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ABSTRACT

During the past 4 years, the education reform movement in the United States has made significant progress. At the federal level, the Bush Administration proposed "America 2000," its specific recommendations for systemic reform; and the Clinton Administration introduced "Goals 2000: Educate America Act." This report concentrates on these innovative strategies and includes specific details of reform efforts at the national, state, and local levels, as well as details of legislative initiatives by two national administrations. Part 1 describes briefly the basic system of education in the United States--its administration, organization, and financing. Part 2 presents new national education data for the past 4 years and summarizes major federal legislation passed. Part 3 outlines the most recent developments to restructure and revitalize American education. This section is divided into three parts: (1) examines actions taken at the federal, state, and local levels; (2) assesses success in the mission to guarantee equal access to education; and (3) measures progress toward the fulfillment of the National Education Goals. Part 4 provides an annotated list of selected books, articles, and reports prepared or published during the period from 1990 to 1994. Seven tables and one figure are included. (MLF)

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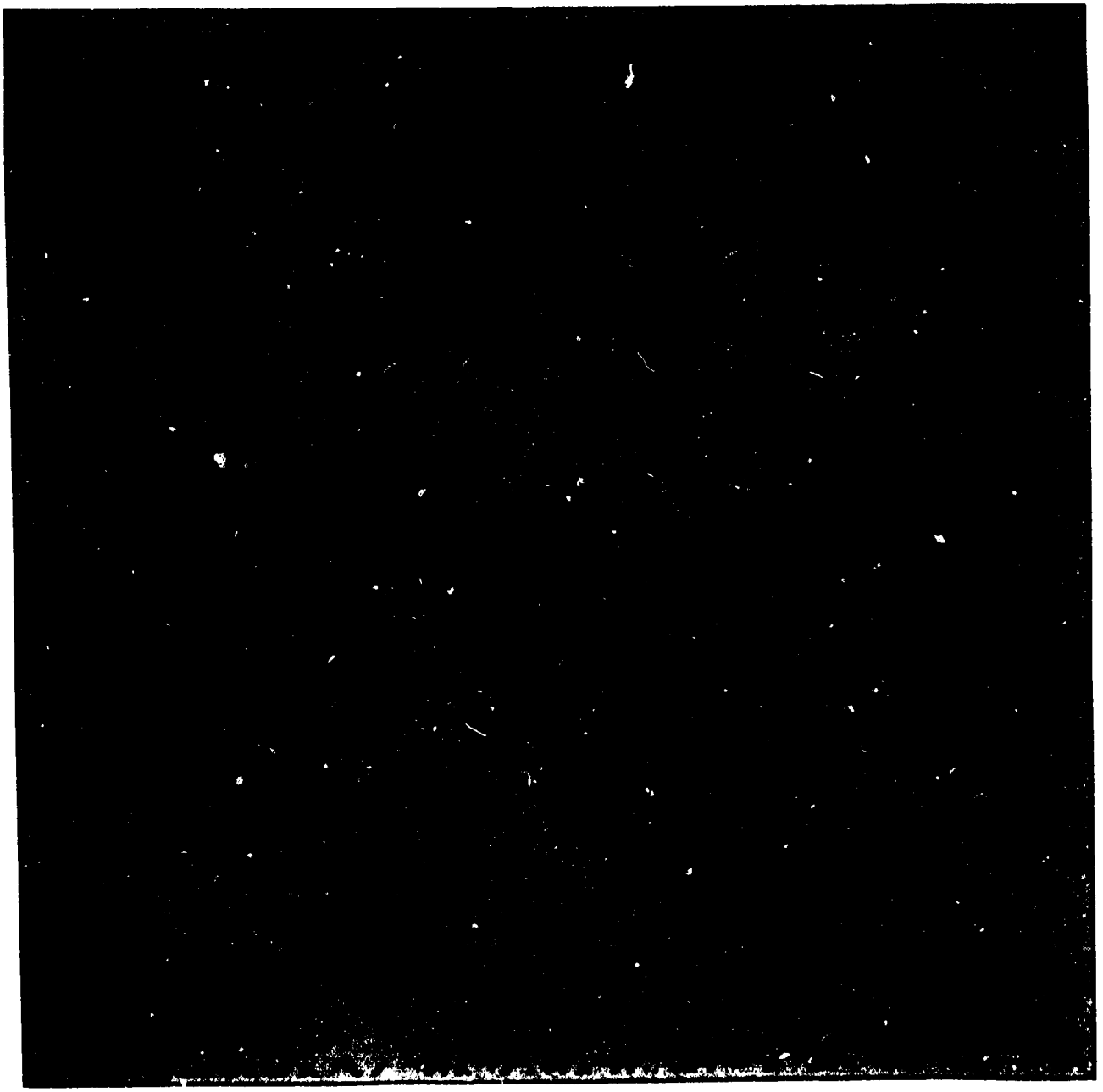
Progress of Education in the United States of America 1990 through 1994



U.S. Department of Education

PROGRESS OF EDUCATION IN THE UNITED STATES OF AMERICA: 1990 THROUGH 1994

CONTENTS

FOREWORD

During the past four years, the "education reform movement" in the United States has made significant progress, though much remains to be done. In 1989, as reported in Progress of Education in the United States of America: 1984 Through 1989, President George Bush invited the Nation's 50 Governors to an Education Summit, where a remarkable consensus emerged concerning the state of U.S. education and the need for a national strategy to remedy its deficiencies.

Following the Summit, the Nation's Governors, in cooperation with the White House and the Congress, adopted six National Education Goals to guide Federal, State, and local authorities in devising plans for the overall improvement of the system. The development of these Goals was a bipartisan effort that was generally applauded by the Nation's educators and its citizens.

At that point, leaders at every level of the education system began to consider a number of specific strategies to achieve the Goals. At the Federal level, the Bush Administration proposed AMERICA 2000, its specific recommendations for systemic reform. At the State level, a number of educators and agencies began to rethink old approaches and devise new ones. And at the local level, superintendents, principals, and teachers, sensing a new freedom, began to experiment with innovative ways of motivating and instructing students. When President Clinton took office in January of 1993, he appointed Richard W. Riley, a former Governor known for his bold initiatives in school reform, as Secretary of Education; and within weeks after the inauguration, the Clinton Administration had introduced its own innovative strategy for systemic education reform throughout the Nation--Goals 2000: Educate America. This Act, together with the School-to-Work Opportunities Act, greatly accelerated the reform movement. The whole Nation had finally accepted the proposition that education in the United States would change and change for the better.

This report is, in part, the story of the years during which the Nation has begun a conscious and concerted effort to revitalize its schools and do a better job of educating its youngsters. Of course, in order to reach this point, Americans had to acknowledge the shortcomings of the current education system--comparing U.S. achievement with that of other nations. This self-examination has been a sobering experience, as reflected in some of the studies and statistics chronicled in this report.

On the other hand, there are signs even now that the reform movement is taking hold, that our schools are beginning to improve, and--more importantly, perhaps--that some of the innovative programs produced by the spirit of reform are successful and will soon be ready for replication in the system as a whole. Many reforms at the State and local levels have been bold, all-encompassing, and ingenious. In States like Kentucky

and in cities like Edmonds, the past has been swept aside with an impatience and an entirely new way of operating schools established in its place. While the final verdict is not in on such innovations, they show every promise of affecting vast improvements in systems that were in danger of collapse.

In addition to a general summary, this report will concentrate on these innovative strategies as well as on individual programs developed by master educators. Included will be specific details of reform efforts at the national, State, and local levels, as well as details of legislative initiatives by two national administrations.

Part I describes briefly the basic system of education in the United States of America -- its administration, organization, and financing. It is, of course, a system in transition, since many of the reform measures are specifically designed to transform current structure and policy.

Part II presents new national education data for the past four years and summarizes major Federal legislation passed during that time.

Part III outlines the most recent developments in the ongoing effort to restructure and revitalize U.S. education. This section is divided into three parts: (1) an examination of actions taken at the federal, State, and local levels; (2) an assessment of success in the mission of the American education system to guarantee equal access to education by all citizens; and (3) a measurement of progress toward the fulfillment of the National Education Goals.

Part IV gives an annotated list of selected books, articles, and reports prepared or published during the period from 1990 to 1994. This bibliography should provide interested scholars with enough resources to understand what has happened in United States education since 1989.

This report is available not only in English but also in several foreign languages as well. The translations are for use by participants at international education conferences, by the thousands of visitors from abroad who seek information from the U.S. Department of Education, and by non-English-speaking educators and policymakers in many other countries.

Many units of the U.S. Department of Education have provided information and advice for this report. Primary among these are: Planning and Evaluation Service of the Office of the Under Secretary, headed by Alan Ginsburg; the Office of Educational Research and Improvement, headed by Sharon Robinson; and the National Center for Education Statistics, headed by Emerson J. Elliott.

Those who have been especially helpful in gathering data are: Val Plisko and Nelson Ashline of the Office of the Under Secretary, Steve Sniegosky of the Office of Educational Research and Improvement, and Tom Snyder of the National Center for Education Statistics. This publication, in part an update of Progress of Education in the United States: 1984 through 1989, was written by Thomas Landess, International and Territorial Services Staff, directed by Stewart Tinsman.

PART I

ADMINISTRATION, ORGANIZATION, AND FINANCING OF THE EDUCATION SYSTEM

BACKGROUND

The education system in the United States is highly decentralized. According to the Tenth Amendment to the U.S. Constitution: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States." In accordance with this Amendment, the federal government has no authority to establish a national education system, nor do Federal agencies ordinarily prescribe policy or curriculum for local schools. Such decisions are made at the State or district level.

Because of this decentralization, laws governing the structure and content of education programs may vary greatly from State to State, district to district. Some of these laws are very prescriptive; others are broad enough to allow local school districts considerable flexibility in the way they operate their schools.

On the other hand, despite this opportunity for experimentation and diversity, the educational programs of the 50 States are remarkably similar, undoubtedly as the result of such common factors as the social and economic needs of the nation, the frequent transfer of students and teachers from one part of the country to another, and the role of national accrediting agencies in shaping educational practice.

In all 50 States, as well as in the six Territories, education is compulsory -- usually from the age of 6 or 7 to the age of 16. Public schools in the United States are free, at least through completion of secondary school, which ends at the 12th grade. One of the primary aims of public education is to ensure equality of access and opportunity for all boys and girls, including minority groups and the disabled. Moreover, U.S. public schools have a long tradition of coeducation.

In all States and Territories, private schools are permitted to operate. They are subject to State licensing and accrediting regulations. A few of these institutions may receive limited federal aid for specialized purposes, but the great majority are funded by sources other than government.

Education in the United States generally reflects the values and priorities of the society. These include a dedication to democratic ideals, a commitment to individual freedom, and a respect for the diversity of the population. In general, the U.S. education system has as its goal the establishment of a quality education that will enable all children to achieve their highest potential as individuals, serve effectively as citizens of a free society, and successfully compete in a changing global marketplace.

Though, as noted above, federal law prescribes no standardized curriculum, the education programs throughout the States generally include English grammar, reading; writing; mathematics; science and the scientific method; U.S. history and government; art, music, health and nutrition; practical arts, physical education, geography and foreign languages. Many schools are also beginning to teach the history, culture, and traditions of other nations and peoples. Some students also receive an introduction to the world of work, through programs that promote career awareness.

ADMINISTRATION

Because of the Tenth Amendment and the consequent evolution of a decentralized education system, the States and local districts assume a primary role in the organization and operation of U.S. schools. For this reason, the discussion below deals at length with State and district roles in education and only briefly with the Federal role. Because they are administered in a different way, postsecondary institutions will be discussed separately.

ELEMENTARY AND SECONDARY EDUCATION

Role of State Governments

Over the years, State legislatures have enacted laws to govern the organization and operation of elementary and secondary schools in the respective States. These laws have been provided to guide the establishment of policies and requirements for the operation of public schools at the local level. In most States, policies and requirements are determined by a State board of education and carried out under the leadership of a chief State school officer (the title varies with the State) and a staff of professional educators in a State department of education.

Different States have different laws and traditions governing the membership of State boards of education. In most States, members are appointed by the Governor; in some they are elected directly by the people; and in still other cases a member serves ex officio -- that is, by virtue of holding another office (e.g., the Governorship).

The chief State school officer -- the head of the State department of education -- is usually appointed by the Governor or by the State board of education, though in a few States the office is elective. The duties of the chief State school officer usually include such functions as: distributing State funds to local education authorities (almost 50 percent of all funds spent on public elementary and secondary schools in the United States come from State sources); interpreting and administering State school laws; supervising the certification of teachers; helping to improve educational standards through in-service training programs; and providing advisory services to local superintendents and school boards.

Typically, State regulations for public schools cover the following areas: length of the school day and school year; graduation requirements; and standards for teacher certification, school transportation, health services, and fire protection. For private schools, about one half of the States have some sort of mandatory approval process that results in a license, accreditation, or registration. A few States require that all private school teachers be certified by the State before they can

teach in a private school. However, requirements vary from State to State, as does the manner in which such requirements are enforced.

State boards of education and their chief State school officers -- supported by organizations like the National Association of State Boards of Education and the Council of Chief State School Officers -- provide strong voices on the national scene and influence the direction of federal legislation and policy.

Role of Local Authorities

With the exception of Hawaii, each State is divided into local administrative districts with extensive authority and responsibility to establish and regulate public schools, both at the elementary and secondary levels. Generally, local school districts are governed by a board of education, usually composed of five to seven members, who have either been appointed by other governmental officials or elected by citizens who live within the district. Consistent with State law and official policy, the local board operates the public school system through the superintendent and the district staff.

