This paper provides an overview of the use of "opportunity to learn" (OTL) standards, in relation to its implications for students with disabilities. It reviews "opportunity to learn" standards in the Goals 2000: Educate America Act and in Congressional report language on Goals 2000. The paper offers five different definitions of "opportunity to learn" and discusses alternative perspectives on OTL standards, which view OTL standards as equivalent to school delivery standards, as sufficient inputs, and as allocated time or academic engaged time. State practices in the implementation of OTL standards are noted, specifically in California, New York, South Carolina, and Vermont. Treatment of students with disabilities in discussions of OTL standards is then explored, determining that treatment ranges from no mention of students with disabilities, to different OTL for students with and without disabilities, to special emphasis on students with disabilities. Measurement of OTL is also considered, focusing on time spent in school, time allocated to instruction, time spent engaged, funding and provision of resources, and content coverage/instructional practices. Major issues surrounding the concept of OTL standards are examined, followed by a discussion of implications for students with disabilities and recommendations. (Contains 45 references.) (JDD)
Opportunity-to-Learn Standards

National Center on Educational Outcomes

The College of Education
UNIVERSITY OF MINNESOTA

in collaboration with

St. Cloud State University
and
National Association of State Directors of Special Education

BEST COPY AVAILABLE
Opportunity-to-Learn Standards

Prepared by: James Ysseldyke, Martha Thurlow, and Hyeonsook Shin

National Center on Educational Outcomes

The College of Education
UNIVERSITY OF MINNESOTA

July, 1994
The National Center on Educational Outcomes (NCEO), established in 1990, works with state departments of education, national policy-making groups, and others to facilitate and enrich the development and use of indicators of educational outcomes for students with disabilities. It is believed that responsible use of such indicators will enable students with disabilities to achieve better results from their educational experiences. The Center represents a collaborative effort of the University of Minnesota, the National Association of State Directors of Special Education, and St. Cloud State University.

The Center is supported through a Cooperative Agreement with the U.S. Department of Education, Office of Special Education Programs (H139C00004). Opinions or points of view do not necessarily represent those of the U.S. Department of Education or Offices within it.

NCEO Core Staff:
Robert H. Bruininks
Ron Erickson
Patricia Graffstrom
Kevin S. McGrew
Dorene L. Scott
James G. Shriner
Gail E. Spande
Martha L. Thurlow, assistant director
James E. Ysseldyke, director

Additional copies may be ordered for $10.00. Please write:
Publications Office
NCEO
350 Elliott Hall
75 East River Road
University of Minnesota
Minneapolis, MN 55455
Abstract

"Opportunity to learn (OTL) standards" is a concept that needs to be defined carefully and examined in relation to its implications for students with disabilities. In this paper, we provide an overview of the use of the term in recent legislation, alternative perspectives on OTL standards, and state practices in the implementation of OTL standards. We examine how students with disabilities are treated in discussions of OTL standards, how people propose to measure OTL, and major issues surrounding the concept of OTL standards. Implications for students with disabilities are discussed, and we conclude with several recommendations.
Opportunity-to-Learn Standards

"Opportunity to learn" is a term that emerged in the vernacular of policymakers just within the past few years. Repeated calls for standards of excellence and greater accountability for results eventually led to concerns about holding students accountable for reaching high academic standards when they had not been provided the opportunity to learn. This paper explores "opportunity to learn" (OTL) and issues that surround the concept of OTL standards. Specifically, in this paper we describe statutory considerations, alternative perspectives on what OTL standards are, primary positions advocated about OTL standards, and what states are doing in implementing OTL standards. We also provide information on how students with disabilities are treated in discussions of OTL standards, current proposals regarding the measurement of OTL, and major issues that need to be addressed. We conclude the paper with a discussion of the implications of OTL standards for students with disabilities.

Statutory Considerations

The notion of "opportunity-to-learn" standards is now in the education reform legislation signed by President Clinton on March 31, 1994. This legislation, known as "Goals 2000: Educate America Act" (PL 103-227) sets out eight national education goals, re-establishes the National Education Goals Panel to monitor progress toward goals, promotes the setting of high standards, establishes a national committee to oversee standards-setting efforts and approve state standards and assessments, encourages and supports state efforts around standards, and establishes national skill standards to define what workers need to know.

Goals 2000 is consistent with the Americans with Disabilities Act (ADA) in that it prohibits discrimination on the basis of disability. It also implements the intent of Part B of the Individuals with Disabilities Education Act (IDEA) and of Section 504 of the Rehabilitation Act of 1973 (Kennedy, 1993). Goals 2000 is expected to "serve as a vehicle for making the promise of Part B of IDEA a reality for all students with disabilities" (Kennedy, 1993, p. 20).

In Section 301 of Goals 2000, within Title III (State and Local Education Systemic Improvement), it is stated that "all students can learn and achieve to high standards and must realize their potential if the United States is to prosper" (Goals 2000: Educate America Act of 1994, § 301(1)). Therefore, under this legislation "students with disabilities . . . must be an integral part of all aspects of education reform, including the application of the National Education Goals and objectives, the establishment of national and State content, performance, and opportunity-to-learn standards" (Kennedy, 1993, p. 20). Students with disabilities are currently being included in education reform considerations. In particular, all students are expected to achieve world-class standards and to learn challenging content to a high level of performance.

Goals 2000: Educate America Act

The Goals 2000 legislation is very clear in its definition of what "all students" and "all children" mean:

The terms "all students" and "all children" mean students or children from a broad range of backgrounds and circumstances, including disadvantaged students and children, students or children with diverse racial, ethnic, and cultural backgrounds, American Indians, Alaska Natives, Native Hawaiians, students or children with disabilities, students or children with limited-English proficiency,
school-aged students or children who have dropped out of school, migratory students or children, and academically talented students and children. (Goals 2000: Educate America Act of 1994, § 3(a)(1), emphasis added)

Several quotes from the original Senate Version (S. 1150) of Goals 2000 (see Table 1) indicate initial thinking about opportunity-to-learn standards for all students. As is evident in Table 1, the Senate version of the law was somewhat weak in its support of opportunity-to-learn standards, requiring only that states begin to explain their strategies for providing opportunity to learn. The initial House version (HR 1804), on the other hand, was strong in its approach to opportunity-to-learn standards, indicating that states must be required to write OTL standards, and to give equal emphasis to content, performance, and opportunity-to-learn standards (H. R., 1994).

The version of Goals 2000 that emerged from Committee reconciled differences in the initial Senate and House versions of the law. The compromise law placed less emphasis on opportunity-to-learn standards, yet recognized these as something states should begin to address. The compromise stance is evident in several parts of the legislation signed into law (see Table 2).

**Congressional Report Language on Goals 2000**

In 1993, the Committee on Labor and Human Resources submitted a congressional report on Goals 2000. In this report it presented, among other things, considerations and implications of the voluntary national opportunity-to-learn standards for individuals with disabilities and for state and local education systemic improvement. While the focus of the law has changed somewhat from the perspective reflected in the initial version, the language that accompanies the signed Senate version is still informative.

The Committee stated its expectation that Goals 2000 will serve "students with disabilities, including lesser known and newly emerging disabilities and students with significant and multiple disabilities . . . [in] all aspects of educational reform, including . . . opportunity-to-learn standards" (Kennedy, 1993, p. 20). Noting that students with disabilities have been excluded from many education reform efforts, the Committee interpreted the term "student" in various parts of Goals 2000 to mean "all students" as defined in Section 3(a)(1) of the legislation. The Committee also noted that a world-class education must be provided for all students.

In Section 201, which specifies the purpose and responsibilities of the National Education Goals Panel (NEGP), it is noted that NEGP will review and approve the voluntary national content, performance, and opportunity-to-learn standards as well as the criteria for the certification of such standards and the criteria for the certification of assessments. The Committee's intent was to make the Panel's review, approval, and report in accordance with the regulations implementing Section 504 of the Rehabilitation Act of 1973. The Committee reported that Section 211 of the Educate America Act specifies the purpose of Part P of IDEA.

