alexander to underwrite national standards-setting efforts in other content areas. According to Diane Ravitch, then an assistant secretary of education, Alexander "bankrolled the projects out of his office's discretionary budget" (in Diegmueller, 1995, p. 5). The National Science Teachers Association (NSTA) and the American Association for the Advancement of Science (AAAS) quickly launched independent attempts to identify standards in science. Efforts soon followed in the fields of civics, dance, theater, music, art, language arts, history, and social studies, to name a few. An overview of the movement to establish standards in the core subject areas is reported in Exhibit 1.1.

Exhibit 1.1 The Standards Movement

1983	*A Nation at Risk* is published, calling for reform of the U.S. education system.
1983	Bill Honig, elected state superintendent of California public schools, begins a decade-long revision of the state public school system, which will encompass the development of content standards and curriculum frameworks.
1987	The National Council of Teachers of Mathematics (NCTM) writing teams begin to review curriculum documents and to draft standards for curriculum and evaluation.
1989	The first education summit is held in Charlottesville, Virginia. The nation's fifty governors and President Bush adopt National Education Goals for the year 2000. One goal names five school subjects—English, mathematics, science, history, and geography—for which challenging national achievement standards should be established.
1989	NCTM publishes *Curriculum and Evaluation Standards for School Mathematics.*

Exhibit 1.1 The Standards Movement

1989	Project 2061 of the American Association for the Advancement of Science (AAAS) publishes *Science for all Americans*, describing what "understandings and habits of mind are essential for all citizens in a scientifically literate society."
1990	In his State of the Union address, President Bush announces the National Education Goals for the year 2000; shortly thereafter, he and Congress establish a National Education Goals Panel (NEGP).
1990	The Secretary's Commission on Achieving Necessary Skills (SCANS) is appointed by the Secretary of Labor to determine the skills young people need to succeed in the world of work.
1990	The New Standards Project, a joint project of the National Center on Education and the Economy and the Learning Research and Development Center, is formed to create a system of standards for student performance in a number of areas.
1990, Fall	The Mid-continent Regional Educational Laboratory (McREL) begins the systematic collection, review, and analysis of noteworthy national and state curriculum documents in all subject areas.
1991	SCANS produces *What Work Requires of Schools*, which describes the knowledge and skills necessary for success in the workplace.
1991, June	Secretary of Education Lamar Alexander asks Congress to establish the National Council on Education Standards and Testing (NCEST). The purpose of NCEST is to advise on the desirability and feasibility of voluntary national standards and tests and make recommendations regarding them.
1992, Jan	NCEST releases its report *Raising Standards for American Education* to Congress, proposing an oversight board, the National Education Standards and Assessment Council (NESAC), to establish guidelines for standards setting and assessment development.
1992, Jan	The National Council for the Social Studies names a task force to develop curriculum standards.
1992, Spring	The National History Standards Project receives funding from the National Endowment for the Humanities and the U.S. Department of Education.
1992, Spring	The National Association for Sport and Physical Education begins work on *Outcomes of Quality Physical Education Programs*, which will form the basis of standards in Physical Education.
1992, June	The Consortium of National Arts Education Associations receives funding from the U.S. Department of Education, the National Endowment for the Arts, and the National Endowment for the Humanities to write standards in the arts.
1992, July	The Center for Civic Education receives funding from the U.S. Department of Education and the Pew Charitable Trusts for standards development in civics and government.
1992, July	The Geography Standards Education Project, funded with grants from the U.S. Department of Education, The National Endowment for the Humanities, and the National Geographic Society, creates the first draft of geography standards.
1992, Oct	The Committee for National Health Education Standards is funded by the American Cancer Society.