The district school board and the superintendent of schools have a broad range of duties and responsibilities. The board and the superintendent are jointly responsible for preparing the school budget. They usually have considerable latitude within broad State guidelines to determine curriculum. They are responsible for hiring teachers and other personnel; for providing and maintaining school buildings; for purchasing school equipment and supplies; and, in most cases, for providing transportation for pupils who live beyond a reasonable walking distance from the school.

Their duties also include enacting regulations to govern the operation of schools. Such regulations must conform to State law. Indeed, the limitations on the actions of school boards are those established by the State legislature, or by the State education agencies, which in most cases prescribe minimum standards for all local school districts.

Districts vary in size from rural systems, with one school building that houses all grades, to those in heavily populated urban areas, with hundreds of schools and thousands of teachers. Some States have regional (county) service districts or centers. These handle regulatory functions as well as advise local school systems and collect and provide statistical information.

POSTSECONDARY EDUCATION

Postsecondary education in America is widespread and diverse. There are literally thousands of degree-granting universities, four-year colleges, and two-year colleges. Some of these are funded by State or local governments, while others are funded by religious denominations or are privately endowed. In addition to these degree-granting institutions, there are also proprietary schools that offer specific vocational training. These proprietary schools are generally operated as businesses for profit.

Postsecondary institutions, both public and private, derive their authority to function and grant degrees from the State in which they are located. This authority is established in the State constitution or in laws passed by the legislature.

States may fund and operate a number of institutions of higher learning. Many larger States, such as California and New York, have highly developed statewide systems of higher education. Most States have some system of policy planning and coordination to guide the development of public higher education within the State -- usually through coordinating boards and consolidated governing boards. However, in most statewide systems, individual campuses have a high degree of institutional autonomy, subject to the overall policies and plans established by State and/or institutional boards.

Nearly all institutions of higher education receive some form of financial support, either direct or indirect, from both State and Federal governments, though public institutions generally receive a substantially higher proportion of their budget from government funding. Other sources of income for both public and private institutions include: student tuition and fees, endowment earnings, and contributions from philanthropic organizations and individuals. Many public community colleges, particularly those drawing students from several school districts, receive the bulk of their public funds from separate community college districts established for this purpose. In a growing number of States, public community colleges receive more than half their funding from State government.

Boards of trustees (sometimes called "boards of regents") make most major decisions affecting colleges and universities in the United States. In most instances the procedures for choosing board members are stated in the institution's founding charter, and, in accordance with the provisions of that charter, members may serve either specified terms or may be appointed for life. Public institutions such as State universities may have trustees who are elected or who are appointed by the State's Governor. Religious institutions usually have representatives of the institution's founding body serving as trustees. In recent years, many boards of trustees, both public and private, have

attempted to broaden their membership to ensure a wider representation of the diverse constituencies that make up the institution's academic and social environment.

ROLE OF THE FEDERAL GOVERNMENT

The role of the Federal Government in education has been one of broad leadership without undue control. It is the legal responsibility of Federal authorities to safeguard the right of every citizen to gain equal access to free public institutions and equal opportunity in the pursuit of learning. While fulfilling this responsibility, the Federal government also attempts to improve the quality of education through the funding of research, direct aid to students, and the dissemination of knowledge about teaching and learning.

To achieve these ends, the Congress over the years has enacted legislation establishing a variety of funded programs, most, though not all, administered by the U.S. Department of Education through the issuance of regulations and the monitoring of Federally funded educational activities. (Federal funding at the various educational levels is covered in the section on financing.) During the 1980s and early 1990s, a decrease in Federal regulations and in Federal authority to disperse funds within the States has further lessened the degree of administrative control exercised by the Federal Government in the field of education.

The only elementary and secondary schools funded and administered solely by the Federal Government are those established for the dependents of military and civilian personnel serving overseas. These are operated by the Department of Defense, with advice provided by local school advisory committees and a national advisory council. Schools serving military installations in the United States receive Federal funding but operate under the direction of local school boards.

The Federal government exercises no direct control over the establishment of postsecondary institutions or over the standards they maintain, except for some academies that prepare persons as career officers for the military. However, in a few areas, such as the enforcement of the Civil Rights Act as it relates to higher education programs, the Federal government has specific legal responsibilities.

Virtually all laws authorizing Federal assistance to institutions require that they meet minimum licensing and accreditation standards. However, the practice of provisional accreditation does permit some institutions to receive assistance while involved in formal and final accreditation. Postsecondary institutions are voluntary members of privately operated accrediting agencies, which periodically review the standards and practices of their membership. This reaccreditation occurs about every five years. For purposes of identifying those institutions

eligible for Federal assistance, the Secretary of Education recognizes the authority of most accrediting agencies, which review periodically the performance of their membership.

The Federal Government requests advice on administering some Federal education programs from citizen councils and committees established for that purpose by legislation, Executive Order, or administrative authority. The members are usually appointed by the President, the Secretary of the Department, or other agency head. The largest number of Federal advisory groups on education are associated with programs administered by the U.S. Department of Education.

ORGANIZATION

STRUCTURE

Education in the United States is organized on three principal levels: the elementary (including pre-school and primary), the secondary, and the postsecondary. Vocational training is available at the secondary and postsecondary levels. In addition, formal and informal programs of adult education and continuing education are offered widely to U.S. citizens in virtually any part of the country -- and throughout their lives. (The structure of U.S. education is illustrated in Figure 1.)

Compulsory Education

Education in the United States is compulsory, beginning at age 7 in 29 States, at age 6 in 16 States, and at age 5 in 3 states. Usually a person is required to attend school until age 16. Schooling is free, through completion of secondary school (grade 12) for those who attend public schools.

Language Used in School

Most classes are taught in English. However, in schools where there is a high concentration of students whose first language is not English, courses are sometimes taught in a foreign language until students are sufficiently conversant in English to enter regular classes.

Time in School

On the primary and secondary levels, the academic year usually begins in September and continues through the first or second week in June, though some school districts prefer to begin and end the school year earlier. Most States require a school year of 180 school days. The school day usually lasts from 8:30 a.m. to 3:30 p.m. -- six hours long, excluding recess and lunch periods. In most instances -- and particularly at the secondary level -- students are given assignments to complete in the afternoon or evening, after the official school day has ended.

On the postsecondary level, the academic calendar is much more flexible. The norm for a full-time student is two semesters of 15-16 weeks each per academic year, but many institutions vary this pattern. Some, for example, adopt a trimester system, which divides the academic year into three segments of 15-16 weeks; and others adopt a quarter system, with the school year divided into four 11-week segments. In the latter two systems, the student normally does not attend school the entire year, but two out of three trimesters or three out of four quarters.

Elementary Education

Elementary education in the United States consists of one or two years of pre-school, one year of kindergarten, and five to eight years of primary education.

Most public school systems provide half-day kindergarten classes for children five years of age, and some provide preschool classes for younger children, though most pre-school programs are offered privately. Although enrollment at five is voluntary, except in three States, 87.1 percent of five-year-olds were enrolled in school in 1992-93. Although primary education may consist of six or eight grades, the six-grade school is most common. The main purpose of primary school is the general development of children from six to 12 or 14 years of age (depending on whether the school is a six- or eight-year elementary school). The program has as its goal to help students acquire basic skills, knowledge, and positive attitudes toward learning. Elementary schools emphasize the growth of the individual child and the relation of the child's progress to individual needs and abilities. Traditional subjects such as reading, writing and mathematics provide tools for learning; and the teacher helps children to recognize problems, work out solutions, and evaluate results.

During the 1960s, the middle school gained widespread acceptance in U.S. education. A refinement of the junior high school, which was designed to improve the transition from elementary to secondary education, the middle school usually includes grades five or six through eight, provides team teaching and other innovative instructional methods, and emphasizes curricular exploration and growing independence for students. Its purpose is to serve the educational needs of students in the early adolescent period -- those between 10 and 14 years of age.

Secondary Education

Secondary education in the United States begins at grade seven or grade nine, depending on whether elementary education in the system extends through grade six or grade eight. In some systems, junior high school follows elementary school, and includes grades seven and eight or seven through nine, followed by high school, which can include grades 9-12 or 10-12. At this level of education, students normally complete the 12th grade by ages 17 or 18. Though each State establishes its own public school curriculum, mandated requirements for high school graduation generally include: two years of mathematics, two years of science, four years of English, and three years of social studies. Students may elect the other courses they take, usually with the assistance of a guidance counsellor. Electives might include such subjects as art, music, foreign languages, and computers. Individual students may elect a program of studies that exceeds the requirements, and many do. The number of hours in any given subject required for graduation varies from State to State.

By the end of grade 10, most students have decided whether they will follow a primarily **academic program** leading to further education at the college level, a **vocational training program** leading to employment or specialized postsecondary training, or a **general program** combining elements of both the academic and the vocational programs. In recent years, the **general program** has been criticized as insufficient either to prepare students for college-level study or to train them sufficiently for employment in an increasingly competitive marketplace.

All secondary programs lead to the high school diploma and in most school districts are offered in the same **comprehensive institution.** A **comprehensive institution** offers a combined curriculum like the **general program**, allows students to transfer easily from one program to another, and provides flexibility for students to develop individual schedules to meet their own personal goals. It is not unusual for a medium-sized comprehensive high school to offer 200 or more separate courses. A comprehensive high school also provides the opportunity for young people with different career interests, as well as diverse social and economic backgrounds to have regular contact with each other. However, in recent years many school districts have introduced magnet schools, which are designed to attract students from all over the school district with a special interest in a particular area of study, such as science, the arts, or languages. Thus magnet schools, while retaining economic and cultural diversity, deliberately sacrifice some curricular variety in order to achieve a more concentrated academic focus.

Most students reach the minimum age for dropping out of school at least a year before graduating from high school. Yet of these students, about 75 percent remain in school until they receive the high school diploma at the end of grade 12.

The American high school is highly flexible, both in its academic offerings and in its vocational programs. In a growing number of schools, academically gifted students can take several additional hours per week of advanced science or mathematics during their last two years of high school. In many instances, pupils taking advanced courses receive college or university credit. Most secondary schools offer some foreign language courses, most commonly Spanish and French.

General Educational Development (GED) Programs

Many students who leave school before high school graduation return to take a General Educational Development (GED) test -- a comprehensive examination over basic skills and knowledge taught in elementary school and high school. A certificate of success on the GED is often accepted as the equivalent of a high school diploma. In many cases high schools offer special short-term courses designed to prepare students to pass the GED test. In 1990, 410,000 people received academic credentials in this manner.

Private Elementary and Secondary Education

Private education at the elementary and secondary levels is similar in curriculum and structure to public education. The vast majority of private schools are coeducational and range from those designed to serve children with learning disabilities, to inner-city religious schools, to college preparatory schools with or without dormitory facilities.

In 1992-93, students in private schools represented about 11 percent of the Nation's children in elementary and secondary school. Approximately 5.5 million students were enrolled in about 25,000 private schools.

The majority of students attending private elementary and secondary schools are enrolled in Roman Catholic school systems -- about 55 percent. Non-affiliated schools account for about 14 percent of private school enrollment, while the remaining students -- 31 percent -- are enrolled in other religiously affiliated schools, the largest number of which are Lutheran. Also, Roman Catholic schools account for a substantial proportion of private schools -- 35 percent -- while non-affiliated schools account for 18 percent, and other religiously affiliated schools, 47 percent.

Vocational Education

Academic education, in the early grades, provides a foundation for vocational education, as well as general education, in secondary and postsecondary institutions. General education at the secondary level provides the basic skills and academic preparation required for postsecondary study. Vocational education, on the other hand, typically begins at the secondary level and continues through the second year of the postsecondary level. Vocational programs are also designed to retrain and upgrade the skills of adult workers in order to keep them current with the changing needs of the marketplace. Such programs contribute to the productivity and economic development of the nation.

The major goal of vocational education is to increase the student's knowledge and skills to meet the demands of a specific job or occupational field. Elementary and secondary schools, as well as adult education centers, offer more than 400 instructional programs designed to increase the individual's potential to enter a new job market or to upgrade his or her skills in a current position. These programs are usually grouped under the seven traditional headings of vocational education: agriculture, marketing and distribution, health occupations, occupational home economics, business and office occupations, technical education, and trade and industrial education.

Certain programs logically continue from the secondary to the postsecondary level. These include office occupations, marketing and distribution education, health occupations, and other nontechnical programs. Because of the academic foundation required at the secondary level, technical education usually begins with postsecondary schooling. However, some special-purpose high schools and large vocational/technical schools offer technical programs at the secondary level. Generally, a two-year postsecondary program is required for minimal competency in any of the physical sciences. If the postsecondary program permits, at this point a student may choose to terminate his or her technical education and transfer credits to study at a four-year college or university. Thus, among institutions that offer technical programs, there is a logical progression from subprofessional to professional technical occupations.

One of the most significant effects of the academic reform movement may ultimately be on the nature and extent of vocational education at the secondary level. More stringent graduation requirements in academic subjects are reducing the time available to students for enrollment in vocational education. However, educators are devoting efforts to the development of stronger ties between academic and vocational courses and secondary and postsecondary vocational programs.

In summary, through its regular secondary and postsecondary programs, vocational education continues to supply a consistent flow of skilled, entry-level workers and to provide specialized training and retraining for adults. In other words, vocational education is intended to meet the needs of students, employers, and communities all at the same time.