The National Education Standards and Improvement Council (NESIC) was established to certify voluntary national content, performance and opportunity-to-learn standards. Like the Goals Panel, the NESIC is also treated by the Committee as a governmental entity for the purpose of implementing Section 504 of the Rehabilitation Act of 1973; therefore, the Committee's intent was that any certification made by the NESIC must be consistent with regulations implementing Section 504 of the Rehabilitation Act of 1973 (Kennedy, 1993). According to Section 213 of the Educate America Act, the NESIC shall certify opportunity-to-learn standards and assessments presented on a voluntary basis by a state if they are consistent with the voluntary national OTL standards. The Committee expressed a concern about considerable exclusion of students with disabilities from national and state data collection programs, based on the data collected by the National Center on Educational Outcomes at the University of Minnesota. The Committee indicated that all students
Table 1
Points in the Original Senate Version of Goals 2000

Section 3(6) defines the term "opportunity-to-learn standards." The standards are defined as the conditions of teaching and learning necessary for all students to have a fair opportunity to learn, including ways of measuring the extent to which such standards are being met.

Section 201 specifies the responsibilities of the National Education Goals Panel (NEGP) to review and approve the voluntary national content, student performance, and OTL standards certified by the National Education Standards and Improvement Council [NESIC].

Section 203(b) specifies the role of the NEGP [National Education Goals Panel] in preparing and submitting a national report card annually. Information on the progress of the nation toward the National Education Goals and necessary actions to enhance progress, is provided for parents and the general public in an understandable form.

Section 211 specifies a mechanism to certify voluntary national opportunity-to-learn standards that describe the conditions of teaching and learning necessary for all students to have a fair opportunity to achieve the knowledge and skills described in the voluntary national content and performance standards certified by the National Education Standards and Improvement Council.

Under Section 213(c)(1), the NESIC shall certify exemplary national opportunity-to-learn standards that will establish a basis for providing all students a fair opportunity to achieve the knowledge and skills set out in the voluntary national content standards certified by the NESIC. Section 213(c)(2) specifies that the "voluntary" national opportunity-to-learn standards shall be general to be used in any state without unduly restricting state and local prerogatives regarding instructional methods to be employed. In Section 213(c)(3), the voluntary national OTL standards certified by the Council address (A) the quality and availability of curricula, instructional materials, and techniques; (B) the capability of teachers to provide high-quality instruction to meet diverse learning needs in each content area; (C) the extent to which teachers and administrators have ready and continuing access to professional development, including the best knowledge about teaching, learning, and school improvement; (D) the extent to which curriculum, instructional practices, and assessments are aligned to content standards; and (E) other factors ensuring that every student receive a fair opportunity to achieve the knowledge and skills described in the voluntary national content and student performance standards certified by the Council.

Section 213(d) addresses voluntary state opportunity-to-learn standards. The NESIC may certify voluntary opportunity-to-learn standards presented on a voluntary basis by a state that (1) describe the conditions of teaching and learning necessary for all students to have a fair opportunity to learn; and (2) address the elements described in Section 213(c)(3).

Under Section 213(f), the NESIC shall (1) work with Federal and non-Federal agencies and organizations that are conducting research, studies, or demonstration projects to determine internationally competitive education standards and assessments, and may establish subject matter and other panels to advise it on particular content, performance, and opportunity-to-learn standards and on assessments, and (4) the Council also shall inform the public about what constitutes high quality, internationally competitive, content, performance, and OTL standards, and assessment systems. According to Section 213(f)(5), criteria for certifying these standards and assessment systems shall be reviewed and updated on a regular basis by the Council. Also, under Section 213(f)(6), those criteria shall be periodically re-certified by the Council.

continued on next page...
Under Section 215(a)(2), the Council shall conduct public hearings in different geographic areas of the United States, both urban and rural, to receive the reports, views, and analyses of the experts and the public on the establishment of voluntary national content, student performance, and opportunity-to-learn standards, and assessment systems.

Section 218 specifies Opportunity-to-Learn Development Grants. A grant is made on a competitive basis to a consortium to develop voluntary national opportunity-to-learn standards. To the extent possible, the consortium shall include Governors (other than Governors serving on the Goals Panel), chief state school officers, teachers (those who are involved in the development of content standards), principals, superintendents, state and local school board members, curriculum and school reform experts, parents, state legislators, representatives of businesses, representatives of higher education, representatives of regional accrediting associations, and advocacy groups.

According to Section 221(c), $1,000,000 is to be appropriated for fiscal year 1994 and such sums as may be necessary for fiscal year 1995 to carry out Section 218.

Section 306 describes state improvement plans for the fundamental restructuring and improvement of elementary and secondary education in the state. Section 306(d) provides information on state improvement plans with regard to opportunity-to-learn standards. Each State improvement plan is to establish a strategy and timetable for (1) adopting or establishing opportunity-to-learn standards that address the needs of all students; (2) achieving the state's opportunity-to-learn standards in every school in the state; (3) periodically reporting to the public on the extent of the state's improvement in achieving such standards. Section 306(f) specifies parental and community support and involvement in each state improvement plan. Also, Section 306(h) states that each state improvement plan shall include strategies for ensuring that comprehensive, systemic reform is promoted from the bottom up in communities, local educational agencies, and schools, and is guided by coordination and facilitation from state leaders.
Table 2
Points of Compromise in the Final Goals 2000 Legislation

Section 213(c) indicates that the voluntary national opportunity to learn standards certified by NESIC should address: (A) the quality and availability to all students of curricula, instructional materials, and technologies, including distance learning; (b) the capability of teachers to provide high-quality instruction to meet diverse learning needs in each content area to all students; (c) the extent to which teachers, principals, and administrators have ready and continuing access to professional development, including the best knowledge about teaching, learning, and school improvement; (D) the extent to which curriculum, instructional practices, and assessments are aligned to voluntary national content standards; (E) the extent to which school facilities provide a safe and secure environment for learning and instruction and have the requisite libraries, laboratories, and other resources necessary to provide an opportunity-to-learn; (F) the extent to which schools utilize policies, curricula, and instructional practices which ensure non-discrimination on the basis of gender; and (G) other factors that the Council deems appropriate to ensure that all students receive a fair opportunity to achieve the knowledge and skills described in the voluntary national content standards certified by the Council.

Section 219 describes the Opportunity-to-Learn Development Grants. They will be awarded to consortia of individuals and organizations that will draw upon current research about student achievement and the necessary conditions for effective teaching and learning. One-third of the members of these consortia will include individuals with expertise or background in the educational needs and assessment of children who are from low-income families, are from minority backgrounds, have limited English proficiency, or have disabilities.

Section 3(7) defines the term "opportunity-to-learn standards" as the criteria for, and the basis of, assessing the sufficiency or quality of the resources, practices, and conditions necessary at each level of the education system (schools, local educational agencies, and States) to provide all students with an opportunity to learn the material in voluntary national content standards or State content standards.

Section 306 describes OTL standards and strategies as including such factors as the State deems appropriate to ensure that all students receive a fair opportunity to achieve the knowledge and skills as described in State content standards and State student performance standards. It is noted as well, however, that this is not to be construed to: (A) mandate equalized spending per pupil for a State, local educational agency, or school; or (B) mandate national school building standards for a State, local educational agency, or school.
should be included in assessment reports, and that students with disabilities should be provided the same accommodations in assessment as are provided in instruction.

Perspectives on the OTL Standards

Opportunity-to-learn (OTL) standards emerged from the national debate over national standards and testing. However, the term has never been clearly defined or used in the same way by different groups. Some groups use the terms OTL and school delivery standards interchangeably while others extend the notion of OTL standards to include a wide range of criteria to be used for system-wide educational reform. Other groups that differentiate OTL standards from school delivery standards often emphasize curriculum and instruction, resources, and inputs. Traiman (1993) presented at least five different ways to define "opportunity to learn." These are shown in Table 3. In this section, we examine some of the differing perspectives on OTL.

OTL Standards as Equivalent to School Delivery Standards

One of the perspectives on opportunity-to-learn standards is that they replace school delivery standards and are essentially the same as school delivery standards (Porter, 1993b). In fact, a number of authors use the terms interchangeably, and some papers on OTL standards are entirely about school delivery standards. School delivery standards are described as an attempt to ensure that each state selects the criteria for assessing a school's capacity and performance in bringing all students to the attainment of high performance standards (Traiman & Goren, 1993). Traiman and Goren (1993) also noted that "school delivery standards are now referred to as opportunity-to-learn standards" (p. 6), and that their purpose is to protect students from being unfairly held responsible for failing to reach the content and performance standards when they have not had the opportunity to learn the material in the content standards.