Exhibit 1.1 The Standards Movement

1992, Nov	The Bush administration awards funds to create English standards to a consortium of three organizations: the National Council of Teachers of English, the International Reading Association, and the Center for the Study of Reading at the University of Illinois.
1993, Jan	The National Standards in Foreign Language Education Project becomes the seventh and final group to receive federal funds for standards development.
1993, April	McREL publishes its first technical report on standards, *The Systematic Identification and Articulation of Content Standards and Benchmarks: An Illustration Using Mathematics.*
1993	AAAS's Project 2061 publishes *Benchmarks for Science Literacy.*
1993, Nov	NEGP's Technical Planning Group issues *Promises to Keep: Creating High Standards for American Students*, referred to as the "Malcom Report." The report calls for the development of a National Education Standards and Improvement Council (NESIC), which would give voluntary national standards a stamp of approval.
1993, Nov	The National Research Council, with major funding from the U.S. Department of Education and the National Science Foundation, establishes the National Committee on Science Education Standards and Assessment (NCSESA) to oversee standards development in content, teaching, and assessment.
1994, Jan	McREL publishes *The Systematic Identification and Articulation of Content Standards and Benchmarks: Update, January 1994*, which provides a synthesis of standards for science, mathematics, history, geography, communication and information processing, and life skills.
1994, Feb	The Standards Project for English Language Arts, a collaborative effort of the Center for the Study of Reading, the International Reading Association, and the National Council of Teachers of English, publishes the draft *Incomplete Work of the Task Forces of the Standards Project for English Language Arts.*
1994, March	President Clinton signs into law Goals 2000: Educate America Act. Among other provisions, this legislation creates the National Education Standards and Improvement Council (NESIC) to certify national and state content and performance standards, opportunity-to-learn standards, and state assessments; funds a grant program for reform plans from participating states; and formally authorizes the National Education Goals Panel. In addition, the legislation names four additional school subjects—foreign languages, the arts, economics, and civics and government—in which students should demonstrate competency.
1994, March	The U.S. Department of Education notifies the Standards Project for the English Language Arts that it will not continue funding for the project, citing a lack of progress.
1994, March	The Consortium of National Arts Education Associations publishes the arts standards (dance, music, theatre, and the visual arts).
1994, Fall	The National Council for the Social Studies publishes *Expectations of Excellence: Curriculum Standards for Social Studies.*

Exhibit 1.1 The Standards Movement

1994, Oct	Lynne Cheney, past chair of the National Endowment for the Humanities (NEH), criticizes the U.S. history standards in the *Wall Street Journal* two weeks before their release. (NEH, with the U.S. Department of Education, funded development of the U.S. history standards.)
1994, Oct	U.S. history standards are released; world history and K-4 history standards are released shortly thereafter.
1994, Oct	The Geography Education Standards Project publishes *Geography for Life: National Geography Standards*.
1994, Nov	The Center for Civic Education, funded by the U.S. Department of Education and the Pew Charitable Trusts, publishes standards for civics and government education.
1995, Jan	Gary Nash, National History Standards Project codirector, indicates that the history standards may be revised. The U.S. Senate denounces the current history standards in a 99-1 vote.
1995, April	The U.S. Department of Education withdraws assurance of a $500,000 grant to the National Council on Economic Education for the development of standards in economics.
1995, May	The Joint Committee on National Health Education Standards releases *National Health Education Standards: Achieving Health Literacy*.
1995, Summer	The National Association for Sport and Physical Education publishes *Moving Into the Future: National Standards for Physical Education*.
1995, Oct	The National Council on Economic Education, using funds from private sources, convenes a drafting committee to develop standards; projected publication is winter 1996.
1995, Nov	The New Standards Project releases a three-volume "consultation draft" entitled *Performance Standards* for English language arts, mathematics, science, and "applied learning."
1995, Dec	McREL publishes *Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education*, a synthesis of standards in all subject areas, including behavioral studies and life skills.
1996, Jan	The National Standards in Foreign Language Education Project publishes *Standards for Foreign Language Learning: Preparing for the 21st Century*.
1996, Jan	The National Research Council publishes *National Science Education Standards*.
1996, March	The second education summit is held. Forty state governors and more than 45 business leaders convene. They support efforts to set clear academic standards in the core subject areas at the state and local levels. Business leaders pledge to consider the existence of state standards when locating facilities.
1996, March	The National Council of Teachers of English and the International Reading Association publish *Standards for the English Language Arts*.
1996, April	Revised history standards are published. Asserting that the revision does not go far enough, Lynn Cheney renews her criticism of the history standards. A review in the *Wall Street Journal* by Diane Ravitch and Arthur Schlesinger, professor emeritus at City University of New York, endorses the standards.

Troubled Times

Despite the federal support for standards and the enthusiasm of educators from various subject areas, critics of the standards movement captured the public's attention. Criticism of the standards fell into four broad categories: (1) resource and equity issues, (2) relationship to previous, failed reform efforts, (3) objectionable content in the standards, and (4) volume of material.