Higher Education

Types of Institutions

Generally speaking, there are three main types of degree-granting higher-education institutions in the United States: the two-year community or junior college, the four-year undergraduate college, and the university. The university normally includes undergraduate as well as graduate and professional education. Each category has both public and private institutions. Two-year institutions offer terminal degrees (associate's degrees) for two years of study or preparation for moving into the last two years of undergraduate study at a four-year college. Four-year colleges usually award undergraduate degrees for four years of study. However, a growing number of four-year institutions offer the last two years of undergraduate study and two years of graduate work for a graduate degree, awarding both undergraduate and graduate degrees. Universities usually offer four years of undergraduate study and two to four years of graduate study, awarding undergraduate, graduate, and professional degrees. Some institutions have post-doctoral programs for advanced study -- generally based on an individualized study or research plan. In 1990-91, there were 156 universities (94 public and 62 private); 1,963 other four-year institutions (496 public and 1,467 private); and 1,382 two-year colleges (958 public and 424 private).

Higher education institutions may be classified according to the total number of degrees they conferred and the field in which the degrees were awarded. This classification divides such institutions into **doctoral**, **comprehensive**, **general baccalaureate**, and **specialized institutions**. **Doctoral institutions** are characterized by a significant level of commitment to doctoral programs and considerable activity in them. **Comprehensive institutions** have a strong post-baccalaureate program but do not engage in significant doctoral-level education. **General baccalaureate institutions** focus primarily on undergraduate baccalaureate education. The category of **specialized** includes professional and other highly-focused institutions.

Of the 3,501 higher education institutions in the United States in 1990-91, a total of 2,119 were four-year colleges and universities. (In addition, some 6,455 nonacademic postsecondary schools -- often called "proprietary schools" -- both public and private, were offering job training in a wide variety of occupations. Normally, these vocational schools do not grant academic degrees but offer certificates or diplomas documenting the completion of training in a given trade or skill.)

The many and diverse degree-granting institutions of higher learning in the United States comprise a broad spectrum of academic traditions, philosophies, and educational goals. More than half are private institutions originally established by special-interest groups for social, educational, or religious purposes. However, the public institutions account for approximately 79 percent of the total enrollment in colleges and universities. Accrediting agencies and associations help to maintain high educational standards and compatible practices among many different institutions. These organizations were established by the member institutions themselves or by professions and specialized vocational fields, and membership is voluntary. Federal and State governments also require the maintenance of certain standards as a condition for financial assistance. Moreover, the professional integrity of the teaching staff and the demands of the economy for qualified graduates motivate most institutions to monitor carefully the quality of their programs.

Higher education enrollment increased by 41 percent between 1970 and 1980. Since then, enrollments have risen more slowly. Between 1980 and 1992, enrollment increased about 20 percent, from 12.1 million to a record 14.6 million. Much of this growth was in part-time enrollment. Between 1980 and 1992, the number of men enrolled rose only 13 percent, while the number of women increased by 27 percent.

Enrollment trends have differed at the undergraduate, graduate, and first-professional levels. Undergraduate enrollment increased rapidly during the 1970s, but dipped between 1983 and 1985. Since 1985, undergraduate enrollment has risen steadily, increasing 15 percent between 1986 and 1991. Graduate

enrollment had been steady at about 1.3 million in the late 1970s and early 1980s, but rose about 14 percent in the five years between 1986 and 1991. After rising very rapidly during the 1970s, enrollment in first-professional programs stabilized in the 1980s. There was a small increase in first-professional enrollment between 1986 and 1991.

Degrees

The associate's degree. The associate of arts (A.A.) or the associate of science (A.S.) degree is usually earned at a community or junior college upon completion of two years of study. In many instances, this degree represents the same level of educational achievement as completion of the first two years of a four-year college or university, and some students who have earned the associate's degree transfer to four-year institutions. Other students, especially those who have completed vocational training for a particular job, normally enter the work force as mid-level technicians.

The bachelor's degree. The bachelor's degree normally requires four years of academic study beyond the high school diploma. In recent years, accelerated learning plans, credit by examination, or practical work experience, year-round study plans, and other innovations have enabled some students to complete the program in fewer than four years.

The two most common bachelor's degrees are the bachelor of arts (B.A.) and the bachelor of science (B.S.). The former normally requires more courses in the arts and humanities, whereas the latter usually places greater emphasis on the sciences. Other common bachelor degrees include the B. Ed. (bachelor of education), the B.F.A. (bachelor of fine arts), the B. Mus. (bachelor of music) and the B.B.A. (bachelor of business administration). The B. Arch. (bachelor of architecture) is often a five-year program. The B.D. (bachelor of divinity) and LL.B. (bachelor of law) are professional degrees, usually requiring three years of study beyond a B.A. or B.S.

The master's degree. Master's degree programs vary considerably among the institutions that award them. Masters degrees are awarded in many academic fields, but most are called master of arts (M.A.) or master of science (M.S.) degrees, or are professional degrees such as master of nursing (M.Nurs.) or master of social work (M.S.W.). Programs leading to this degree usually require one to two years of advanced study in graduate-level courses and seminars. Frequently a thesis is required and/or a final oral or written examination. Requirements may differ not only from institution to institution but also from department to department within an institution.

The doctor's degree. The doctorate is considered the highest academic degree conferred in the United States. It attests to the ability of its holder to conduct original research of a high order. The most frequently awarded doctorate is the doctor of philosophy (Ph.D.). Others include the doctor of education (D.Ed.) and the doctor of divinity (D.D.). Since work at the doctoral level is often individualized, the specific requirements may vary widely. In general, however, the degree requires a minimum of two years of course work beyond the master's degree level, success in a qualifying examination, proficiency in one or two foreign languages, and/or in an equivalent research resource (such as statistics) considered appropriate to a particular field of specialization, and completion of a doctoral dissertation that is normally intended to represent an original contribution to knowledge in the candidate's chosen field.

First-professional degrees. Included among first professional degrees are dentistry (D.D.S. or D.M.D.), law (LL.B. or J.D.), medicine (M.D.), theology (B.D. or M. Div., or Rabbi), veterinarian medicine (D.M.V.), podiatry (Pod.D. or D.P.) or podiatric medicine (D.C. or D.C.M.), and pharmacy (D.Phar.). The education prerequisite and length of study required for these degrees vary with the field of study. For example, in medicine most students, after receiving a bachelor's degree, complete four years of medical studies before receiving the M.D. degree. Subsequently, they often enter into three years of residency training in a specialty.

In 1990, 19.1 percent of young adults (25 to 30 years of age) had attended college without receiving a degree or certificate; 2.8 percent had received a vocational certificate; 6.2 percent had received an associate degree; 17.4 percent had received a bachelor's degree; 3.5 percent had received a master's degree; 1.2 percent had received a professional degree; and .03 percent had received a doctor's degree.

CURRICULUM DEVELOPMENT

State and local education authorities are responsible for determining and developing public school curriculum. The Federal government is expressly forbidden by statute from intrusion into curricular decisions. There is no national public curriculum at any level of education. In fact, the U.S. Congress carefully monitors Federal assistance for curriculum development to assure that State and local control is maintained. However, the Congress has mandated that every school receiving Federal funds must provide a program designed to teach students that drug use is wrong and harmful. Also, the Federal government sometimes funds curricular research and develops model curricula that State and local authorities may choose to utilize. In this way, the Federal government exercises leadership without directly intervening in the affairs of the public school system.

Elementary and Secondary Curricula

Generally, States exercise their responsibility for public school curricula in five major ways: by establishing the graduation requirements for students within the State; by selecting the texts to be used in classrooms; by developing minimum-competency tests; by issuing State curriculum guides; and by providing technical assistance. For example, most States require that students take one or more social studies courses in the area of American history or the history of their particular State. Local school districts may add curriculum requirements of their own, such as local history or sex education.

State officials select textbooks and other curricular materials in about half the States. Local officials make the selections in the remainder. In either case, the State or local board of education usually delegates the responsibility to a textbook commission or committee made up of professional educators and community representatives. Most commonly, textbook commissions approve several textbooks and materials for each course, and local or school authorities make selections from the list. Usually teachers may choose a program of study from approved materials.

Most textbooks are published by private firms, which usually contract with educators and other specialists to develop teaching materials; then they submit the final products to the State and local textbook commissions for approval. States and local school districts sometimes commission teams of teachers and other experts on curriculum to develop materials for use in classrooms. In some instances, universities develop curricular materials for use at the State or local level. Teachers are often given latitude to choose a program of study from a variety of materials -- sometimes from all of these sources.

In a situation where as few as four States may control almost 30 percent of the market (California -- 11 percent, Texas -- 8 percent, New York -- 6 percent, and Illinois -- 5 percent) publishers interested in selling to a broad market are likely to address the requirements of these key States, though their curricula sometimes are based on conflicting aims.

Minimum-competency testing is a means by which the States may influence local curricula. This practice originated in the middle 1970's, and some form of minimum competency testing now exists in at least 40 States. Initially, many States mandated that students meet a minimum standard of competency before receiving a high school diploma. Gradually, testing has been extended to the lower grades to monitor early progress. Now, States conduct minimum-competency testing at two or three stages of a student's education to pinpoint problems and to institute remedial help. Reading, writing, and mathematics are the three subject areas most commonly targeted for minimum-competency testing, typically in grades three or four; six, eight, or nine; and 11 or 12.

States also influence local curricula by providing technical assistance, which is delivered primarily by State curriculum specialists in the various fields (e.g., the sciences). Among other activities, these specialists work with local district personnel individually, conduct regional and statewide workshops for groups, and organize the development of State curriculum guides (materials suggested but not mandated).

Despite the decentralized nature of American education, a certain pragmatic standardization of curriculum exists. First, the textbook is probably the greatest single determinant of curriculum, and many publishers have successfully established large markets among the nation's schools. Second, college and university entrance requirements strongly affect curricular decisions at the secondary level because local school authorities want their graduates to be readily admitted to institutions of higher education. In some cases, a high school's curriculum may be designed wholly or in large part to prepare students to enter college, even though the college-bound population may be only about 50 or 60 percent of the high school's student body. Third, national achievement and aptitude tests developed by private, non-profit organizations influence secondary school curricula. The national norms on these tests tend to become accepted norms for achievement locally; and, consciously or unconsciously, teachers may begin to teach solely in preparation for these tests. Three tests are particularly influential.

One is the National Assessment of Educational Progress (NAEP), a periodic measurement of the skills and knowledge of representative samples of 9-, 13-, and 17-year-olds in reading, writing, mathematics, science, social studies, and other subjects. NAEP's impact on curriculum is more indirect than direct; it is felt primarily through the many State assessment programs that, though independently developed, are patterned after NAEP.

Two other tests that have proven highly influential on curriculum are the Scholastic Aptitude Test (SAT) and the American College Testing Program (ACT). The SAT is a test of vocabulary and reasoning skills that is taken by about 1.1 million students each year. The ACT is similar to the SAT but covers social studies and the natural sciences in addition to math and English. About 800,000 students take this test each year.

Postsecondary Curricula

State governments do not exercise direct influence on the curriculum of private or public postsecondary academic institutions. Curricular decisions are made most often within academic departments, and individual professors are responsible for the content of their courses. The institutions usually require that a student earn a given number of credits, often prescribing specific courses or areas of study as prerequisites for graduation. Many also require a student to take a specified number of courses in a major field of study before conferring a degree.

However, States can exercise indirect control over postsecondary academic institutions, both public and private, through their licensing authority. For example, through power delegated to professional licensing boards, States can require that professionals such as doctors, attorneys, engineers, and teachers complete a minimum number of courses from a specified list of academic or professional subjects to qualify for a license to practice.

TEACHER EDUCATION

Preservice

All preservice teacher education in the United States is at the postsecondary level. Many public and private universities have departments, schools, or colleges of education. In addition, a few institutions in the United States specialize exclusively in preparing educators to teach special subjects such as music and art, or to give instruction to severely disabled persons.

In most cases, candidates for teacher education programs must have successfully completed one or two years of general undergraduate requirements. The minimum requirement for teaching on the elementary and secondary level in any of the 50 States is the bachelor's degree. However, an increasing number of States are meeting the growing demand for qualified instructors by instituting "alternate certification programs" which sometimes allow candidates with special qualifications to take a lesser number of education courses before entering the classroom.

While most teacher training occurs in four-year programs, some schools, colleges, or departments of education (SCDEs) offer five-year programs, some leading to a Master's degree. In most programs for elementary school teachers, the core curriculum of professional studies devotes slightly more time to theory than to method, while in programs for secondary school teachers the reverse is true. Despite an ongoing debate on the relative value of theory and method, most programs include both in all education courses.

All States require that programs to educate teachers include general education, specialization in a teaching field, and professional education courses. The general education program usually includes a foundation in the liberal arts, with an emphasis on the humanities, natural sciences, and social sciences. In addition, all states require that future teachers engage in full-time teaching in a public school classroom under the supervision of an experienced teacher approved by the college or university in which the candidate is enrolled.

In each State an agency regulates the certification of teachers. This agency issues a certificate or license to teach once all State requirements have been met. States issue several types of certificates, based on training and need: permanent (regular), probationary, and temporary, with the specific nomenclature varying from State to State.

Many States require that a teacher acquire a graduate degree within ten years. Often States or local school districts offer salary increases and free tuition as incentives to pursue study beyond what is required.

Inservice

Most U.S. school districts assist or encourage teachers at the elementary and secondary levels to continue their professional growth in one way or another. To this end, teachers often have the opportunity to attend formal courses and workshops that confront significant classroom problems or explore new approaches. Those that attract the most participants tend to focus on problems that affect large numbers of teachers, such as instructing handicapped children in regular classes, meeting the needs of children from low-income families, and providing bilingual and multicultural education.

Not only do higher education institutions provide these programs, but many large school districts and several smaller ones sponsor workshops using their own staff, with or without outside consultants. Many districts have established inservice training centers, which often include a reference library, an audiovisual center, workrooms for developing instructional materials, and rooms for seminars or lectures. With increasing frequency, the control of teacher centers is being entrusted to the teachers themselves.