School delivery standards were defined by the National Council on Education Standards and Testing (NCEST) as the educational standards that set out criteria in such a way that parents, educators, policymakers, and the public can be informed of the quality of a school's capacity and performance in providing quality education for students in subject matter set out by the content standards (NCEST, 1992). These were deemed necessary because a common set of challenging content standards and high performance standards for all students, without providing all students with an equal opportunity to learn, could widen the achievement gap between advantaged and disadvantaged students (NCEST, 1992). Thus, the extent to which a school delivers to students the opportunity to learn the material set out in the curriculum standards deserves careful consideration. Several questions were posed by NCEST (1992) in order to get information about whether school delivery standards are being met:

- Are the teachers in the school trained to teach the content of the standards?
- Does the school have appropriate and high quality instructional materials which reflect the content standards? . . . does the actual curriculum of the school cover the material of the content standards in sufficient depth for the students to master it to a high standard of performance? Does the performance of the students in the school indicate that the school is successfully providing the opportunity to learn to all students? (p. E-5)

The notion of OTL standards as school delivery standards also is encompassed in the New Standards Project's (1992) social compact. This compact ensures that new assessment for high stakes purposes (e.g., awarding a diploma or credential) will not occur until all students have been provided the opportunity to be taught a curriculum that will prepare them for the exams. The OTL standards are emphasized along with the development of a performance-based examination system based on world-class standards.
Synthesis Report 14

Table 3
Different Definitions of Opportunity to Learn

Opportunity-to-learn standards should be parsimonious and be limited only to criteria that are directly related to the provision of high-quality curriculum and instruction based on challenging academic standards.

Opportunity-to-learn standards should include other critical factors deemed essential to quality teaching and learning. These factors transcend a narrow interpretation of curriculum and instruction to include safe and drug-free schools; adequate laboratories, libraries, and technology; and indicators of effective schools and professional practice.

Opportunity-to-learn standards should include all of the systemic changes needed for all students to succeed.

Opportunity-to-learn standards should include the actions a state will take if students fail to meet established performance standards.

Opportunity-to-learn standards should provide measures of the adequacy of funding available at each school to help all students achieve.

NOTE: These are directly quoted from Traiman (1993, p. 13).
Andrew Porter (1993a), who directs the Center for Education Research at the University of Wisconsin and has written extensively on opportunity to learn standards, referred to and quoted the meaning of school delivery standards that was used in the 1992 House Bill on restructuring schools: "School delivery standards means the standards necessary to ensure that each student in a school has a fair opportunity to achieve the knowledge and skills set out in the National Content Standards and Work-force Readiness Standards" (quoted by Porter, 1993a, p. 2). Porter (1993a) specifically identified the Curriculum Standards, Evaluation Standards and Professional Standards for Teaching Mathematics that were published by the National Council of Teachers of Mathematics as "the best current examples of school delivery standards" (p. 27).

In his discussion of school delivery standards, Porter (1993a) argued that school process standards and school performance standards should be differentiated. School process standards provide educators with a vision of educational practice in terms of the organizational characteristics (e.g., school and class size) and instructional characteristics (e.g., curriculum quality, instructional resources) of effective schools. School performance standards may be used for accountability purposes and provide measurable indicators of what schools are accomplishing in terms of student performance (e.g., student achievement levels).

Porter (1993b) also differentiated school delivery standards from opportunity to learn standards. At the same time, however, he recognized that the terms are being used interchangeably. He defined opportunity to learn standards as "the enacted curriculum as experienced by the student" (Porter, 1993b, p. 7). He expanded the coverage of opportunity to learn standards from just the content of instruction to "the pedagogical quality of instruction and the resources that are available to students and teachers" (Porter, 1993b, p. 7). Further, Porter indicated that the two factors together (content coverage and instructional quality) can best predict student achievement. However, he also pointed out that opportunity to learn standards are less inclusive than school delivery standards in that opportunity to learn standards do not address school organizational characteristics and drug-free safe, school environments. According to Porter (1993b), school delivery standards do not have a certain meaning but they include not only opportunity to learn but also quality of school life factors.

OTL Standards as One Part of Systemic Reform

At a 1992 meeting sponsored by the National Governors' Association, participants suggested that OTL standards be used in a variety of ways, "depending on whether they focus on inputs (e.g., teacher training, provision of appropriate textbooks), processes (e.g., instruction), outcomes (e.g., student performance), or a combination of all" (Traiman & Goren, 1993, p. 6). The OTL standards included a wide range of criteria to be used for school improvement purposes. Traiman and Goren (1993) identified the key question in determining the degree of specificity or the intended use of the OTL standards when they asked whether "OTL standards should include all of the systemic changes needed for all students to succeed or OTL standards should be limited to a few criteria directly related to the provision of high-quality curriculum and instruction" (p. 8).

Systemic reform involves changes throughout the educational system. OTL standards are being included in discussions of systemic educational reform because they involve a wide range of criteria directly related to the implementation of systemic reform. Under the rubric of systemic educational reform for the purpose of improving the quality of schooling and providing equal opportunity for all students, OTL standards are not limited to the determination of a school's performance in delivering to students the opportunity to learn well the material set out in the content standards.

As part of systemic reform, OTL standards address the quality and availability of curriculum, materials, and technologies; teacher training and professional development; provision of a safe and
secure environment for learning; provision of resources such as libraries and laboratories or other related services; and, aligned policies on curriculum, instruction and assessment.

When the national education goals were first established in 1989, the Governors took the position that the education system should be fundamentally restructured in order to challenge all students to achieve high standards at world-class levels. The NGA Task Force on Education (1992-1993) recommended that "state leadership and support are needed for systemic education reform and that the purpose of state systemic education reform is to provide each student with the opportunities, resources, and incentives needed to achieve high standards" (p. 3).

O'Day and Smith (1993) argued that content-driven systemic school reform sets out a goal: "to upgrade significantly the quality of the curriculum and instruction delivered to all children" (pp. 250-251). Its major concern is to bring about real change in the classroom by establishing curriculum frameworks, supporting schools in designing instructional strategies for teaching their children to learn the curriculum content to a high level of performance, and training teachers to teach challenging content. OTL standards are not considered to be at the same level as systemic reform; however, systemic school reform is assumed to have potential impact on equality of educational opportunity (O'Day & Smith, 1993). Under a coherent system, curriculum reform not only can improve the quality of schooling for all children but also can achieve equal educational opportunity through improving resources for children who are disadvantaged.

In contrast to people who are differentiating OTL standards from school delivery standards, some of those who are advocating systemic school reform take into account "a physically safe environment for all participants" (O'Day & Smith, 1993, p. 276). A safe environment is considered necessary for learning the content of the curriculum to a high level of performance.

Resources that are necessary for implementing the overall systemic strategy include "teachers and administrators knowledgeable of and able to teach the content of the curriculum frameworks and a planned school curriculum, professional development programs, assessments, and instructional materials and resources, all in line with the frameworks" (O'Day & Smith, 1993, p. 276). The terms "curriculum frameworks" and "content standards" are used to refer to state or national specifications of what students should know and be able to do. O'Day and Smith use "content standards" for national specifications such as NCTM standards and "curriculum frameworks" for state-level specifications. Curriculum and instruction in the classroom also are considered to be part of criteria for determining whether schools actually provide all students with the opportunity to learn the content of the curriculum frameworks. In addition to providing resources and assisting high performance, such practice standards are considered directly related to implementation of systemic reform.

**OTL Standards as Sufficient Inputs**

For some, as long as schools allocate resources to instruction and fund programs, students are considered to have the opportunity to learn. NCEST (1992) identified input conditions that are fundamental to providing all children the opportunity to learn. These conditions include, but are not limited to, the following:

- teachers who are trained to teach the content of the content standards,
- appropriate and high-quality instructional materials which reflect the content standards,
- curriculum that covers the material of the content standards in sufficient scope and with adequate sequence for students to master it to high performance standards (NCEST, 1992, E-5).
In other words, educational processes, inputs, and resources are considered necessary for improving student achievement. This approach reflects a concern for what is taught in school and how it is taught.