Resources and Equity Issues

Some educators saw the standards movement as a major drain on resources that should have been used for more pressing needs such as basic educational materials. For example, Theodore Sizer, founder of the Coalition of Essential Schools, stated that "the maps on the walls [of classrooms] still call [Zaire] the Belgian Congo. Those are the things that just cry out for attention" (in Diegmueller, 1995, p. 5). Others noted that the drain on resources predictably would adversely affect some students much more than others. Specifically, the standards movement was viewed as another burden that would be placed on the shoulders of those who traditionally do not do well in schools. Curriculum professor Michael Apple noted that "national standards and national testing are the first steps toward educational apartheid under the rhetoric of accountability" (in Diegmueller, 1995, pp. 5-6).

Relationship To Previous, Failed Reform Efforts

Others saw the standards movement as a thinly veiled attempt at a type of education reform that has been tried a number of times before. For example, researcher and theorist Elliot Eisner (1995) noted the similarity of the standards movement to the efficiency movement of the early 1900s:

> The efficiency movement, which began in 1913 and lasted until the early 1930s, was designed to apply the principles of scientific management to schools. Its progenitor, Frederick Taylor, the inventor of time-and-motion study, was a management consultant hired by industrialists to make their plants more efficient and, hence, more profitable. By specifying in detail the desired outcomes of a worker's efforts and by eliminating "wasted motion," output would increase, profits would soar, wages would rise, and everyone would benefit. (p. 159)

According to Eisner (1995), school administrators soon found that the basic concept underlying the efficiency movement—namely, that one could mechanize and routinize teaching and learning—did not work. Educators would no doubt come to the same conclusions about standards, opined Eisner.

The standards movement was also likened to the failed behavioral objectives movement of the 1960s. Like the efficiency movement, the basic notion behind behavioral objectives was to

define education goals in terms that were sufficiently specific to determine without ambiguity whether or not students had achieved them. Measurement expert Robert Mager (1962) is commonly credited as the initiator of the movement, although Ralph Tyler (1932/1989, 1949), considered by many to be the father of modern-day curriculum theory, laid much of the foundation for the concept. Based on his extensive research, Tyler (1932/1989) concluded that learning objectives must be highly specific if instruction is to be effective:

> To define the behavior to be evaluated is essentially to determine all of the kinds of behavior which are particularly significant for the purposes under consideration. The reactions of any human organism are so many and varied that it is necessary to isolate the particular reactions which are significant for a given purpose. (p. 77)

Through his book *Preparing Instructional Objectives*, published in 1962, Mager routinized and popularized the process of constructing behavioral objectives to such an extent that teachers all across the country, in virtually every subject area, at every grade level, were writing behavioral objectives during the 1960s. For Mager, an objective must identify the expected behavior in detail, the conditions in which the behavior is to be displayed, and the criterion that makes it possible to measure the student's performance. An example of a behavioral objective following Mager's criteria would be "At the end of a 50-minute period of instruction, students will be able to complete eight out of ten problems in two-column addition within a five-minute period."

This level of detail, although effective instructionally, created a system that was overwhelming for teachers. As Eisner (1995) notes, the approach required that schools construct hundreds, and sometimes thousands, of behavioral objectives to specify the outcomes of instruction. Soon, schools and districts became bogged down by the sheer number of objectives. This led even ardent supporters of behavioral objectives, such as assessment expert James Popham (1972, 1994), to realize that the movement was doomed to failure.

Objectionable Content In The Standards

In addition to its association with the flawed efficiency and behavioral objective movements of the past, the standards movement received a fair amount of criticism for the very content it promoted. Perhaps the lowest point in the standards movement was the debate over the history standards. In the fall of 1994, Lynne Cheney, a fellow of the American Enterprise Institute, unleashed a blistering attack on the History Standards Project, which, along with science, was the first standards project to receive funding from the U.S. Department of Education in 1991. Cheney alleged that the history standards portrayed the United States and its white, male-dominated power structure as an oppressive society that victimizes minorities and women. She further charged that the history standards ignored such traditional historical figures as George Washington and Robert E. Lee in order to placate proponents of multiculturalism. Diegmueller (1995) notes that suddenly the rather academic discussion of standards burst onto the national scene:

> Cheney's views won such exceptionally wide exposure because, as chairwoman of the National Endowment for the Humanities, she had lobbied for history standards, funded the project, and selected its leaders and many of the people on its 29-member board. Soon it became evident that the criticism was not about to subside—even though there were far more supporters than detractors. The U.S. Senate even weighed in, denouncing the history standards by a vote of 99 to 1. (p. 8)

To date, the history standards have not recovered from the negative public perception generated by Cheney's criticisms, even though a revised edition that attempted to address the criticisms was published in 1996 (National Center for History in the Schools [NCHS], 1996).