Other inservice opportunities available to teachers include: visits to other schools, availability of consultants for individual problems, and special days (often called "inservice days") during which pupils are excused from school and teachers participate in special programs designed to help them improve their understanding of problems and their classroom performance.

Many school districts encourage their teachers to participate in inservice education through a variety of strategies. They may (1) require a prescribed number of courses before a teaching contract can be renewed; (2) subsidize tuition fees at a university; (3) increase the salary of teachers who earn higher degrees, complete a given number of credit hours, or participate in other inservice activities; (4) release teachers from classroom responsibilities and provide travel expenses to enable them to attend professional meetings; (5) approve sabbaticals; or (6) legitimize release time during the day.

FINANCING

In 1992-93, the United States spent an estimated $445.3 billion, or 7.8 percent its gross national product, on education. Funds for education came primarily from taxes collected by State, local, and Federal governments. In 1988-89, about $330.5 billion, or 6.8 percent of its gross national product, was spent on education.

ELEMENTARY AND SECONDARY EDUCATION

Public elementary and secondary schools receive virtually all of their revenues from government sources, mostly from the State or local school district. In 1992, total revenue receipts amounted to $261.1 billion, as opposed to $158.8 billion in 1987. Until relatively recent times, local government has been the prime source of funding for elementary and secondary schools; but since 1978-79, revenues from State governments have slightly exceeded those from local governments. For example, in 1990-91, the federal government spent $6.7 billion on elementary and secondary education; State governments spent $43.6 billion; and local governments spent $40.6 billion, with an additional $10.1 billion spent by private and other sources. With the increased role of the State in financing public elementary and secondary education, the proportionate share of funding by the Federal government has correspondingly decreased, despite a steady increment of Federal spending on education over the past two decades. Thus, while the proportion of revenue received from the Federal government dropped from 9.8 percent of the total in 1980 to 5.6 percent in 1993, Federal expenditures on education rose from $14.1 billion in 1980 to $34.8 billion in 1992 -- an increase of slightly more than 145 percent. The Federal share of education costs tends to be greatest in States and localities with large numbers of disadvantaged children or with numerous Federal installations.

Per-pupil expenditures varied greatly among the States in 1989-1990, the last period for which figures are available, from a high of $8,374 in Alaska to a low of $2,730 in Utah, with the level of most States ranging from $4,000 to $6,000. These differences are not just a result of varying levels of commitment to education but reflect cost-of-living differences and the relative economic bases from which States can derive income. Within States where there are large discrepancies among per-pupil expenditures there have been court challenges to equalize the distribution of State funds.

HIGHER EDUCATION

About 30 percent of the total funds for education flow to higher education institutions -- 10 percent less than in 1989. However, during the past decade, expenditures and tuition costs for these institutions have risen significantly.

After adjustment for inflation at colleges and universities, current-fund expenditures per student rose about 17 percent between 1980-81 and 1990-91. Administrative expenditures (institutional support and academic support, less libraries) have been rising more rapidly than most other types of college expenditures. At public universities, between 1980-81 and 1990-91, inflation adjusted administration expenditures rose 28 percent compared with 12 percent for instruction expenditures per student. At private universities during the same period, the per student administrative costs rose 45 percent, and the instruction costs rose by 38 percent. One of the most rapidly rising expenditures during the decades was the funding of scholarships and fellowships, which rose by 51 percent per student at public universities and by 71 percent at private universities.

As for tuition, for the 1992-93 academic year, annual undergraduate charges for tuition, room, and board are estimated at $5,394 at public colleges and $14,741 at private colleges. Between 1982-83 and 1992-93, charges at public colleges have risen by 83 percent and charges at private colleges by 113 percent. These increases substantially surpassed the rise in the Consumer price Index, which was up about 45 percent during the same period.

FEDERAL AID

In school year 1992-93, the U.S. Department of Education contributed an estimated $36.7 billion to help support and strengthen the Nation's schools. The Department contributed 5.7 percent of the Nation's total expenditures on elementary and secondary education and 12.2 percent of total expenditures on higher education, as well as funded adult and vocational education, public libraries, education research and statistics, and its own management costs. In addition, almost every other Federal agency funded some programs that directly or indirectly contributed money and services to schools.

The following summaries and funding estimates for Fiscal Year 1993 demonstrate the continued level of financial support and public visibility in six major Federal Programs.

Education for the Disadvantaged

The primary program for the disadvantaged (generally referred to as "(Chapter 1") provides compensatory education services for about 5 million disadvantaged elementary and secondary school students. These funds are appropriated to provide supplementary services to assist disadvantaged children to acquire basic academic skills and thus enhance their opportunity to participate fully in society and to share equally in its benefits. Funding was $4.6 billion in 1989 and an estimated $6.7 billion in 1993.

Education for Children with Disabilities

This program provides special services for about 4 million children with disabilities in elementary and secondary schools. It assists States to provide opportunities for education to students with disabilities. The goal is to ensure that all such children acquire basic academic skills and thus enhance their opportunity to participate fully in society and to share equally in its benefits. Funding was for $4.6 billion in 1989 and an estimated $5.2 billion in 1993.

Vocational Education

This program provides support services to about 17 million students. Funds are channeled into activities directly related to improving vocational education; into programs for "special populations," including children with disabilities and those educationally disadvantaged; and into strengthening the capacity for State leadership in vocational education. Funding for 1989 was $1.1 billion and an estimated $1.48 billion in 1993.

Grants for School Improvement

This grant program (often referred to as "Chapter 2"), part of the Education Consolidation and Improvement Act of 1981, provides aid to States to improve the quality of education for all children. This program focuses on general improvement in education rather than on narrow categorical activities, while allowing local and State officials to set their own priorities among the various activities. Chapter 2 operates on the assumption that the States and local school districts have the best understanding of the needs of their children and that they must be given the flexibility to use this understanding in a way that will best serve local schools and students. Funding for 1989 was $1.3 billion and an estimated $1.5 billion in 1993.

School Assistance in Federally Affected Areas

Known as "Impact Aid," this program assists school districts that enroll students whose parents both live and work on Federal property and thus are ineligible for an education funded by local tax revenues. Funding for 1989 was $.8 billion and an estimated $.75 billion in 1993.

Student Financial Assistance

These programs help students meet the cost of attending postsecondary institutions through grants, low-interest loans, and work study programs. Almost 80 percent of all student aid is derived from these programs. Funding for 1989 was $10.5 billion and an estimated 12 billion in 1993.

Other Department of Education programs that expend a significant amount of financial support include: education research and improvement; adult education; bilingual and minority language programs; and aid to higher education. Combined funding for these programs in 1989 was $2.6 billion and an estimated $2.8 billion in 1993.

PART II

RECENT EDUCATION STATISTICS AND FEDERAL LEGISLATION

STATISTICS

OVERVIEW

Approximately 71.8 million people were involved in U.S. education in the fall of 1993, up from 65.2 million in the fall of 1988. Included in this total are 63.9 million students; 3.7 million teachers and faculty at the elementary, secondary and postsecondary levels; and 4.2 million professional, administrative, and support staff. Thus, in a Nation with a population of around 258 million, more that one out of every four persons was participating in education at some level -- whether elementary, secondary, or postsecondary. Yet educators and public policy leaders are calling on even more Americans to become "lifelong learners." For many reasons, then, education has begun to command increased attention in contemporary U.S. society.

The segment that follows contains further statistics and tables that paint a more detailed, quantitative picture of education in the United States. These figures suggest, rather than define in absolute terms, the progress of U.S. education over the past several years.

ENROLLMENT

Enrollment in U.S. elementary and secondary schools has ebbed and flowed over the past two decades, reaching an all-time high of 51.3 million students in 1971, dropping to 45 million in 1984, then climbing slightly to 45.4 million in 1988. By 1992, the number had reached 47.8 million. These increases have been concentrated at the elementary school level (kindergarten through grade 8) where enrollment rose from 31.2 million in 1984 to 34.4 million in 1992. In contrast, the enrollment at the high school level -- grades 9 through 12 -- declined during the same period from 13.8 million to 12.6 million.

Enrollment in Elementary and Secondary Institutions

Enrollment trends in elementary and secondary schools in the United States closely mirror changes in the school-age population. At age five, about 91 percent of the children tend to be enrolled in preprimary or elementary school; at age six through 13, more than 99 percent; and at age 14 through 17, about 95 percent. Enrollment declined in the 1970s and early 1980's because there were fewer school-age children. In fall 1985, elementary and secondary school enrollments increased for the first time since 1971. Enrollment has continued to rise, as evidenced by an increase of 7 percent from 1985 to 1992. However, elementary and secondary enrollment exhibited contrasting patterns. Between 1985 and 1992, public elementary enrollment rose by 13 percent while secondary enrollment declined by 6 percent, a discrepancy explainable in terms of a very recent rise in births.

During the 1970s and early 1980s, preprimary education enrollment grew substantially. Between 1970 and 1980, preprimary enrollment of 3- to 5-year-olds rose by 19 percent; between 1980 and 1992, it increased an additional 31 percent. An important feature of the growing participation of young children in preprimary schools is the increasing proportion of full-day programs. In 1992, about 38 percent of children in this age group attended school all day, compared with 32 percent in 1980 and 17 percent in 1970.

Despite drops in total elementary and secondary school enrollment during the late 1970s and early 1980s, increasing numbers of children were served in programs for the handicapped. In 1976-77, 8 percent of children were served in these programs, compared with 12 percent in 1990-91. However, since 1983-84, the increases have been relatively small. Much of the rise in the 1976-77 to 1989-90 period may be attributed to the passage of the Education of the Handicapped Act of 1975 and an increasing proportion of children being identified as "learning disabled," which rose from less than 2 percent of all children in 1976-77 to 5 percent of all children in 1990-91.

The trend in births in the recent past ensures that enrollment will continue to grow for a number of years. According to projections by the National Center for Education Statistics, an arm of the U.S. Department of Education, by the year 1995, total student enrollment in educational institutions should reach 64.6 million, and by the year 2000 it should reach 68.1 million.

Enrollment in Higher Education

In higher education institutions, the enrollment trend has been generally upward for many years. Higher education enrollment increased by 41 percent between 1970 and 1980. Since then, enrollments have risen more slowly. Between 1980 and 1992, enrollment increased about 20 percent, from 12.1 million to a record 14.6 million. Much of this growth was in part-time students. Between 1980 and 1992, the number of men enrolled rose only 13 percent, while the number of women increased by 27 percent.

The number of older students has been growing more rapidly than the number of younger students. Between 1980 and 1990, the enrollment of students under age 25 increased by only 3 percent. During the same period, enrollment of those 25 and over rose by 34 percent. The National Center for Education Statistics projects from 1990 to 1998 a rise of 14 percent in enrollments of persons over 25 and an increase of only 6 percent in the number of those under 25.

Enrollment trends have differed at the undergraduate, graduate, and first-professional levels. Undergraduate enrollments increased rapidly during the 1970s, but dipped between 1983 and 1985. Since 1985, undergraduate enrollment has risen steadily, increasing 15 percent between 1986 and 1991. Graduate enrollment held steady at about 1.3 million in the late 1970s and early 1980s, but rose about 14 percent in the years between 1986 and 1991 to slightly over 1.6 million. After rising very rapidly during the 1970s, enrollment in first-professional programs stabilized in the 1980s. There was a small increase in first-professional enrollment between 1986 and 1991.

Since 1984, the number of women in graduate schools has exceeded the number of men. Between 1981 an 1991, the number of male full-time graduate students increased by 23 percent, compared with 45 percent for full-time women. Among part-time graduate students, men increased by only 6 percent compared with 25 percent for women.

The proportion of minority students has been rising. In 1976, 15.7 percent of all students were minorities, compared with 21.2 percent in 1991. Much of the change can be attributed to rising numbers of Hispanic and Asian students. The proportion of black students has fluctuated over the past 15 years. In 1976 it was 9.6 percent, and it was 9.6 percent again in 1991. These percentages exclude foreign students enrolled in U.S. colleges and universities.

Despite the sizable numbers of small colleges, most students attend the larger colleges. In fall 1991, 38 percent of higher education campuses had fewer than 1,000 students; yet altogether, these campuses enrolled only 4 percent of college students. On the other hand, though only 12 percent of the campuses enrolled over 10,000 students each, they accounted for 53 percent of total enrollment.

TEACHERS AND STAFF

Staff in Elementary and Secondary Schools

The number of teachers in U.S. elementary and secondary schools has continued to rise through the years. The increase continued even during the 1970s and early 1980s, when enrollment was decreasing. The number of elementary and secondary school teachers grew from 2.5 million in 1984 to an estimated 2.8 million in 1991. This number has risen in recent years, up about 11 percent since 1985. The number of public school teachers in 1993 was about 2.5 million, and the number in private schools was estimated at about 0.4 million. About 1.8 million teachers were teaching in elementary schools, while about 1.1 million were employed at the secondary level.

The number of public school teachers has risen at a faster rate than the number of students in recent years, resulting in a continuing decrease in the pupil/teacher ratio. In the fall of 1992, there were 17.3 pupils per public school teacher, compared with 18.6 pupils per teacher 10 years earlier. During the same time period, the pupil-teacher ratio in private schools fell from 17.2 to 14.8.

In general, public school teachers receive substantially higher salaries than private school teachers. In 1990-91, the average base salary for public school teachers was $31,296, compared with $19,783 for private school teachers. The average salary for public school teachers has grown rapidly in recent years, reaching $35,334 in 1992-93. After adjustment for inflation, teachers' salaries rose 18 percent between 1982-83 and 1992-93, more than recouping the losses in purchasing power suffered during the 1970s.