In Porter’s (1993b) differentiation between standards for what is taught and standards for how it is taught, OTL standards emphasize the content of instruction, the pedagogical quality of instruction, and the resources that are available to students and teachers as instruction takes place. According to Porter (1993b), a safe school environment or school organizational features such as school leadership, school goals, parent and community support and district and state support are not included in OTL standards. Of course, not all OTL proponents emphasize only learning materials and instructional practices. For example, safe, well-equipped schools are considered by Billings (1993) to be essential for the provision of the opportunity to learn.

Content and instructional quality are viewed by Porter (1993b) as the two best predictors of student achievement and as the essence of the OTL standards. Descriptions of opportunity to learn typically reflect the priority of the best predictors of student learning: content that is taught in schools, effective modes of instruction, and the type/levels of knowledge or skills that students are expected to acquire as a result of instruction (Porter, 1993b). However, without adequate funding, schools may not be able to provide quality instruction on the content covered in the content standards. This is often the case, although funding alone is not a sufficient variable for improving student achievement, and schools are being held accountable only for the use of the funds provided (Porter, 1993b). Outcomes usually have been used to hold schools accountable. Thus, school delivery standards and opportunity-to-learn standards hold schools accountable for the use of inputs and processes.

In an attempt to assure equal access to educational opportunity across districts, the current discussion about opportunity to learn standards shifts its focus from minimum standards, equal finance, and compensatory education (e.g., special education, special urban aid) to outcomes: "Assuring that all students have equal opportunity to reach ambitious outcomes requires not only equal access to inputs but also effective use of inputs/resources at school" (Fuhrman & Elmore, 1993). One of several approaches to the effective use of resources is to create professional standards or incentives for more effective use of resources. In addition, more emphasis may be placed on professional development and teacher preparation to encourage good practice in the effective use of resources.

Two of the eight national education goals included in Goals 2000 were added during the final stages of negotiation on the legislation. These two, one dealing with teacher training (new Goal 4) and one dealing with parent involvement (new Goal 8) perhaps reflect a concern for some of the opportunity to learn concepts that were weakened in the final version of the law. The exact words in the two new national education goals are presented in Table 4.

**OTL as Allocated Time or Academic Engaged Time**

Time is a recurring notion to people who are concerned about the teaching-learning process in classroom settings. One of the conclusions of *A Nation at Risk* (National Commission on Excellence in Education, 1983) was that insufficient time was devoted to instruction. Initial reactions to this focused on extending the school year and extending the length of the school day. Following this, conceptualizations of time were refined, and positive relationships shown between time allocated to instruction, engaged time, and student achievement (Cooley & Leinhardt, 1980; Denham & Lieberman, 1980; Stanley & Greenwood, 1983; Thurlow, Graden, Greener, & Ysseldyke, 1983; Ysseldyke, Christenson, Thurlow, & Skiba, 1987). The concept of time spent in learning has been called "Academic Learning Time" (ALT) by the Beginning Teacher Evaluation Study (BTES) researchers. Academic Learning Time (ALT) is distinguished from scheduled time.
Table 4
New National Education Goals Added to Previous Six

Goal 4: Teacher Education and Professional Development

By the year 2000, the Nation's teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century. The objectives for this goal are that:

- All teachers will have access to preservice teacher education and continuing professional development activities that will provide such teachers with the knowledge and skills needed to teach to an increasing diverse student population with a variety of educational, social, and health needs.
- All teachers will have continuing opportunities to acquire additional knowledge and skills needed to teach challenging subject matter and to use emergent new methods, forms of assessment, and technologies.
- States and school districts will create integrated strategies to attract, recruit, prepare, retrain, and support the continued professional development of teachers, administrators, and other educators, so that there is a highly talented work force of professional educators to teach challenging subject matter.
- Partnerships will be established, whenever possible, among local educational agencies, institutions of higher education, parents, and local labor, business, and professional associations to provide and support programs for the professional development of educators.

Goal 8: Parental Participation

By the year 2000, every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children. The objectives for this goal are that:

- Every State will develop policies to assist local schools and local educational agencies to establish programs for increasing partnerships that respond to the varying needs of parents and the home, including parents of children who are disadvantaged or bilingual, or parents of children with disabilities.
- Every school will actively engage parents and families in a partnership which supports the academic work of children at home and shared educational decision making at school.
- Parents and families will help to ensure that schools are adequately supported and will hold schools and teachers to high standards of accountability.
in that academic learning time is an engaged time variable that includes only the time during which the student is engaged in a task that can be performed with high success.

Differences in time allocated or time spent do not consistently relate to differences in achievement. Because of this, Gettinger (1984, 1985) presented the notion of time needed for learning. According to Gettinger, students differ in the amount of time they need to reach a certain criterion of mastery. Thus, time spent or time allocated relates inconsistently to learning when the amount of time needed is not taken into account. Citing Carroll's alternative model to the concept of fixed-time learning, Gettinger (1984) indicated that Carroll's factor of opportunity represents only part of the amount of time allocated. Thus, some qualifications need to be imposed on quantity of instruction. Although the amount of time allocated to instruction is determined by the length of the school year and the length of a school day, and time allocated delineates the ceiling level of the amount of time each student can actively engage in learning, simply providing additional instructional time without consideration of individual differences in time needed to reach a particular objective or to complete a certain task may produce inconsistent consequences in school achievement (Gettinger, 1984, 1985).

Time to learn was defined by Gettinger (1984) as "the amount of time needed by individual students to reach criterion level of a specific instructional unit" (p. 15). Thus, slower learners may need extra time to master a given learning task to a certain criterion. This concern about time needed for learning is similar to the argument that there needs to be fair and sufficient opportunity to learn. Haycock (1993) presented both oral and written testimony on OTL standards at a hearing sponsored by the National Governors' Association. Speaking on behalf of the Commission on Chapter 1, Haycock mentioned "time" in addition to other commonly identified variables, as a variable for helping students reach high performance standards. According to Haycock's testimony, states must determine whether schools provide extra time for students who need it, plus time during the regular schedule for teachers to assess students' progress, meet with parents, and learn how to improve their own skills. This notion is reinforced by recent policy documents that stress time as a key part of the opportunity a student has to learn (Anderson & Walberg, 1993; Moore & Funkhouser, 1990; National Education Commission on Time and Learning, 1994).

What Are People Advocating for OTL Standards?

Prior to the passage of Goals 2000, people were taking positions on the importance and need for OTL standards. Among the main positions were ones that argued to (a) not include these types of standards in Goals 2000, (b) mandate OTL standards, and (c) keep OTL standards voluntary. While the passed legislation retained OTL standards in a voluntary way, it is still useful to review perspectives that people took before the legislation passed. Each of these positions is discussed in brief here.

Do Not Include OTL Standards in Goals 2000

Opponents of a federal role in the development and implementation of OTL standards were fearful about including the OTL standards in federal legislation because they thought it was too difficult to define OTL standards, because it would be too hard to measure, or because it would result in chaos. They expressed concerns over the unintended infringement on state's and local education agencies' constitutional responsibility for education practices and policy. Traiman and Goren (1993) also identified the apprehension that "OTL standards will be much too prescriptive, require burdensome documentation, and inhibit local creativity" (p. 7).
1. It is too hard to define OTL standards. OTL standards were being defined differently by different people, depending on their viewpoint about the degree of specificity or the intended use of the standards. There was not an agreed-upon definition of OTL standards. Thus, a concern was raised about whether the hard-to-define OTL standards should be included in federal legislation.

OTL standards seemed to be "the riskiest part of Goals 2000" (Barth, 1993, p. 3), although OTL standards had a good rationale: students would not be held accountable for achieving knowledge and skills described in the national content standards if they had not had the opportunity to learn. Despite this "well-meaning" rationale, it was hard to define what constitutes fair opportunity.

2. It is too hard to measure OTL standards. It was also argued that we should not include opportunity to learn standards in federal legislation because OTL standards are too hard to measure. Such a concern was about what to measure, how to measure, and when to measure in order to know whether students had opportunities to learn. OTL standards cannot be measured just by referring to a checklist of resources, inputs, or curriculum content areas. Another concern was whether the measurement of OTL standards should be delayed until outcome measures signal a problem, rather than measuring all schools (Traiman & Goren, 1993).