Volume Of Material

Perhaps the death blow to the federally funded efforts to establish standards was the charge that, once developed, they were simply too cumbersome to use. In the beginning, policymakers and educators had expected to see concise standards. However, as the standards drafts and final documents were produced, it became clear that the standards were far from concise. Education researcher Chester Finn, Jr. noted that "the professional associations, without exception, lacked discipline. They all demonstrated gluttonous and imperialistic tendencies" (in Diegmueller, 1995, p. 6).

At the time of Finn's statement in 1995, the standards documents, taken together, weighed about 14 pounds, stood six inches tall, and contained over 2,000 pages. Since then, more documents, more pounds, and more inches have been added to the total mass of standards. By contrast, the Japanese national curriculum fits into "three slender volumes, one for elementary schools, one for lower secondary schools, and one for upper secondary schools" (Ravitch, 1995, p. 15). Ron Brandt (1995), executive editor of the Association for Supervision and Curriculum Development (ASCD), acknowledged the problem of the sheer volume of the standards:

> I would describe them as an ambitious conception of what professional educators, most of whom are advocates or specialists in the various school subjects, want students to learn in those subjects. It's the classic curriculum dilemma faced by every principal, central administrator, and generalist teacher: specialists naturally expect a lot; they love their subject and they know its possibilities. Taken as a whole, however, such statements of aspirations are overwhelming. (p. 5)

In summary, the once-bright promise of subject-area standards, born from a desire to improve the rigor and effectiveness of American education, has quickly faded under a wide array of criticisms. As Finn notes, "If this were a play, I'd put it on the shelf with tragedies" (in Brandt, 1995, p. 5).

Is The Standards Movement Still Alive?

Given the intense criticism of the modern standards movement, there are some who believe that, for all practical purposes, it is dead. Brandt (1995) explains:

> Now that some of the original sponsors are disappointed in the new standards because they are not what was expected, what does that mean for educators? Apparently, these standards will not soon become a national curriculum or the basis for a set of high-stakes tests. Under the circumstances, educators can breathe a sigh of relief and, with discretion, put them to use in the endless task of improving curriculum and instruction. (p. 5)

Similarly, Paul Gagnon, a senior research associate at Boston University's School of Education, notes that the national movement to create standards is "dead of multiple wounds, some self-inflicted, others from our culture wars, still others from congressional antipathy to any federal initiative, and most from American educators who have long resisted establishing a common core of academic learning" (in "National Update on America's Education Reform Efforts," 1995, p. 1).

In general, we agree with Brandt and Gagnon that America will not soon have a set of national standards. In addition to the problems with standards cited above, the impetus for reform at the federal level has been halted because of a changing political climate. This has been dramatically illustrated by the demise of the National Education Standards and Improvement Council (NESIC). Created as part of the Goals 2000 legislation passed in 1994, NESIC was charged with overseeing the development of voluntary national content standards and "certifying" the standards created by states. But by June of 1995, education policy analyst David Cohen wrote that the NESIC was a casualty of a changing Congress:

> NESIC seems to be dead on arrival. Barely half a year after Goals 2000 was signed into law, Republicans took control of Congress. Although many Republicans had supported the legislation in the previous Congress, the new faces were generally more conservative and had little use for any sort of national school reform. They had especially little use for an agency that would devise, promulgate and certify national education standards. (p. 752)

At the same time, the standards movement at the state level has also been problematic. Campaigns have been mounted to stop the identification of state standards in Virginia, Colorado, Oregon, Pennsylvania, and Washington, to name a few. Studies by the American Federation of Teachers (AFT) have concluded that state standards are, for the most part, weak. For example, in a 1995 study (Gandal, 1995a), the AFT concluded that "only 13 states have standards that are strong enough to carry the weight of the reforms being built upon them" (p. 13). By 1996, the AFT found, significant improvements had been made, but state standards were still lacking: "Only 15 states have standards in all four core subjects that are clear, specific, and well-grounded in content" (Gandal, 1996, p. 13).