The number of nonteaching staff employed by public schools grew at a faster rate than the number of pupils and teachers in the 1970s. During the 1970s, the proportion of the total staff who were teachers declined from 60 percent to 52 percent. In the 1980s, the number of teachers grew at about the same rate as other public school staff. In 1969-70, there were 13.6 pupils per staff member (total staff) compared with 9.2 pupils per staff member in 1991. In 1990-91, the number of pupils per staff member at private schools was 9.5.

Staff in Higher Education Institutions

Small increases have occurred over time in the number of instructional staff members in colleges and universities. In most years, the increases have been proportional to the rise in full-time-equivalent enrollment in those institutions. For example, from 1984 to 1990, the increase in college faculty is estimated to have risen from 717,000 to 824,220.

The student-staff ratio at colleges and universities dropped from 5.4 in 1976 to 4.8 in 1989, the latest year for which figures are available. During the same time period, the student-faculty ratio dropped from 16.6 to 15.7. The proportion of staff who were administrative and other non-teaching professional staff rose from 15 percent in 1976 to 22 percent in 1989, while the proportion of staff identified as non-professional declined from 42 percent to 38 percent.

Approximately 2.5 million people were employed in colleges and universities in the fall of 1989, including 1.5 million professional and .9 million nonprofessional staff. About 40 percent of the staff were teachers or teaching assistants, 22 percent were other non-teaching professionals, 18 percent were clerical of secretarial, and the remaining 20 percent were technical, paraprofessional, skilled crafts, service, and maintenance staff.

Colleges differ widely in their practices of employing part-time and full-time staff. In fall 1989, only 52 percent of the employees at public two-year colleges were employed full-time compared with 76 percent at public and 75 percent at private four-year colleges. A higher proportion of the faculty at public four-year colleges (79 percent) was employed full-time than at private four-year colleges (64 percent) or public two-year colleges (39 percent).

About 10 percent of full-time faculty in colleges and universities were minorities in 1987-88. Four percent of the faculty were Asian-Pacific Islanders; 3 percent were black; 2 percent were Hispanic; and 1 percent were American Indian.

College faculty generally suffered losses in the purchasing power of their salaries from 1972-73 to 1980-81, when average salaries fell 17 percent after adjustment for inflation. During the 1980s, average salaries were on the rise and have recouped most of the losses. Changes in 1990-91 and 1991-92 were relatively small. Average salaries for men in 1991-92 ($46,848) were considerably higher than the average for women ($37,534) and have increased at a faster rate since 1980-81.

The proportion of faculty with tenure has remained relatively stable in recent years. About 64 percent of full-time faculty were tenured in 1991-92, but a large difference existed between the proportion of men and women with tenure. Seventy percent of men compared with 49 percent of women were tenured in 1991-92. About 66 percent of the faculty at public institutions were tenured, compared with 57 percent of faculty at private institutions.

EDUCATIONAL ATTAINMENT OF THE POPULATION

Since 1940, the Bureau of the Census, U.S. Department of Commerce, has collected statistics on the educational attainment of the population in the United States. The data from these household surveys are available in Census reports that provide detailed information by age, race, and sex. Table three, which is derived from Census publications, shows the level of education completed by the entire adult population 25 years of age and over and also by young adults 25 to 29 years old. The data indicate that through the years there has been a strong upward trend in the proportion of adults who complete their high school and college education. The trend has continued into the 1990s, although the rate of increase has decreased perceptibly in recent years.

Between 1988 and 1991, the proportion of adults with four years of high school or more rose from 77.7 percent to 79.9 percent. During the same period, those with four or more years of college increased from 20.9 to 22.2 percent. Among young adults (ages 25-29), the proportion with four years of high school or more dropped slightly from 85.9 percent in 1988 to 85.5 percent in 1991, while those with four or more years of college edged up slightly from 23 percent in 1988 to 23.2 percent in 1991. Although the white population has completed more years of school than blacks and other races, the gap has narrowed substantially in recent years.

HIGH SCHOOL AND COLLEGE GRADUATES

High School Graduates

The number of high school graduates in 1992-93 totaled about 2.5 million. Slightly less than 2.3 million graduated from public schools and less than .03 million graduated from private schools. Because of a decrease in the population of teenagers, the number of high school graduates has declined from its peak in 1976-77 when 3.2 million people earned their diplomas.

Although the number of graduates has been lower in recent years, comparisons of the number of public and private high school graduates with the 17-year-old population show that the proportion of young people earning regular high school diplomas has not decreased over the past 20 years. At its highest point in 1968-69, there were 77.1 graduates for every 100 persons 17 years of age. This ratio declined during the 1970s, falling to a low point of 71.4 in 1979-80. The ratio has risen since then, reaching 73.8 in 1992-93. Other measures, such as the dropout rate among 16- to 24-year-olds (which count GED recipients as completers) suggest some improvements, especially for blacks.

College and University Graduates

The number of degrees conferred by institutions of higher learning is expected to be at an all-time high during the year 1992-93: 497,000 associate degrees; 1,145,000 bachelor's degrees; 364,000 master's degrees; and 41,200 doctor's degrees.

The total number of bachelor's degrees increased slowly during the early 1980s and more rapidly at the end of the decade, especially for women. Between 1980-81 and 1990-91, the number of bachelor's degrees awarded to men increased by 7 percent, while the number of degrees awarded to women rose by 27 percent.

In recent years, more people are completing college. Between 1980-81 and 1990-91, the number of associate, bachelor's, masters, and doctor's degrees rose. Associate degrees increased 16 percent, bachelor's degrees increased 17 percent, master's degrees increased 14 percent, and Doctor's degrees increased 19 percent during this period. The number of first-professional degrees during this period was about the same in 1990-91 as it was in 1980-81. They declined in the mid 1980s before rising in the late 1980s.

Of the 1,094,538 bachelor's degrees awarded in 1990-91, the largest number of degrees were conferred in the fields of business and management (249,960), social sciences (124,893), education (111,010), engineering and engineering technology (78,864), health professionals (59,268), and psychology (58,451). At the master's level, the largest fields were education (88,904), and business and management (78,681). The largest fields at the doctor's level were education (6,697), engineering and engineering technology (5,272), physical sciences (4,290), and life sciences (4,093).

The pattern of bachelor's degrees by field of study has shifted significantly in recent years. The pace of growth in such areas as business and management has subsided, and declines are significant in male majority fields such as engineering and computer and information sciences. The number of degrees conferred in business and management rose by 19 percent between 1980-81 and 1985-86, but only by 5 percent between 1985-86 and 1990-91. Engineering and engineering technologies rose 28 percent between 1980-81 and 1985-86, but then posted a decline of 18 percent between 1985-86 and 1990-91. In contrast, some fields that had been declining (e.g., psychology and other social sciences) began to increase. For example, the number of degrees conferred in social sciences dropped by 7 percent between 1980-81 and 1985-86, but rose 33 percent between 1985-86 and 1990-91. In 1987-88, the number of degrees conferred in education rose for the first time since 1972-73. To some extent, these shifts during the 1985-86 and 1990-91 period highlight the increasing female majority on college campuses by reflecting significant increases in degrees in predominantly female fields and decreases in predominantly male fields.

Only about half of the students who enrolled full-time in a four-year college in 1980 graduated with a bachelor's degree by 1986, according to the High School and Beyond survey. About 55 percent of the students who enrolled in private four-year colleges earned a bachelor's or higher degree by 1986 compared with 46 percent in public four-year colleges.

Total Funding for Education

Total expenditures for public and private education at all levels (elementary, secondary, and higher education) rose from about $330.5 billion in 1988-89 to an estimated $445.3 billion in 1992-93. The expenditures of elementary and secondary education are expected to total about $279 billion for this period, while institutions of higher learning will spend about $187 billion.

The Funding of Elementary and Secondary Education

Elementary and secondary spending amounted to about 60 percent of total expenditures, and colleges and universities accounted for the remaining 40 percent. The expenditure per pupil in public schools has risen significantly in recent years, even after allowing for inflation. In 1992-93, the estimated current expenditure per pupil in average daily attendance was $5,762. After adjustment for inflation, this figure represents an increase of 34 percent since 1982-83.

Public elementary and secondary schools received virtually all of their funding from governmental sources, especially State and local governments. The state share of revenues for public education grew steadily through most of the 1980s, but in 1987-88 the trend began to reverse. Between 1987-88 and 1990-91, the local share of school funding rose to equal the proportion from state governments. In 1990-91, 47 percent of all revenue came from State sources, 47 percent came from local sources, and 6 percent came from the Federal government.

The Funding of Higher Education

Colleges and universities received income from a variety of sources, including State and local government, tuition fees from students, sales and services, the Federal government, private gifts and grants, and endowment earnings. A prime difference in the financing of public and private higher education institutions is revealed in the fact that most public institutions receive major contributions from State governments, while private colleges and universities rely to a much greater extent on tuition and fees from students. This difference means that public institutions can keep their tuition and fees relatively low compared with charges at private colleges. For example, in 1991-92, a full-time undergraduate student attending a public college or university in his or her home State paid an average of about $1,665 in tuition and fees for that year. During the same year, the average student in a private institution paid $9,498 in tuition and fees.

With the rise of school enrollment in the 1990s and a growing public awareness of the importance of education, over the past four years the U.S. has devoted a higher proportion of its resources to its schools. In 1987-88, total spending for education amounted to 6.9 percent of the gross domestic product. In 1992-93, total expenditures for education are expected to amount to about 7.8 percent of the gross domestic product.

FEDERAL LEGISLATION

Between 1990-1994, new laws were enacted that affected education in the United States. The Bush Administration enacted some legislation between 1990-1992. In 1993 and 1994, the Clinton Administration enacted several bills into law, bringing about the most sweeping changes in American education since 1965, during The Great Society program of former President Lyndon Johnson. Some of this enacted legislation consisted of the reauthorization of funding for existing major programs, with amendments and additions. The laws passed during the Clinton Administration broke new ground in the providing of government funds and services. The most important of the laws of both Administrations are briefly described below under the heading "Enacted Legislation."

ENACTED LEGISLATION

The following are major laws affecting education that were passed between the years 1990 and 1994.

National Literacy Act (1991)

This Act established new literacy programs, provided higher authorization levels for some existing adult literacy programs, and restored eligibility for various programs to the Freely Associated States (i.e. the Republic of the Marshall Islands and the Federated States of Micronesia). The purpose of the Act was "to enhance the literacy and basic skills of adults, to ensure that all adults in the United States acquire the basic skills necessary to function effectively and achieve the greatest possible opportunity in their work and in their lives, and to strengthen and coordinate adult literacy programs."

Education Council Act (1991)

This Act established the National Education Commission on Time and Learning and the National Council on Education Standards and Testing. The National Education Commission on Time and Learning was to review the relationship between time and learning in the Nation's schools and make a report on its findings by April 1994. The National Council on Education Standards and Testing was to provide advice on the desirability and feasibility of developing national standards and conducting national testing of school children. The Council was directed to make its report by December 1991. Both reports have been published.

Reauthorization of the Higher Education Act of 1965 (1992)

This bill extended for five years the provisions of the Higher Education Act, as reauthorized in 1986. This legislation -- which included renewal of the higher-education student aid programs, such as Pell grants and student loans -- had as its

broad purpose to expand student access to postsecondary education, encourage educational excellence, and ensure integrity in making service delivery. It also contained substantial amendments to the earlier act, adding more than forty programs in higher education.

Education of the Deaf Act Amendments (1992)

This Act extended for five years support of programs at Gallaudet University, with its hearing-impaired student body, and at the National Institute for the Deaf (NTID). The purpose of this legislation was to allow Americans who are hearing-impaired to receive training and education that will qualify them to live full and productive lives.

Rehabilitation Act Amendments (1992)

This Act expanded the scope of previous legislation by (1) requiring the States to develop valuative studies and performance indicators for many of their programs, (2) vesting authority in the Secretary of Education to increase client choice within the vocational rehabilitation process, and providing authority to support business partnerships to develop model projects that give unemployed workers with disabilities the opportunity to acquire the knowledge and skills needed to advance employment. The purpose of this bill was to bring greater integrity to existing programs and expand the educational opportunities for disabled Americans.

Student Loan Reform Act (1993)

This Act reformed the student aid program by phasing in a system of direct lending which will eliminate private lenders and guaranty agencies, empowering the U.S. Department of Education to channel loan funds through postsecondary institutions. This new process is estimated to save tax payers and students $4.3 billion by 1997. Schools with adequate administrative capacity can originate loans on campus. Smaller schools have alternative processes. Students can choose among a variety of repayment options, including income contingency.

Rehabilitation Act and Education of the Deaf Act Technical Amendments (1993)

These amendments made no substantive policy changes, but corrected unforeseen operational problems caused by changes enacted in 1992.

Migrant Student Record Transfer System (MSRTS) (1993)

This Act extended temporarily the Department of Education's contract for the Migrant Student Record Transfer System (MSRTS), pending possible modification in the reauthorization of the Elementary and Secondary Education Act. MSRTS is a centralized database that maintains records on the school-age children of migrant workers, since these students must transfer from school to school as their parents move from community to community seeking farm work.

Higher Education Technical Amendments Act (1993)

This Act amended the Higher Education Act to make technical changes and conforming amendments.

National Assessment of Educational Progress, (1994)

This Act authorized the use of the National Assessment of Educational Progress (NAEP), a standardized test administered to selected schools nationwide, for State-by-State comparisons.

National Service Trust Act (1993)

This Act amended the National and Community Service Act of 1990 to establish a Corporation for National Service and enhance opportunities for service to the nation. The Act provided education grants of up to $4,725 per year to people aged 17 years or older who perform community service before, during, or after postsecondary education.