The extent to which schools deliver a fair opportunity to learn to their students and how much opportunity is provided seemed to need to be measured, particularly if schools would be held accountable on school delivery standards. The measurement issue was important: How can states and local school districts know and measure whether students have had the opportunity to learn with respect to the established content and performance standards? Many indicators can be used, depending on how many criteria have been used in setting or defining OTL standards. Even with a narrow perspective of school delivery standards, the enacted curriculum, instructional materials and strategies would be hard to measure because, according to Crandall's (1993) testimony submitted to NGA, OTL standards should not be a mere list of inputs.

3. It will result in chaos. It was very likely that different places would go about defining and implementing opportunity-to-learn standards in many different ways. This would happen, in part, because of the vagueness of the existing conceptions of OTL. It was seen as very likely that the lack of clarity would, in turn, lead to a number of legal issues that would dramatically increase the likelihood of lawsuits on the failure to provide sufficient opportunity to learn. In general, there was the potential for a great deal of confusion and chaos.

Mandate OTL Standards

The federal role in the development and implementation of OTL standards was controversial. In fact, OTL standards were a hotly-debated component of federal education legislation. Although some opponents of OTL standards were fearful of the inclusion of OTL standards in federal legislation, many proponents recognized the need to address OTL standards in federal legislation. The rationale behind wanting mandatory OTL standards was that students should be held responsible for learning challenging national content to a high level of performance only if they had appropriate opportunities to learn. The federal role was to distribute federal resources equitably to those students who needed support to have fair opportunities to learn.

Many proponents of OTL standards claimed that OTL standards should not be so highly prescriptive (Porter, 1993a) or excessively inclusive that they would stifle local flexibility (Darling-Hammond, 1993). However, Lehman (1993) dismissed the concerns that OTL standards tend to be too prescriptive. Lehman argued that OTL standards should be mandatory in order to support, or put pressure on school districts in which many students are not achieving at the expected level of performance. Although the federal role for OTL standards appeared to be limited, it was still considered important as states developed strategies to ensure the opportunity to learn to all
students. The federal government may be charged with identifying state and local policies and practices that foster opportunity to learn and making every effort to distribute federal resources to disadvantaged students and students with special needs who are most in need of support to achieve high national content and performance standards (Traiman & Goren, 1993).

**Keep OTL Standards Voluntary**

Many proponents of OTL standards claim that it is unfair to hold students responsible for achieving high standards if they have not had the opportunity to learn the content reflected in the curriculum or included on the assessments. However, another issue still exists: Who should take the responsibility for setting and using the OTL standards? The 1992-1993 report of the National Governors' Association (NGA) stated that "the Governors strongly affirm that states, not the federal government, should assume the responsibility for creating an education delivery system that enables all students to achieve high standards" (NGA, 1992-1993, p. 2; also cited by Olson, 1993, p. 32). According to this statement, the development and use of OTL standards should be each state's responsibility and should not be mandated through federal legislation. Each state would be allowed to develop its own OTL standards to meet the educational goals of the state. For example, in the Executive Summary of Vermont's Work Group on Opportunity to Learn Standards, it is assumed that OTL standards should be mandated through legislation, confirming that it is necessary to ensure opportunity to learn for all students and, at the same time, each state should develop its own OTL standards.

**State Practices in Implementation of OTL Standards**

There is much debate about whether OTL standards should be mandated through federal legislation or instead should be each state's responsibility. Concerns about stifling local autonomy and dumbing down to minimum standards have been raised whenever national standards are discussed. Another concern is that states may need guidance about how to develop strategies for providing opportunity to learn to all students. In this section we provide illustrations of what is happening with OTL standards in a few states. The four states selected for this purpose are California, New York, South Carolina and Vermont.

**California**

California operates a voluntary system of OTL standards. It is part of the current state effort in system-wide education reform. California's ongoing effort to reform the education system has brought about accountability systems for schools through the following mechanisms:

- **California Learning Assessment System (CLAS)**

  All students in grades 4, 5, 8, and 10 are tested on a comprehensive set of statewide assessments for the purpose of providing (1) individual student scores, (2) reports based on performance standards, (3) performance-based assessments, (4) end-of-course examinations in subject matter fields, (5) the integrated state and local assessments, and (6) the assessment aligned with the state curricula. Assessment results provide information on whether classroom instruction needs to be improved as well as how much students have mastered curriculum content. In addition, the assessment results may be used to measure the relative progress of individual schools. What is especially noteworthy is that language minority students and students with special needs are considered in an attempt to address their needs in assessment.
• Performance Report Summary

School performance reports provide schools, districts, the state and the public with data on who has met performance standards set by the state department of education.

• Program Quality Review Process (PQR)

California schools are involved in a self-analysis process against quality standards set by the state. They work with an external review team for this review. Currently, this system puts more emphasis on student work to improve student learning and instructional programs. Student work is compared with state frameworks and curriculum guides.

• School Accountability Report Card (SARC)

Performance of students and conditions of each school are reported to the public. A report card includes data on student achievement, drop-out rates, class size, staff development, safety of school environments, etc. (California Department of Education, 1993, p. 7)

California's long history of educational reform has been built on a major theme of "equity: ensuring that every student, regardless of race, language, culture or economic class, has an equal opportunity to learn" (California Department of Education, 1993, p. 1). Providing "equal" opportunity to learn exceeds merely equating teaching, learning, and resources for all students. In setting OTL standards, the California Task Force on School Delivery Standards identified eight principles of equity (California Department of Education, 1993):

(1) All students should be given access to enriched, rigorous, and culturally relevant curricula.

(2) All students should be provided with high-quality differentiated instruction.

(3) Additional support is provided for both students and school staff.

(4) Students and teachers should have access to learning and instructional technologies.

(5) All students should learn in a safe learning environment.

(6) All students and their families should have access to well-coordinated support services.

(7) Human, material, and financial resources should be fairly distributed among schools. Furthermore, supplemental funds for additional services should be provided for students and schools with special needs.

(8) State and district policies should promote coherence among educational programs, whereby they can avoid limiting the opportunity to learn of special needs students.

As is evident here, California's perspective on the development and implementation of OTL standards is much broader than the viewpoint that OTL is equated with access to the curriculum.
content covered by assessments and performance standards. OTL standards are so broad in scope that they encompass a number of variables influencing a student's opportunity to learn.

New York

Within the policy framework of "A New Compact for Learning," adopted by the Board of Regents of the University of the State of New York in March 1991, system-wide work on standards in elementary, middle and secondary education was undertaken. With a grant awarded from the National Governors' Association in January 1993, the New York State Education Department has been involved in the development and implementation of school delivery standards, now being referred to as opportunity-to-learn standards. In an effort to improve schools, content, performance, and OTL standards are reviewed in relation to each other. Three initiatives were undertaken to promote a systemic commitment to the improvement of schools, according to the Executive Summary of the New York State Education Department (1993). First, the New York State Curriculum and Assessment Council was charged with clarifying what students should know and be able to do and how it can be assessed. Second, the Equity Study Group was started to bring about a more equitable allocation of resources and improved learning, on the basis of the documentation of the relation between inequitable resources and underachievement, especially of poor and minority children. Third, the School Quality Review Initiative was designed to document what was going on in the public schools in the state and to develop a culture of review in each public school building.

The development of a culture of review in schools is important to providing every student with an equitable opportunity to learn and equitable outcomes. Whether schools participate in the external review or in the internal self-review process, all aspects of each school's work are reviewed to ascertain their influence on the quality of teaching and learning. The task force of the New York State Education Department (1993) stated that the process of both an external school quality review and a self-review is "supportive, . . . [non-prescriptive], non-monitoring, non-regulatory, and non-accrediting" (p. 8). This school quality review process reflects "the central theme of the New Compact for Learning: Top down support for bottom up reform" (p. 8).