Standards: A Powerful Option For Reform

In spite of a plethora of problems at the national and state levels, we do not believe that the standards movement is dead. In fact, we assert that the logic behind organizing schooling around standards is so compelling that schools and districts will implement standards-based school reform even in the absence of federal or state mandates or incentives. Indications are that the standards movement, though "fallen from grace" at the national level, is rising through reform efforts at the local level; over the last year, the Mid-continent Regional Educational Laboratory (McREL) has seen a greater than three-fold increase in the number of districts and schools that have contracted for assistance in the development of standards and benchmarks. Even the 1995 AFT study (Gandal, 1995a) concluded that it is not too late "in most states for changes to be made that will strengthen their standards and enhance their efficacy in improving student achievement" (p. 31). Standards-based reform encompasses not only content knowledge and skills but how courses and subjects are defined, how student performance is described, and how student performance is graded and reported. These areas benefit directly from standards development. There appear to be at least four reasons that standards represent one of the most powerful options for school reform: (1) erosion of the Carnegie Unit and the common curriculum, (2) variation in current grading practices, (3) lack of attention to educational outputs, and (4) success in other countries.

Erosion Of The Carnegie Unit And The Common Curriculum

Although 90 years old, the Carnegie unit is still a basic structural feature of American education. The history of the Carnegie unit dates back to 1906 when the president of the Carnegie Foundation for the Advancement of Teaching, Henry S. Prichett, defined a "unit" as "a course of five periods weekly throughout an academic year" (in Tyack & Tobin, 1994, p. 460). By convention, these periods had come to be thought of as 55 minutes long. The impetus for this categorization came from an attempt by a blue-ribbon panel of trustees of the Carnegie Foundation to establish criteria for distinguishing between colleges and universities. At that time, there were over 600 institutions of higher education in the country ranging in character from struggling small academies to major research institutions such as the University of Chicago and Columbia University. Any of the institutions within this range might have used the title of "university." However, the Carnegie committee decreed that to truly be considered a university, an institution must have at least six full-time professors, a course of study of four, full years in the liberal arts and sciences, and require of entering students no less than four years of academic or high school preparation. Researchers David Tyack and William Tobin (1994) explain that the Carnegie committee also set what became well-established standards for the content and duration of specific courses:

> It was not enough simply to prescribe four years of secondary instruction. . . . It was also necessary to develop a standard measurement of time and credit for each subject—the Carnegie unit—and to demand that a college require at least fourteen of these units. The Foundation did not stop there: it also went on for

> eight pages specifying in great detail the content of units in subjects like English, mathematics, Latin, Greek, foreign languages, history and science. Thus, they standardized not only time and credits, but gave pride of place to traditional academic subjects. (p. 461)

The Carnegie unit was almost immediately adopted by high schools and quickly became required as one of the criteria for high school accreditation by regional associations such as the North Central Association of Colleges and Secondary Schools. State laws also built the Carnegie unit system of credits into the requirements for secondary schools.

Initially, then, the Carnegie unit represented an implicit set of standards. It required high schools to cover specified content in a specified period of time. For decades, this system worked fairly well.

By the 1930s, even before compulsory education laws were established, most children went to school. However, although education during this period had substantial drawing power, it had little staying power. According to Ravitch (1983), by the middle of the 1940s, educators were concerned that for every 1,000 children who entered fifth grade in 1932, only 455 graduated from high school. To remedy the problem, high schools began to offer a wide array of courses to cater to the various academic and vocational interests of students. This move away from a central core of knowledge and skills was exacerbated by the acceptance of the progressive movement in education. By the mid-1940s, notes Ravitch (1983), "it was no longer referred to as progressive education, but as 'modern education,' the 'new education,' or simply 'good educational practices'" (p. 43).

A central feature of the progressive education movement was a rejection of an emphasis on specific knowledge and skills to an emphasis on the child as learner. Ravitch (1983) adds that progressive education rejected many of the basic features of schooling that previously had provided such stability to the Carnegie unit. Among the features rejected by progressive education were

> the belief that the primary purpose of the school was to improve intellectual functioning; emphasis on the cultural heritage and on learning derived from books; the teaching of the traditional subjects (i.e., history, English, science, and mathematics) or such; the teaching of content dictated by the internal logic of the material. (p. 44)

From the 1940s until the mid-1970s, the emphasis on serving the interests of individual children generated a geometric expansion of the number of courses that constituted the high school curriculum. By the mid-1970s, the U.S. Office of Education reported that more than 2,100 different courses were being offered in American high schools (see Ravitch, 1995).

This trend toward ever-expanding offerings and ever-decreasing uniformity in the school experience still exists today. This is evident in studies that have focused on how teachers use