GOALS 2000: Educate America Act (1994)

This Act is the centerpiece of the Clinton Administration's initiative to bring about systemic educational reform. It established a new federal partnership through a system of grants to states and local communities to reform the Nation's education system. This legislation formalized the six National Education Goals and their objectives, added two new goals, and established in law the National Education Goals Panel. The Act created a National Education Standards and Improvement Council (NESIC) to provide voluntary national certification of state and local education standards and assessments-to spur increased educational opportunity while creating greater accountability and responsibility for students and schools. It also established the National Skills Standards Board to develop voluntary national skill standards. More details are provided in Part III.

School-to-Work Opportunities Act (1994)

This Act established a national framework within which states and communities can develop School-to-Work Opportunities programs to prepare young people for first jobs and continuing education. It will facilitate the development of a system of rigorous academic and occupational preparation for students. The legislation provided seed money to states and communities to develop a system of programs that include work-based learning, school-based learning, and connecting activities. School-to-Work programs will provide students with a high school diploma (or its equivalent), a nationally recognized skill certificate, an associate degree (if appropriate), and may lead to a first job or to further education. More details are provided in Part III.

Safe Schools Act (1994)

This Act authorized the award of competitive grants to local educational agencies with serious school crime to implement violence prevention activities such as conflict resolution and peer mediation.

Educational Research, Development, Dissemination and Improvement Act of (1994)

This Act reauthorized the educational research and dissemination activities of the U.S. Department of Education's Office of Educational Research and Improvement (OERI). It established five institutes which will conduct research in direct support of the national education goals. The legislation also authorized continuation of the regional educational laboratories and university-based research and development.

Student Loan Default Exemption Extension Act (1994)

This Act amended the Higher Education Act of 1965 to extend until July 1, 1998 the effective date for cohort default rate exemption for Historically Black Colleges and Universities, tribally controlled community colleges, and Navajo community colleges.

PENDING LEGISLATION

Improving America's Schools Act (Reauthorisation of ESEA)

This proposed Act, expected to be passed by the Congress in 1994, would reauthorize the Elementary and Secondary Education Act of 1965, with some significant changes. The Department's bill would require States to develop high-quality content and performance standards and assessments in order to qualify for certain kinds of federal funding; emphasizes local control and flexibility in exchange for accountability; shifts the focus away from remedial programs and emphasizes overall school performance; promotes school equity by focusing Federal funds for high poverty areas;

links some federal funding to health, social service, early childhood, and school-to-work programs; expands the Eisenhower Professional Development Program to help teachers upgrade their knowledge and skills; requires parent-school "compacts" that spell out mutual responsibilities of parents and schools; provides for planning and opening public "charter" schools that can operate outside many constraining rules and regulations; provides for technology research and development; provides for bilingual education; gives the Secretary broad authority to waive requirements that stand in the way of reform, but continues to protect the rights of minorities and children with disabilities; and expands the Safe and Drug-Free Schools and Communities program to include violence prevention.

NCES Reauthorization Act

Section 406 of the General Education Provisions Act authorizes the activities of the National Center for Education Statistics. The NCES reauthorization is being considered with the reauthorization of ESEA.

PART III

EDUCATION REFORM

1990 - 1994

THE END OF THE BEGINNING: THE EDUCATION REFORM MOVEMENT FROM 1990 TO 1994

> Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning....
>
> -- Winston Churchill, 1942

BACKGROUND

The first federal call for the reform of American education came in 1981 when Secretary of Education T.H. Bell created a National Commission on Excellence in Education to "report on the quality of education in America...." That report, A Nation at Risk, was published in 1983 and contained the grim observation that "if an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war." The report called for widespread, systemic reform and made four major recommendations: a strengthening of graduation requirements, more rigorous and measurable standards, more time in school, and significant improvement of teaching. The report also sounded this cautionary note:

> Our final word, perhaps better characterized as a plea, is that all segments of our population give attention to the implementation of our recommendations. Our present plight did not appear overnight, and the responsibility for our current situation is widespread. Reform of our educational system will take time and unwavering commitment. It will require equally widespread, energetic, and dedicated action.

With this report, the Nation as a whole was alerted to the plight of U.S. education and the need for a comprehensive revitalization of the school system. However, for the next two or three years reform was chiefly confined to State and local initiatives.

Then, in 1986, The National Governors' Association took official notice of the problem. In a strong statement, the Governors linked achievement in education to performance in the international marketplace: "Better schools mean better jobs. To meet the stiff competition from abroad, we must educate ourselves and our children as never before."

The Carnegie Forum on Education and the Economy was even more direct:

> If our standard of living is to be maintained, if the growth of a permanent underclass is to be averted, if democracy is to function effectively into the next century, our schools must graduate the vast majority of their students with achievement levels long thought possible for only the privileged few. The American mass education system...will not succeed unless it....strives to make quality and equality of opportunity compatible with each other.

In 1989, shortly after he took office, President George Bush invited the Nation's 50 governors to attend an Education Summit to discuss the current condition of education and what course of action might be adopted to reverse the trend toward mediocrity. At this Summit, a remarkable consensus emerged on the nature of current educational problems and the broad strategies necessary to solve these problems. The Nation's Governors, in cooperation with the White House and the education community, focused the attention of the public on seeking solutions by establishing six National Education Goals and insisting that they be achieved by the year 2000:

Goal #1: **All children in America will start school ready to learn.**

Goal #2: **The high school graduation rate will increase to at least 90 percent.**

Goal #3: **American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter, including English, mathematics, science, foreign languages, civics and government, economics, art, 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 Nation's modern economy.**

Goal #4: **U.S. students will be first in the world in science and mathematics achievement.**

Goal #5: **Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.**

Goal #6: **Every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.**

The identification and articulation of goals, however, constituted no more than a first step in the direction of education reform. The Nation in general, and educators in particular, now knew in the broadest terms what was expected of U.S. schools; but there was no consensus concerning strategies to achieve these ends. Reform initiatives had sprung up in all parts of the country, many of them innovative and effective; but there was no evidence that the Nation as a whole had the ability or the inclination to adopt a single plan of action leading to the achievement of the National Goals by the year 2000. In the first place, given the widespread diversity of regions, States, and cultures in the United States, it would be difficult to devise a broad systemic approach that would work in every part of the country for every group.

In the second place, the political system of the United States is not structured for national solutions in the field of education. Except in very special circumstances, the U.S. Department of Education is forbidden by law to involve itself in curricular decisions at the State and local level, and in only one or two specific areas (for example, civil rights enforcement) is the federal government empowered to take certain actions in the management of local schools.

For these reasons, public policy leaders recognized from the outset that any Federal role in achieving the National Education Goals would have to gain its authority through persuasion rather than coercion. The White House and the Department of Education could propose solutions; the States and local school districts could accept or reject Federal proposals.

Yet many leaders felt that some Federal leadership was necessary if the nation as a whole was to improve its schools and achieve the National Education Goals by the year 2000. There were several things the Department of Education could do -- indeed was already doing -- to contribute to the development of a plan to meet the Goals.

In the first place, the Department -- through its Office of Educational Research and Improvement -- was funding and conducting research to analyze the problems faced by educators and those strategies and solutions that seemed most successful. In the second place, the Department, through its Educational Resources Information Centers (ERIC) and other databases and networks, was disseminating a wide range of pertinent information on educational programs to the educational community. For this reason, many reformers concluded that the Department could use these legitimate functions to provide national leadership in achieving the six National Education Goals.

REFORM AT THE FEDERAL LEVEL

AMERICA 2000 Excellence in Education Bill

As a follow-up to the Education Summit, the Bush Administration introduced "The AMERICA 2000 Excellence in Education Act," a legislative package that called for funding the following: Presidential Merit Schools -- rewards to schools that made progress in raising achievement, fighting drugs, and reducing dropout rates; Presidential Awards for Excellence in Education: appropriation of funds to give $5,000 awards to teachers in every state who meet the highest standards of excellence; National Science Scholarships -- 570 college scholarships to be awarded annually to high school seniors in order to encourage them to take more courses in the sciences and mathematics; Magnet Schools of Excellence -- grants would be awarded on a competitive basis to local districts to support magnet schools for purposes other than for desegregation; Alternative Teacher and Pupil Certification -- one-time grants awarded to States to design, develop, or implement creative and flexible alternative teacher certification systems; Historically Black Colleges and Universities -- provision of $60 million over a four-year period to help sustain black colleges; Drug-Free Schools Urban Emergency Grants -- one-time grants to urban school systems to develop and test approaches to the solution of local drug problems; Literacy Program for Homeless Adults -- funds to be used to implement and fully fund the McKinney Act program designed to address the special needs of homeless elementary and secondary students.

This legislative program was never passed by Congress. Supporters of the bill maintained that it would use the principles of free market economy to promote improvement by rewarding excellence and by introducing the element of choice into education. Opponents argued that the bill asked for too little in the way of additional Federal support for the States and did not focus on areas of major concern.

Creation of the National Goals Panel

In order to monitor the progress of the Nation in meeting the Goals and to provide a national focus for their implementation, the National Goals Panel was created in July of 1990. A 1992 report by the National Goals Panel contains this description of its composition and purpose:

> An unprecedented bipartisan association of Governors, senior national Administration officials, and Congressional representatives, the Panel monitors and reports annually to the American people on the nation's and each state's progress in achieving these Goals. The purpose of these Reports is not measurement for measurement's sake. Rather, by demanding an annual accounting of progress, they reinforce a commitment to the Goals and to educational

improvement efforts that will be necessary if the Goals are to be achieved...The Panel also recommends improvements and enhancements to existing data and assessment systems so that better information relevant to the National Goals can be provided to the American people in the future.

In order to ensure improvement throughout the education system, the National Goals Panel recognized the need for the development of "new, clear, and ambitious standards for the educational achievement of all students." A few months later Congress established the National Council on Education Standards and Testing, a bipartisan committee that recommended the creation of voluntary national standards and a voluntary national system of student assessments.

Conceding the enormity of such a task, the panel adopted a charter for a National Education Standards and Assessment Council (NESAC). The mission of this Council was "to ensure that the many standard-setting activities currently underway move forward expeditiously and reflect a broad national consensus about what all American students should know and be able to do if they are to achieve at world-class levels."

Given the nature of the educational system in the United States, it followed that National Education Standards could not be mandated by the federal government but had to be accepted voluntarily by each of the 50 states. However, since there was an extraordinary national consensus concerning the current state of U.S. schools, NESAC did not encounter significant resistance in its attempts to lead the way toward national standards, though some critics feared that standardized national testing might lead to a standardized national curriculum.

One of the first initiatives of NESAC was to ask professional organizations to develop voluntary national standards in their own fields. For example, the National Council of Teachers of Mathematics prepared mathematical standards; and literally thousands of teachers and scholars nationwide worked together to create standards in science, history, the arts, civics, geography, and English. The standards were to be ready by 1994-95 for use in the Nation's classrooms.

In order to assist organizations in the preparation of these standards, the U.S. Department of Education gave grants to major professional and scholarly organizations to develop voluntary national standards in different subjects. Department officials made it clear, however, that "national standards" did not mean "Federal standards," nor did "national testing" mean "Federal testing." The standards and testing would be developed by NESAC in cooperation with professional organizations, and the States would be free to adopt or reject them.

NESAC completed its initial task in 1992 and was disbanded. The National Goals Panel continued to monitor the development of national standards and testing, and a voluntary system should be in place by the deadline -- which is the school year 1994-95.

In its annual reports -- with the first appearing in 1991 -- the National Goals Panel began to address for the first time the performance of American schools on the various Goals. For example, the 1992 report devoted an entire chapter to the subject of "American Education in a Global Context" (pp. 3-13) and examined the data regarding dropouts, mathematics and science achievement, and higher education. The report noted the following:

- The performance of American students on international mathematics and science examinations has been fairly consistent over the past 25 years. In 1991, in mathematics the U.S. ranked last in a field of nine, and in science second to last.

- There is evidence that U.S. educational achievement deficiencies relative to other nations with whom we compete may be present as early as the first grade.

- The traditional U.S. lead in educational access and opportunity is less apparent today as other industrialized nations have increased their secondary and postsecondary completion rates. Among young adults (ages 25-34), both Japan and Germany now have higher high school completion rates than the United States.

- Unlike the results in both mathematics and science, recent evidence suggests that the basic knowledge and skill levels of Americans in geography and reading are comparable to those of most other students in industrial nations. This evidence, however, does not allow comparisons of higher-order thinking and reasoning skills in these subject areas.

- There are two differences of note in the learning environments of children in the U.S. and in nations whose educational performance exceeds that of U.S. students. First, there is evidence that students in such higher performing nations are more likely to take and succeed in courses that offer challenging subject matter than are U.S. students. Second, American parents appear to be more easily satisfied with their children's educational performance than parents in higher-performing nations.

- Relative to the population of graduation age, the United States grants more undergraduate degrees in science, mathematics, and engineering than Germany, France, and Italy -- but fewer than both Canada and Japan.

- Recent international data on worker attitudes reveal that Americans' belief in the value of work is comparable to German and Japanese workers, but U.S. workers are much less likely than workers in these countries to anticipate a need to upgrade their present job skills.

While the panel urged caution in the use of these limited data, it did suggest a strong "need for improved future international data collection efforts so that valid comparisons can be further developed and refined." However, the panel drew the following conclusions from the data surveyed:

> Some of the findings are positive. Relatively high proportions of our citizens complete formal schooling at both the secondary and postsecondary levels. Our basic reading and geography literacy rates appear comparable to other industrialized nations. We graduate large numbers of mathematicians, scientists, and engineers from our higher education institutions. And worker attitudes on the importance of their jobs compare favorably with those of workers in Japan.
>
> However, there is also much to be concerned about. American educational achievement deficiencies relative to other nations that we compete with may be present as early as the first grade. Even more troubling, the gap in student achievement seems to grow as students get older. As other nations graduate larger proportions of their young people from high school, the historic edge we have seen in graduation rates is slipping.
>
> (The National Education Goals Report: 1992, pp. 12-13)

AMERICA 2000

In 1991, The Bush Administration announced the establishment of AMERICA 2000 -- a "strategy" to implement the six goals. The Administration preferred the word "strategy" rather than "program" because it was proposing a general framework in which any number of programs might fit rather than mandating specific policies and practices at any level.