As mentioned previously, OTL standards are seen as an effort to form a systemwide commitment to school improvement and an accountability system that can be relied on to inform the public how well public schools are providing education. The New York State Education Department (1993) considers the separation of the dual concerns of the OTL standards: the standards of practice and the standards of policy and resources. The School Quality Review Initiative views OTL standards through two sets of "lenses" focusing on equitable access to not only learning and teaching but also the contexts in which learning and teaching take place:

- Teaching and learning lenses:
  1. A curricular entitlement and learning experiences lens,
  2. A teaching repertoire and assessment lens,
  3. An organization of teaching and learning lens,
  4. A professional culture and development lens,
  5. A human relationships and resources lens.

- School context lenses:
  1. A financial resources and management lens,
  2. A social, economic, and community lens,
  3. A federal, state, and district lens,
  4. A partnership lens. (New York State Education Department, 1993, pp. 9-10)
This system of dual "lenses" has an ultimate goal of both raising the levels of student achievement and reducing the gap in achievement between students achieving at world-class levels and underachieving students.

South Carolina

During the past decade, South Carolina has developed innovative educational systems built with an emphasis on high learning standards, a restructured educational system, and strong community partnerships. Through educational reform initiatives, South Carolina is exploring a delivery model that targets provision of equity and excellence for all students. For the purpose of continuously improving education at every level of the system, in 1991 South Carolina's statewide task force, called the Committee for Continuous Improvement Towards Excellence in Education, proposed quality standards for school districts to promote the statewide systemic reform initiatives. In 1992 South Carolina Department of Education staff and representatives from six school districts began to pilot Total Quality Education (TQE) as the management framework (South Carolina Department of Education, 1993). The principles of Total Quality Education (TQE), a systemic approach to continuous improvement, have been established through a process of:

- defining challenging learning standards for ALL students;
- restructuring schools, districts, and the state educational systems to support and encourage superior performance among ALL students;
- creating partnerships among ALL members of the community to ensure commitment to and accountability for a quality educational system. (South Carolina Department of Education, 1993, unpaged)

South Carolina's model for school quality encompasses curriculum frameworks, new assessment strategies, and new ways of supporting and assessing school excellence. Thus, South Carolina's conceptual framework of school delivery standards is viewed from a broad perspective of quality education. The South Carolina Department of Education (1993) advocates the conceptual framework of school delivery standards consisting of:

- Learning Standards: What ALL students need to know and be able to do; high levels of knowledge and performance;
- Operational Standards: Resources that influence knowledge and performance; resources needed for the system to operate at a quality level;
- Quality Standards: How to manage those resources effectively.

South Carolina's school delivery standards have been established on the basis of a statewide task force's efforts to align learning standards, operational standards, and quality standards. The State's efforts are reflected in its attempt to represent its system of beliefs about education and student learning. The belief system is described as an interlocking wheel, which focuses on student learning and at the same time keeps all other parts of the wheel moving together around the student and expectations of student performance (South Carolina Department of Education, 1993).

In addition to developing standards frameworks, the statewide task force on school delivery standards plans to review and revise the TQE principles and the school delivery standards; make recommendations regarding the role of school delivery standards in promoting the statewide systemic reform initiatives; and, make recommendations as to the role of each level of the education
system for ensuring the opportunity to learn at challenging levels and for ensuring equitable
distribution of resources supporting opportunities to learn for all students (South Carolina

Vermont

For some years Vermont has had a social contract that requires school districts to take
responsibility "for delivering the instruction [to youth] and certifying that students have received
the instruction" (Vermont Department of Education, undated, p. 1). Recently, the Vermont State
Board of Education identified "a Common Core of Learning: what all students will need to know
and be able to do to be successful [in the future]" (unpaged). In Vermont's model proposed by the
Vermont Department of Education (undated), all levels of the system, including state, district, and
school, share the responsibility for ensuring that all students have the opportunity to learn the
content standards defined in Vermont's Common Core of Learning at the level prescribed by the
performance standards in the statewide assessment initiative. This change reflects the state's
willingness to induce quality education in schools throughout the state. Vermont's OTL standards
address such systemic change. Thus, the OTL standards are not limited to a few criteria related to
the provision of high-quality curriculum and instruction.

With a grant awarded from the National Governors' Association, Vermont's work group started to
identify the conditions, resources, and practices that should be provided to ensure that all students
have a genuine opportunity to learn the content standards at the level of the performance standards.
These conditions, resources, and practices address "the learning environment and the quality of
curricula, instructional materials and technologies; the alignment of the curriculum, instructional
practices and assessments; school/community climate; professional preparation and development of
teachers and administrators; finances; and governance structure of the educational system"
(Vermont Department of Education, undated, pp. 1-2). Such a comprehensive coverage of
conditions, resources, and practices seems to provide information about the State's commitment to
systemic change, incorporating the development of OTL standards. The Vermont Department of
Education (undated) presented seven domains of OTL standards and their related criteria:

(1) The school and community share a common vision of student performance,
meeting the state board goals.

- powerful partnerships to support teaching and learning.
- school goals aligned with the collaboratively developed vision.
- a close association with human services agencies.

(2) The curriculum is designed and implemented in such a way that helps all learners
achieve the content and performance standards.

- curricular alignment with Vermont's Common Core of Learning.
- rich, challenging, age-appropriate, relevant (to all learners) curriculum.
- active learning in multiple learning environments.
- flexible, well-organized, and sufficient (for all learners) instructional time.

(3) Assessments measure the current level of performance in terms of the vision.

- authentic assessments with multiple measures which are appropriate for the
  intended purpose.
(4) Effective professionals facilitate learning.

- teachers who are trained to teach the curriculum and to have the belief in the possibility of student achievement up to the performance standards.
- teacher training in the assessment of learning styles and in the use of appropriate strategies.
- continuous professional development.

(5) Sufficient educational resources are provided for all learners so that they can attain the very high skills.

- equitable distribution of funds.
- predictable, creditable and accountable financial system.
- non-financial community resources.
- access to support services.

(6) The learning environments enhance high performance learning.

- access to appropriate learning environments.
- safe, healthy, and challenging environments.
- acknowledgment of all students as learners and individuals.
- access to instructional material, technologies, and resources necessary to attain the high performance standards.

(7) The school's organizational structure is designed to ensure the attainment of the desired student performance measures.

- sufficient instructional time to achieve academic excellence for all learners.
- participation of students and parents in the decision-making process.
- the school's organizational structure aligned with the district's and the state's goals and mission.
- continuous communications between the school and community.

How Are Students with Disabilities Treated in Discussions of OTL Standards?

As might be expected, students with disabilities are treated in a range of ways in the discussion of OTL standards. The range goes from no mention of students with disabilities to special emphasis on students with disabilities. Several of these perspectives are summarized in this section.

Students with Disabilities Are Not Mentioned

OTL standards address a concern about the possibility that the consequences of inadequacies and inequities in curriculum, instruction and learning environments are unfairly imputed to students rather than to schools and school systems. In addressing this concern, many proponents of OTL standards mention those students who would be at a disadvantage when more demanding content and higher levels of expectation are imposed. They regard OTL standards as a vehicle for not holding poor and minority children responsible for poor learning until a fair opportunity to learn is provided. Much attention seems to have been paid to poor and minority students when it is said that "far too many poor and minority students suffer a lifetime of consequences of poor education. These are the very students who stand to benefit the most if the curriculum reform is successful" (Porter, 1993b, pp. 4-5).
The current emphasis on outcomes and a high level of performance also may be a burden to students with disabilities. However, those students with disabilities who have not had enough opportunities to learn the content reflected in outcome measures are scarcely mentioned in the argument for OTL standards.

**Different OTL for Students with Disabilities and Students without Disabilities**

The National Center to Improve the Tools of Educators (1993) mentioned "a diverse population" while discussing the need to establish "a process distinguishing between innovation as change itself and reform as change bringing about improved student learning" (p. 2). A diverse population includes, but is not limited to, children with disabilities, children in poverty, and bilingual students. There has been concern over the planning and implementation of educational innovations, with the focus on the use of effective educational tools (e.g., books, materials, teacher-student interaction, time devoted to instruction, staff development, funds for staff development) as a way to prevent educational approaches from impeding the progress of any group of students, including students with disabilities and students in poverty. Equity, the underlying principle of OTL standards, is considered important when educational approaches are delivered to diverse groups of children.