This strategy contained four separate tracks, each of which was designed to approach a different set of problems, though all had the same ultimate goal.

Track #1 called for better and more accountable schools.

Track #2 focused on the need for innovative research programs to create models for "a new generation of American schools."

Track #3 had as its primary focus those adults in need of further education, retraining, and motivation to learn.

Track #4 proposed to create communities "where learning can happen" by involving every town and city in the AMERICA 2000 strategy.

In order to enlist support for the AMERICA 2000 program, the President called on every neighborhood, town, and community to become an AMERICA 2000 community by doing four things:

1. adopting the six National Education Goals;

2. developing a community-wide strategy to achieve them;

3. designing a report card to measure results; and

4. planning for and supporting a New American School.

The details of AMERICA 2000 drew some criticism from both ends of the political spectrum. The unions were opposed to provisions for school choice, while conservatives saw some elements as a threat to the local autonomy of schools. Both groups expressed concerns about a national testing program.

However, there was widespread support for some of the provisions of the strategy. Indeed, the President, the Governors, and educational leaders at the State and local levels seemed to be in basic agreement on what needed to be done. They also agreed that the best solutions would probably come from classroom teachers and innovative local educators. As one U.S. Department of Education official put it: "This war won't be won at some bureaucratic headquarters back in Washington but in the educational trenches -- State by State, district by district, classroom by classroom."

Given the national dimensions to U.S. education problems, it may seem paradoxical to suggest that they could only be solved locally. Yet American education has always been decentralized, if not diversified; and any attempt to impose a national solution on the 50 States and more than 15,000 school districts would not only have been resisted by fiercely independent educators, but also might have raised constitutional questions.

By the end of 1992, 48 States and over 2,000 communities had committed themselves to the achievement of the National Education Goals and had become a part of AMERICA 2000.

New American Schools Development Corporation

When President Bush announced America 2000 as a national strategy for achieving the National Education Goals, he said: "For the sake of the future -- of our children and the nation -- we must transform America's schools." This statement echoed a constant theme in the Reform Movement: "the need to reinvent American education by designing new schools for a new century."

Corporate America, with a huge stake in the success of the educational system, responded to a specific request from the President by establishing the New American Schools Development Corporation (NASDC), "a private, non-profit, tax exempt organization" with a stated mission "to support the design and establishment of new high-performance learning environments that communities across the country can use to transform their schools for the next generation of American children." The business community saw this task as analogous to research and development in their own ranks, which they understood to be an essential element of competing in the international marketplace. Just as high-tech corporations have to develop new products and new manufacturing methods, they reasoned, so must schools develop new ways of teaching and learning -- perhaps in the process completely discarding current educational practice.

The specific objective of NASDC was "to raise $200 million to support the work of 'Design Teams' that focus the talent, energy, and expertise of a wide range of individuals and organizations on the task of designing and implementing new learning environments for the future." The Design Teams would be specifically chosen to reflect a diversity of attitudes and approaches.

As a NASDC publication put it:

> No two Design Teams will look alike. Each will bring together a unique assemblage of talent, drawing on knowledgeable individuals and experienced organizations with expertise in diverse areas.

In July of 1992, NASDC announced its first grants -- one-year contracts to 11 Design Teams. During this period, these teams designed, planned, and refined programs to be implemented in schools beginning in the 1993 school year. Following this two-year phase, NASDC announced that nine of the programs would undergo final modification and then be offered to education systems, communities, and schools all across the Nation. These programs are currently in the process of refinement. Two of the Design Teams elected to end their work during 1993 and not proceed with the next phase. NASDC itself plans to cease operations in 1996.

GOALS 2000: Educate America Act

In 1992, President Clinton was elected and appointed former Governor Richard Riley of South Carolina as his Secretary of Education. Riley took office in February of 1993.

While the Clinton Administration approved of some of the initiatives contained in AMERICA 2000, both the President and the Secretary rejected several key measures -- for example, the encouragement of a choice initiative that included private schools.

The new Administration wished to introduce massive educational reform measures of its own. In order to distinguish its efforts from AMERICA 2000, the Clinton Administration called its set of initiatives "GOALS 2000" and offered a legislative package of five proposed laws to support its platform for systemic educational reform throughout the nation. The proposed laws offered a systemic, integrated policy and procedure for bringing about reform in education for the first time in the history of this nation. The centerpiece of that legislative package and systemic educational reform -- "GOALS 2000: Educate America Act" -- was introduced in 1993.

Title I of Goals 2000 codifies into law the six original National Education Goals, and adds additional goals on parental involvement and professional development. The establishment of the goals recognized that learning begins at birth and continues through life. The goals provide a framework for a new, reformed education system for the 21st century. Many feel that these goals must be achieved if the United States is to remain competitive in the world marketplace and our citizens are to reach their fullest potential. Please see following page.

Title II -- "National Education Reform Leadership, Standards, and Assessments" -- establishes in law the National Education Goals Panel, as well as a National Education Standards and Improvement Council (NESIC). The Panel has the responsibility for reporting annually on State and national progress toward achieving the National Education Goals and for keeping this nation focused on the steps necessary to meet the goals. It also has responsibility for identifying actions that should be taken to enhance progress toward achieving the Goals and to provide all students with a fair opportunity-to-learn.

NESIC is responsible for establishing criteria for and certifying voluntary national content, student performance, and opportunity to learn standards, as well as State standards and assessment systems that are submitted on a voluntary basis. The voluntary national opportunity-to-learn standards will address: (1) the quality and availability of curriculum instructional materials and technologies, (2) the capabilities of

The National Education Goals as enacted into law in 1994 are as follows:

NATIONAL EDUCATION GOALS

By the Year 2000:

1. **All children in America will start school ready to learn.**

2. **The high school graduation rate will increase to at least 90 percent.**

3. **All students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter, including English, mathematics, science, foreign languages, civics and government, economics, art, 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 Nation's modern economy.**

4. **U.S. students will be first in the world in science and mathematics achievement.**

5. **Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.**

6. **Every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol and will offer a disciplined environment conducive to learning.**

7. **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.**

8. **Every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children.**

teachers to provide quality instruction in each content area, (3) the extent to which teachers and administrators have access to professional development, and (4) the extent to which curriculum instructional practices and assessments are aligned to content standards. NESIC will also work toward the development of criteria for certifying assessments that are consistent with the content standards -- assessments that can be used to (1) exemplify for students, parents, and teachers the kinds and levels of student achievement that are expected; (2) improve classroom teaching and learning; (3) inform students, parents, and teachers about student progress toward achieving the content standards; and (4) measure and motivate individual students, schools, districts, States and the Nation to improve educational performance.

Title III is the crux of the Act, designed to encourage State and local efforts to improve and reform their schools. Funds from Title III can be used to accelerate reforms already in progress and to initiate new strategies and programs. Central to Title III is a State Improvement Plan, which each State participating in Goals 2000 will develop. Most of the funds awarded to states will be passed on to local districts and schools to develop local and school improvement plans designed to address the same components required in the State plan.

Title V, establishes a National Skills Standards Board to encourage, promote, and assist industry, labor, and education in the voluntary identification, development, and adoption of high standards needed in each work area and the matching of those needs to curricula, work experience, training, and training material. The Board is also charged with the establishment of a means to assess and certify skills, using a wide range of evaluation techniques to measure achievement against the voluntary, broadly-based skill standards. It will also develop systems to keep the standards abreast of changes in occupational needs and technological innovations, and to disseminate information relating to the standards, curricula, training, assessment, and certification.

Congress also added four new small grant programs under this Act. They are Title IV, Parental Assistance; Title VI, International Education Programs; Title VIII, Minority Focused Civics Education Program; and in Title IX, a Teacher Research Dissemination Demonstration Program and GOALS 2000 Community Partnership.

Title VII, Safe Schools, and Title IX, Educational Research and Improvement (OERI Reauthorization), integral parts of the Administration's systemic educational reform, are discussed below.

Safe Schools Act

The sixth National Education Goal addresses the problem of school safety and drug abuse, and a 1991 report by the Bureau of Justice Statistics indicated that the problem had by no means disappeared since the Goal was first drafted in 1989.

In June of 1993, President Clinton transmitted to Congress the Safe Schools Act, legislation which his office described as "the first federal program to direct funds to local school districts specifically to help make them safer." This legislation makes it possible for a school district facing high rates of crime, violence, and disciplinary problems to compete for a U.S. Education Department grant.

Under the Act, local school districts can receive up to $3 million per year for two years. To receive funds for a second year, grantees will have to develop a comprehensive, long-term plan for preventing violence and making their schools safe. The legislation allows districts to exercise considerable flexibility in developing programs designed to meet local needs.

The Act also allows the Secretary of Education to reserve up to ten percent of each year's appropriation for national leadership initiatives, such as public awareness campaigns and program evaluation. This act became Title VII of the Educate America Act.

Reauthorization of the Office of Educational Research and Improvement

Title IX of the Goals 2000: Educate America Act reauthorized the Office of Educational Research and Improvement. It established the National Educational Research Policy and Priorities Board which will oversee the Office's activities. The Act reorganized OERI into five national research centers:

- The National Institute on Student Achievement, Curriculum and Assessment
- The National Institute on the Education of At-Risk Students
- The National Institute on Educational Governance, Finance, Policy-Making and Management
- The National Institute on Early Childhood Development and Education
- The National Institute on Postsecondary Education, Libraries and Lifelong Education

It also established an Office of Reform Assistance and Dissemination and a National Library of Education.

This reorganization will provide for educational policy research and research on effective educational practices that will support the attainment of the National Education Goals.

School-to-Work Opportunities Act

Another initiative proposed by the Clinton Administration, and enacted into law on May 4, 1994, the School-to-Work Opportunities Act, is one of the acts intended to effectuate systemic educational reform. It establishes broad national criteria and a framework within which States can create school-to-work opportunities systems to facilitate a smooth and effective transition from school to the workplace, or to further education or training. To be jointly administered by the Department of Education and the Department of Labor, this legislation brings employers, educators, and others into partnerships that will seek to build Statewide school-to-work opportunities systems flexible enough to accommodate State and local needs, and at the same time comprehensive enough to address youth unemployment problems nationwide.

Specifically, the legislation:

- establishes common features and basic program components for State systems while leaving State and local agencies substantial flexibility;
- provides for development grants for all States to develop a comprehensive, statewide, school-to-work opportunities plan;
- provides for five-year implementation grants to States that have completed the development of their plan and are ready to begin full-scale operations and implementation of that Statewide plan;
- provides for waivers of certain statutory and regulatory program requirements to allow States to carry out their Statewide school-to-work opportunities systems more effectively;
- provides for direct implementation grants to local partnerships to enable such partnerships to implement School-to-Work Opportunities programs;
- provides for direct implementation grants to local partnerships in high poverty areas to enable such partnerships to implement effective School-to-Work Opportunities programs in such areas;
- provides for development and implementation grants to establish and carry out School-to-Work Opportunities programs for Indian youth that involve schools funded by the Bureau of Indian Affairs;
- authorizes funding for research, development, training and technical assistance to further the purposes of the School-to-Work Opportunities Act; and

- provides for the establishment of a system of performance measures for assessing State and local programs regarding key elements and goals of the School-to-Work Opportunities Act.

The legislation provides that every School-to-Work program must include:

- Work-based learning that provides a planned program of job training or experiences, work experience, work-place mentoring, instruction in general work-place competencies, and broad instruction, to the extent practicable, in all aspects of the industry.

- School-based learning that provides career awareness and career exploration and counseling, instruction in a career major (selected no later than the 11th grade); a program of study that is based on high academic and skill standards as provided for in the Goals 2000: Educate America Act, and typically involves at least one year of postsecondary education; and regularly-scheduled evaluations to identify students' academic strengths and weaknesses.

- Connecting activities that coordinate involvement of employers, schools, and students; matching students and work-based learning opportunities; and training teachers, mentors, and counselors.

Improving America's Schools Act

The pending legislation, Improving America's Schools Act (Reauthorization of ESEA), will complete the systemic educational reform package of the Clinton Administration when it is passed by Congress. (See description under Pending Legislation.)

These five pieces of legislation are designed to encourage comprehensive education reform throughout the Nation. The federal funds to be appropriated under these laws are intended to serve as a catalyst to the States to join voluntarily (the legislation is not compulsory) in the reform movement. The legislation calls for total systemic reform, i.e., improved early childhood education, parent involvement, high academic and skill standards, curricular reform to meet those standards, focus on the disadvantaged, opportunities for all to learn and achieve, formative and summative assessment, professional development of teachers and administrators, school based management and accountability, systemic programs of school-to-work transition, safer schools, and educational research to support these provisions. Never before has the United States Department of Education offered such a comprehensive package for reform in accordance with its mission "to ensure equal access to education and to promote educational excellence throughout the Nation."

Prisoners of Time

In conjunction with the national education reform movement, the United States Congress passed the Education Council Act of 1991. This Act established the National Education Commission on Time and Learning, an independent advisory body. Congress directed the Commission to make a comprehensive review of the relationship between time and learning in the Nation's schools, and prepare a report on its findings. The report of the Commission, Prisoners of Time, was published in April, 1994. The findings of the Commission could have profound implications for educational reform in the United States.