Carnine and Kameenui (cited in National Center to Improve the Tools of Educators, 1993) provided an example of students with learning disabilities performing as well as their advantaged peers in areas targeted by world-class standards. Equity does not mean the use of the same educational approach for all students. Under the assumption that children learn at different rates, on-going assessments are designed and implemented to ensure that children are learning. Assessment results are used to adjust instruction and design remediation programs for children who are not performing at the expected level of rate and accuracy in a curriculum. Such a concern leads to the consideration of diverse students' different educational situations and different needs and, eventually, to the provision of equal access to education for a diverse student population.

**Extensive Attention Given to Students with Disabilities**

Some people suggest that students with disabilities should get much more opportunity to learn than students without disabilities. Such a concern seems to have been raised by proponents of a federal role in protecting and providing educational opportunities to children with disabilities as well as disadvantaged children (Traiman & Goren, 1993). In an effort to reform the education system, California supports a voluntary system of opportunity-to-learn (OTL) standards. Based on several principles of equitable learning, additional support and staff development are designed for students with special needs to provide more opportunities to learn for those students (California Department of Education, 1993).

Carnine (undated) differentiated instructional delivery standards from curriculum outcome standards since the learning failure of diverse learners, including students with disabilities as well as students of poverty, has brought up issues of how those students will learn what they should learn. Rather than reducing expectations for the achievement of students with disabilities, providing those students with access to quality education can be one of the ways to help them attain high expectations that are set in the challenging curriculum standards. Carnine (undated) summarized several features of quality educational tools that are particularly critical for lower-performing students:

1. Lower-performing students require explicit learning strategy instruction to a greater degree than their peers.
2. Lower-performing students need instructional materials that provide more instructional guidance and supports.
(3) Lower-performing students need more relevant prior knowledge than their peers because they neither learned prior knowledge nor learned it thoroughly.

(4) Lower-performing students require appropriately varied review. That is, instructional materials need to be designed in ways that give those students opportunities to apply knowledge in various ways.

Quality educational tools, however, are related to only one aspect of opportunity to learn standards and do not include other aspects from a broader perspective. Camine's concept of quality educational tools does not provide any definitive guidelines about their development and selection for children with disabilities. However, Camine's work initiates discussion about the provision of OTL standards for students with disabilities different from those for non-disabled students.

How Do People Propose to Measure OTL?

Just as conceptions of opportunity to learn vary considerably from one person to the next, or one organization to the next, there is considerable controversy about how any one conception of OTL should be measured. Some of the ideas are discussed in brief here.

Time Spent in School

For some, opportunity to learn is best reflected by the amount of time that students spend in school. They advocate lengthening the school day or the school year as ways to increase opportunity to learn. And, they advocate measuring the amount of time that students spend in school as an index of their OTL.

Time Allocated to Instruction

A considerable amount of the time that students are in school can be spent in non-instructional activities. This fact has led many investigators to suggest that we measure the amount of time teachers allocate to instruction as an index of OTL. It is thought that students whose teachers allocate two hours each day to reading instruction have twice as much opportunity to learn to read as those whose teachers allocate one hour per day to reading instruction. Minutes or hours allocated to instruction is one way to measure allocated time. Another way is to count the number of hours of academic content students take, or to count credit hours delivered.

Time Spent Engaged

A common argument expressed in the professional literature is that time spent in school and time allocated to instruction are inadequate indices of opportunity to learn because during those times students still might not be actively engaged in responding to instruction. So, some propose measuring academic engaged time, active learning time or active responding time as an index of OTL. The methodology used when engaged time is the variable of interest usually consists of observing in classrooms and counting (usually using an interval recording method) the number of intervals in which students are actively engaged. Greenwood (1991) and Ysseldyke and associates (e.g., Ysseldyke, Thurlow, Mecklenburg, & Graden. 1984), for example, used the Code for Instructional Structure and Student Academic Response (CISSAR) in assessing academic engaged time. Greenwood (1993) has now developed the Ecobehavioral Assessment Software System (EBASS) to be used in gathering data on student active responding, inappropriate behavior, and task management responses. The computerized methodology is used to produce printouts of how students spend their time in school. These might, in turn, be used as indexes of academic engaged time, active learning time, or active responding time.
Funding and Provision of Resources

For some, opportunity to learn is best measured by counting the amount of money spent on provision of instruction. Indices of money spent could be the overall school budget, per pupil expenditure, or teacher salaries. The fundamental assumption underlying this approach is that there is a direct correlation between money spent, quantity and quality of instructional resources, and pupil outcomes.

Content Coverage/Instructional Practices

As Porter indicated (1993a, 1993b), teacher interviews or daily logs can be used to measure how well OTL standards are being met. We might know whether students have had opportunities to learn by asking what teachers are doing in class to teach their pupils or what teachers think their pupils learn from their teaching. Measuring opportunity to learn using teacher logs provides information on the enacted curriculum as experienced by the student. Porter (1993b) presented content taxonomies in science and math as a framework that a teacher can rely on when indicating the content of instruction and instructional practices for each day of instruction for an entire school year. The first emphasis is placed on whether all students studied the same content for the school day. Content coverage is indicated by topics covered in the class period and the amount of emphasis placed on the topic. Teachers are also asked to indicate the modes of instruction: lecture, demonstration, drill, whole class discussion, small group work, independent work; the types of activities students engaged in: listen/take notes, discuss, take a test, write paper, lab/field work, present/demonstrate; and, instructional materials used: textbook, workbook, supplementary text, teacher-made assignment/exercise, lab, computers, calculators, test, etc. (Porter, 1993b).

Major Issues

Several major issues surround the notion of opportunity-to-learn standards. Many of these issues, either directly or indirectly, are related to the implementation of standards and their incorporation within current state policies and practices.

Definition

There are significant disagreements about the definition of opportunity to learn. Obviously, if OTL is defined differently in different settings, then indices of OTL in different settings, districts, or states cannot be compared. If OTL is engaged time in one place, money spent on provision of instruction in another, and length of the school year in a third, then this will lead to differences in measurement methodology and comparisons have no meaning. At issue is gaining consensus on what opportunity to learn is.

Measurement

Porter (1993a, 1993b) suggested that teacher interviews or daily logs be used to measure how well OTL standards are being met. However, self-report devices may be inappropriate for accountability purposes. This also applies to self-review procedures for schools. The process of measuring how well each school is meeting the standards per se runs the risk of transforming the standards into checklists of minimum amounts or types of resources and practices. This would spoil the rationale behind the setting of such standards.

When Billings (1993) presented testimony on OTL standards at a hearing held by the National Governors' Association, she mentioned the need to measure OTL standards "by means of a carefully designed school accreditation process. After a careful self-analysis, a visiting team of
accreditors could determine the levels at which the standards are being met and recommend any needed steps for improvement" (p. 2).

Relationship of OTL to Outcomes

In contrast to Porter's argument (1993a) that school delivery standards should not be used for accountability purposes (so the information on the enacted curriculum, the pedagogical practices, and instructional resources would not be used for school-by-school accountability), Darling-Hammond (1993) argued in favor of the use of OTL standards as "a critical component of an accountability system" (p. 1). Attention should be paid to "resources and learning experiences required for students to achieve the intellectually and practically challenging learning outcomes envisioned by current school reform initiatives" (Darling-Hammond, 1993, p. 1).

Genuine accountability occurs when the success of schools is determined by the quality of professional practice and learning experiences that schools provide to students, rather than by measures of outcomes (Darling-Hammond, 1993; O'Neil, 1993). The use of data on educational outcomes (e.g., test scores, graduation rates, drop-out rates) as a sole basis for assessing school quality may provide distorted information on school practices in distributing equitable access to educational opportunities and, further, may result in the exclusion of students from disadvantaged backgrounds in order to maintain a good image via student performance levels. Exclusion could be accomplished by retaining low-performing students in grade, placing them in special education programs, or letting them drop out (Allington & McGill-Franzen, 1992).

New York State's Compact for Learning is viewed as a way "to construct new forms of accountability that can support and sustain schools that are learner-centered, knowledge-based, and responsible and responsive to the many constituencies they serve" (Darling-Hammond, 1992, p. 5). For this purpose, standards for school inputs and practices are considered along with student performance standards. In order to have a genuine school-level accountability system, personnel in the New York State Department of Education suggest "Standards for Excellence." Those standards deal with state and school district responsibilities for providing students with equitable access to learning opportunities. Districts and the states are encouraged to provide all students with equitable access to school funding, well-prepared teachers and professional staff, the materials and equipment necessary for learning, a rich and challenging curriculum, and teaching practices that address individual learning needs. Further, standards for professional practice are identified without highly specified prescriptions for promoting equity in the provision of school resources and processes. Such improvements in educational resources and processes might be targeted to increase student achievement and guarantee accountable schools, in order to avoid any attempt to limit enrollment or participation of low-performing students in school programs as a way to produce apparently good outcomes (Darling-Hammond, 1992).

Minimum Standards and "Dumbing Down"

O'Day and Smith (1993) presented the following three scenarios about achieving equality of educational opportunity. One emphasizes a basic skills curriculum and minimum competency tests with both disadvantaged and advantaged students. In fact, the public was surprised at the narrowed achievement gap between 1960 and the early 1980s. However, the narrowing of the gap could be explained in several ways that are not as positive as the apparent improvement. The instructional emphasis on basic skills and compensatory education increased the achievement levels of disadvantaged students (mainly, those who came from African-American families or poor backgrounds) but did not change the achievement levels of more advantaged students. A second scenario focuses on differentiation of curriculum: disadvantaged students receive basic skills curriculum and more advantaged students increasingly receive instruction on problem solving and complex content. A third scenario is that instruction of challenging content is delivered by teachers
who are well prepared with a depth of content knowledge, appropriate instructional materials, and instructional practices, in schools that have experience with these new instructional practices.

Expectations for higher-order skills and knowledge for all students might produce failure in those schools where large numbers of disadvantaged students have not had the instructional opportunities required for learning challenging content (O'Day & Smith, 1993). Under the school reform assumption that all children not only can learn but also can learn challenging content and complex problem solving skills, "dumbing down the material for the disadvantaged represents a clear denial of their opportunity to learn challenging material of the curriculum" (O'Day & Smith, 1993, p. 264). Equity of opportunity is stressed again. To ensure equity of educational opportunity, schools and systems should be responsible for the equitable distribution of access to the curricular content while equitably distributing outcomes.

When Should OTL Standards Be Applied?

OTL standards, by definition, involve many different components of the educational system. Measurement of these components necessarily will take time and resources. There are many perspectives on when OTL standards should be applied. One perspective is that we should not worry about measuring OTL until we have outcomes information that signals a problem (D. W. Hornbeck, personal communication, Dec. 3, 1993). In other words, if educational outcomes are meeting desired levels, then we need not worry about OTL. Another perspective is that just as we should not measure OTL without also measuring outcomes, we should not measure outcomes without also measuring OTL. In other words, both opportunity to learn and outcomes should be measured at the same time. Doing this not only enables us to look at OTL when outcomes are not what they should be, but also to look at OTL for subgroups of students for whom OTL is not what it should be, even though overall outcomes are acceptable. In 1992, participants in the NGA meeting claimed that OTL standards involve outcomes as well as inputs and processes (Traiman & Goren, 1993).

How Should OTL Standards be Incorporated into Existing Procedures?

We currently have state policies for the accreditation of schools as well as procedures for the review of school quality. For instance, California's accountability systems have components that review schools to monitor their progress toward meeting OTL standards (California Department of Education, 1993). Kansas is also supporting a process of accreditation as a statewide monitoring system, called the Kansas Quality Performance Accreditation (Swall & Finley, 1993). As an integral part of the New Compact for Learning, the New York State School Review Initiative has been taken to both inform the public schools of New York State of their capacity to meet the high standards expected and support schools in teaching and learning (New York State Education Department, 1993). To some minimal extent, the basic OTL notion is already incorporated within these existing mechanisms. But, they could be incorporated to a much greater extent. The inclusion of the opportunity-to-learn notion within federal education reform law, no matter how weak it may seem, will be a first step toward greater incorporation of OTL standards into state policies and school review practices.

Implications For Students with Disabilities

In its report Raising Standards for American Education, NCEST (1992) noted that "if not accompanied by measures to ensure equal opportunity to learn, national content and performance standards could help widen the achievement gap between the advantaged and the disadvantaged in our society" (p. E-12). This is a basic equity issue that continues to be discussed. However, there are several other implications that OTL standards have for students with disabilities. Some of these are discussed here.
Students Forgotten

As noted previously, there is a historical tendency in our country to exclude students with disabilities from discussions of assessment and accountability-related issues. This possibility exists as well for the topic of opportunity to learn. If students with disabilities are not included in measurements of OTL, then there is the distinct risk that they will be viewed as unimportant, second-class citizens for whom educators are not responsible. If policy decisions are made using data on only a portion of the school-age population, then there is a risk of inaccurate and harmful policy decision making.

Funding as a Measure

Although several possible measures of opportunity to learn have been proposed, perhaps none is of more concern than using some form of funding consideration alone as the measure. There is a significant cost involved in providing special education services to students with disabilities. In general, students with disabilities need more equipment, lower student-teacher ratios, and a number of other costly provisions. If some index of funding is used as the measure of OTL, then students with disabilities are going to appear to receive much more opportunity to learn than many other students. And, it is likely that the results of the provision of greater opportunity to learn will be hard to justify based solely on outcomes. No one to our knowledge has talked about balancing a funding measure with some kind of weighting for resources needed.

Qualitative Nature of Instruction

Much focus is now placed on time in discussions of opportunity to learn. There is little discussion of the qualitative nature of instruction. Two students can be actively engaged in responding to instruction for identical amounts of time (a quantitative index), and yet the qualitative nature of instruction can be very different for the two students. Ysseldyke and Christenson (1993) contend that the qualitative nature of instruction for two students can be very different in the same classroom at the same time when taught by the same teacher using the same teaching tactics. The difference can be a function of individual differences in the students and their needs. Ysseldyke and Christenson advocate formal measurement of the student's instructional needs in the context of classroom and home environments, and have shown that procedures now exist to gather data on classroom and home environments.

Comparable Versus Necessary OTL

A basic question when thinking about opportunity to learn and students with disabilities is whether low functioning students should get the same amount of time as everybody else, or the amount of time necessary for them to be successful. This question makes the distinction between absolute measures of opportunity to learn and measures that are weighted in some way by the need exhibited by the student. Spady (1994), in advocating outcome-based education, contends that the goals of instruction should remain constant across students, but that time to learn might vary. If we define OTL as time spent learning or active engaged time, this may be inequitable to those who need significantly more time than their peers. If we define it as time needed to learn, this may be inequitable to students who are rapid learners, who need very little time.
Conclusions and Recommendations

Developing reasonable and fair opportunity-to-learn standards is a challenge, particularly when students with disabilities are considered. Despite arguments for and against these kinds of standards, it is difficult to leave them out of the picture when students are required to reach high academic standards.

Given that opportunity to learn is an important part of achieving high academic standards, it is important to recommend the nature of these standards. In the final version of Goals 2000, it was made clear that those defining opportunity to learn must consider (Goals 2000: Educare America Act of 1994, § 213(c)(2)):

- curricula, instructional materials, and technologies
- teacher capabilities
- professional development for teachers, principals, and administrators that includes the best knowledge about teaching, learning, and school improvement
- alignment of curriculum, instructional practices, and assessments with content standards
- safety and security of the learning environment
- availability of resources for learning and instruction, such as libraries and laboratories
- policies, curricula and instructional practices that ensure non-discrimination on the basis of gender
- other factors that help ensure that students receive a fair opportunity to achieve the knowledge and skills in the content performance standards

These factors, of course, are relatively limited in their coverage. However, the first recommendation indicates that opportunity to learn is to be viewed as something more than just the financial resources in a school.

It will be critical that the development of opportunity-to-learn standards involve all communities that will be affected by the Goals 2000 legislation. Of particular concern, here, of course is the involvement of individuals with disabilities or of individuals familiar with disability issues. This currently is a requirement of the law. How it will be played out when the National Education Standards and Improvement Council is formed will be of interest to many.

Another important recommendation is that the effects of the legislation on children with disabilities be monitored. Again, this is a provision included in the final legislation. Either the National Academy of Sciences or the National Academy of Education will conduct an analysis of the extent to which students with disabilities are included (or, excluded) from Goals 2000 reform activities.
References