The report states that "... students, teachers, administrators, parents and staff are prisoners of time, captives of the school clock and calendar." Its findings indicate that if the educational reform movement is to be successful, States and school districts must modify the general six hour school day and 180 day school year to meet individual needs if the high standards of the Educate America Act are to be attained. The Commission determined that on average only a little more than half the school day is spent on academic core subjects. It maintained that, given the lack of sufficient time devoted to academic subjects, U.S. students would not be able to achieve the standards desired, and that no matter how well intended, the reforms will be doomed to failure. The report calls for radical reconsideration of the length and structure of the school day and the number of days per school year.

The Commission made eight recommendations:

- Reinvent schools around learning, not time.
- Fix the design flaw: use time in new and better ways.
- Establish an academic day.
- Keep schools open longer to meet the needs of children and communities.
- Give teachers the time they need.
- Invest in technology.
- Develop local action plans to transform schools.
- Share the responsibility: finger pointing and evasion must end.

If these recommendations are adopted to facilitate the other reform measures, the changes in America's schools could be profound.

Student Loan Reform Act of 1993

This legislation is designed to establish the Federal Direct Student Loan Program, a new way for students to borrow money to pay for education after high school. Under this legislation, a post secondary institution participating in the new Direct Loan Program will receive loan funds directly from the U.S. Department of Education and disburse them to eligible students. (Under the previous Federal Family Education Loan Program, the loans were made through a private lender and a guaranty agency.)

The new program will be implemented in phases, beginning July 1, 1994, when the first loans may be used to pay for education expenses. Nearly 400 institutions will offer Direct Loans in the 1994-95 school year. By 1995-96, nearly half of the institutions that provide federal student aid will offer Direct Loans, and by 1998-99, the Department anticipates that most postsecondary institutions will participate in the Direct Loan Program.

Under this program, there are two kinds of Direct Loans:

- **Stafford Loans** - Federal Direct Stafford Loans can either be subsidized or unsubsidized. If the student demonstrates financial need, the loan will be subsidized -- the federal government will pay the interest on a loan while a student is in school if the loan qualifies for an interest subsidy. Students can get unsubsidized Direct Stafford Loans regardless of need, but will have to pay all interest charges.

- **Federal Direct PLUS Loans** - These provide funds to parents of dependent students to pay for the students' education.

REFORM AT THE STATE LEVEL

During this period, the education reform movement made headway in all states, though in some more than others. One of the issues that required the attention of State authorities was the problem of unequal funding among school districts. In the United States, the states contribute the largest share of the education budget, but local school districts finish a close second. In most states local revenues for education come from property taxes. In school districts where property values are high, the revenues are greater than those where property values are low. In part this discrepancy is mitigated by the fact that living expenses are lower in poorer districts (if only because house payments are less). However, it has become increasingly clear over the past few years that in some states the low-income school districts are suffering disproportionate as the result of diminished revenues. The result has been unequal opportunity of education among the various school districts. In several States -- e.g., Texas and Kentucky -- State courts have intervened and ordered the legislatures to take some action that will ensure a greater equity in funding.

The Texas legislature voted to take State revenues away from the more affluent districts and redirect them to the poorest districts. However, this solution proved unsatisfactory to the smaller counties; and the court ordered the State to make an additional effort to provide equity. The legislature passed a law ordering more affluent school districts in the State to share revenues from local property taxes with the poorest districts. This solution provoked a legal challenge from the affluent districts, and the State court likewise ruled that such a solution was unconstitutional. In 1994, Texas was still wrestling with the problem.

The Kentucky Experiment

In 1989 the Kentucky Supreme Court ruled that the State's system of public school financing provided unequal education and was therefore a violation of the State's constitution. The court ordered the legislature to devise a new way of funding the State's school systems. As a consequence of this ruling, Kentucky was forced to reexamine its entire education system, and the result was a series of reforms at both the local and State levels.

The next year, in response to the Kentucky Supreme Court's mandate for financial equity, the legislature passed the 1990 Kentucky School Reform Act, which authorized an extra $1 billion for education -- to be appropriated over a two-year period. This appropriation constituted a 35 percent increase in funding between 1990 and 1992, which raised the per pupil spending by nearly $1,000 to $4,600.

But the legislature did not stop there. In addition to this huge increase to correct inequities, the School Reform Act also called for sweeping changes in the way the State operated its educational system. These reforms eventually included:

- o the institution of instruction on Saturdays, before and after school, and during the summer vacation for students in need of extra help;
- o the maintenance of "family resource centers" designed to provide social and medical services to needy schools;
- o the abandonment of multiple-choice tests in favor of tougher measures that demand essays and analysis of data, as well as an emphasis on collections of student work rather than a single examination;
- o the establishment of cash awards for teachers whose schools show improvement over a two-year period;
- o the assembly of a statewide technology network designed to put a computer-ready telephone line in every classroom, providing linkups with libraries, research databases, governmental agencies, and even other schools and classrooms;
- o the elimination of separate grades in elementary school, allowing students of different age groups to work side by side;
- o the introduction of new courses that help students prepare to cope with such practical problems as child rearing and personal finance; and
- o the adoption of a looser classroom structure, including untimed classes and the blending of subjects such as mathematics and English.

This experiment in education reform is perhaps the greatest ever undertaken by a state -- at least since the Massachusetts "common school" movement in the 1830s -- and after only three years the final results have yet to be posted. However, changes have taken place.

In 1990, the first phase of the reform program was implemented:

- o A new school-financing formula began to correct inequalities in funding.
- o An Education Professional Standards Board, made up mostly of teachers, was named to set and enforce teaching standards.

- With some exceptions, schools were required to open preschool classes for disadvantaged four-olds. Such classes had to be in place the 1991-92 school year as well as preschool programs for handicapped three- and four-year-olds.

The year 1991 brought further implementation:

- An appointed education commissioner replaced the elected superintendent of public instruction as the head of the state school system with a mandate to reorganize the Department of Education.

- At least one school in each district was mandated to begin governing itself through a school council. The idea was to ensure that most decisions relevant to instruction be made at schools by teachers, principals, and parents.

- In order to provide help for students in need of extra attention, schools began offering instruction before and after school, on weekends or in the summer.

- Centers to coordinate school and health services for students and their families began to open in or near schools where at least one-fifth of the students lived in poverty. More than 1,000 schools were required to provide such centers by the 1994-95 school year.

In 1992, more reforms followed:

- The State began to assess learning in grades four, eight, and twelve. This assessment involved not only grading written tests, but also evaluating portfolios of student work. Students were asked to perform complex tasks that required them to draw on several types of knowledge. Successful schools were rewarded. Struggling schools received extra help. (Current policy would permit the State to take over the worst schools.)

- The Council on School Performance Standards issued detailed goals for Kentucky schools. Schools are to be judged by how they meet the learning goals and whether or not the school reduces impediments to poor learning, such as poor health and poor attendance.

By 1993, the Kentucky Department of Education reported the following progress:

- An "improvement goal" and an "accountability index" had been set for each of 1,400 schools. Approximately 600 of the schools already had councils in place, with a full budget allocation.

- At least 222 Family Resource/Youth Services Centers were already in operation--127 Family Resource Centers, 55 Youth Services Centers, 40 combined -- and 103 school districts have one or more. These centers served 51,205 individuals representing 32,916 families.

- Summer school programs operated in all school districts and served 20,750 students. About 33 percent of those students improved by at least one letter grade.

- Eight Regional Service Centers, dedicated to the professional development of teachers and administrators, were established. The funding for this program increased from $1 per student to $16 per student.

As reported by the Washington Post in April of 1993, teachers were teaching their subjects in a new way and students were learning differently:

- In rural schools, which were once without the basic tools of scientific learning, children were studying biology and chemistry in high-tech laboratories.

- A team of academics was deciding which literary works were most important in order to establish a syllabus with which all students must be familiar in order to graduate.

- Desks now came with lap-top computers, and eventually students would be able to check them out for home use like library books.

- A class in Calloway County Middle School was using its computer to call a national weather database. Recently these students tracked the progress of an ongoing tornado in Louisiana, hundreds of miles away.

Of course, some educators were cautious about abandoning all the ideas and practices of the past. As one teacher put it: "I have to keep enough of the old way to know it will work, and the add to it and build in the new way. In my own mind I can't throw away what I learned in 19 years."

Many students weigh the new against the old and see advantages in change. "The work is a little bit harder," said one 14-year-old, "but it sticks with you longer."

Some administrators have also found improvement in the midst of challenge and readjustment. "People feel so pressured, there is so much change," said a rural principal. "But this is absolutely the opportunity of a lifetime." Her county superintendent affirmed the radical nature of the change.

"Basically we were able to erase the board clean and do away with everything as it was," he said. "It's probably the cleanest sweep [the country] has had in education."

These are signs of significant progress in Kentucky schools. However, it would be unwise to suggest that all states could profit equally from these reforms. In many ways, Kentucky's educational system is atypical. For one thing, its per pupil expenditures and its teacher's salaries have always been among the lowest in the Nation. Some of what is happening in Kentucky's schools is merely compensation for past inadequacies, a sudden and valiant effort to catch up with the rest of the states. For this reason, a dramatic rise in funding may be more likely to yield dramatic results here than in a state where expenditures have been perennially high and where modern technology has long been available.

On the other hand, some of the classroom innovations instituted in Kentucky (e.g., diverse age grouping in elementary school) may generate improvement in traditionally affluent states as well as in poorer ones. For this reason, the Nation is watching Kentucky with great interest.

The Kentucky experiment is probably the boldest of any educational reforms at the State level, but there is reason to believe that other states are beginning to consider some of the ideas instituted in Kentucky. For one thing, by the beginning of the 1990's, other States had begun to face the issue of inequity in financing, and the question was a topic for debate at every level of the U.S. education system. It seemed clear that with rising taxes more and more an issue in local, State, and Federal elections, educators would have to devise innovative solutions to justify the expectations of the general public. Already a number of researchers were exploring various means of delivering a quality education at a reduced cost.

REFORM AT THE LOCAL LEVEL

Reform was also taking place at the local level. In Edmonds, Washington, located between Seattle and Everett, the process began several years before 1990. The Edmonds School District services 20,000 students and is part of one of the fastest growing counties in the country.

A Citizen Planning Committee was created in the district with parent representation from each of 32 schools and at-large membership from the community. The committee began studying school organization, demographics, and physical facility needs. In 1989, a "Strategic Thinking Task Force" was also established to develop an action plan for reform.

Several schools in the district won special grants from the state after proposing plans for Washington's "Schools for the 21st Century" program. Only one site was chosen each year for this state investment, and schools in Edmonds were winners in both 1988 and 1990. The winning schools served as catalysts for transformation throughout the district.

In 1992, the Strategic Thinking Task force finalized its report. Actions were proposed for achieving quality in five areas: student knowledge, staff knowledge, time, decision-making and facilities. The task force also recommended that Edmonds declare itself as a "transforming school system."

The vision to transform led Edmonds residents to link with other efforts around the nation to achieve the National Education Goals. In March 1992, they adopted the Edmonds 2000 framework to move ahead with their plans for reform.

The reform strategy was to concentrate on three areas: content standards, performance assessment, and program choices. In each area, an underlying question was the focus. CONTENT: What do we want our students to know and be able to do? PERFORMANCE ASSESSMENT: How will we know when students are meeting the standards? PROGRAM CHOICES: How will we develop the capacity of staff and school communities to make choices about getting the performance results desired?

In the fall of 1992, four Community Forums were held, one for each quadrant of the district, to ask residents to define standards: "What do we want students to know and be able to do?" Five hundred parents, teachers, and citizens contributed their input. The hundreds of suggestions were distilled into a draft document, and in February 1993, the draft was mailed to every household in Edmonds, along with a schedule for a second round of forums.

After more input from residents, a second draft of content standards was formed, published with lines through the original document to show the changes that had been made. "We really invited our whole community to edit our content standards," said Edmonds Superintendent Brian Benzel. "We listened to our community."

Edmonds 2000 also presented the consensus of the community to date in a pictorial form entitled "The Tapestry of Student Learning." The Tapestry showed how a total of fifteen academic and skill categories were interwoven in the big picture of student achievement. Examples of the categories included producing quality and pursuing excellence, thinking and problem solving, self-directed learning, communicating, and working with others.

The Tapestry integrated academic learning with the skills the business community wanted students to possess. The district held Business Forums to create a continuing dialogue between business leaders and educators about what students should know and be able to do. School-to-work transition is a high priority in Edmonds, which is located near Boeing's 747 and 777 production plants as well as near a major county retail center.

Although some opposition to reform has emerged, Edmonds 2000 continues to move forward. The next major task is to devise fair and accurate assessments based on the academic and skill categories. Edmonds 2000 has no formal steering committee, but the School Board of five elected citizens serves in this capacity. Superintendent Brian Benzel is the community leader responsible for moving the agenda forward, and the Citizen Planning Committee contributes as well. Edmonds is optimistic that by the year 2000, the state of Washington will be using performance-based assessments to measure what students should know and be able to do.

MAJOR ISSUES AND TRENDS

When people enter the headquarters of the U.S. Department of Education, they see the following message on the pink marble wall: "Our mission is to ensure equal access to education and to promote educational excellence throughout the nation." In a sense, the twin goals of this statement define in broad terms the two major issues in American education today: the need for equity and the need for excellence. All significant reform is directed toward the fulfillment of these crucial needs; yet few educators believe that overall efforts have produced completely satisfying results. Much has been accomplished. Much remains to be done.

"TO ENSURE EQUAL ACCESS"

A number of groups in the United States have historically found it difficult to gain equal access to education. The disadvantaged, racial and religious minorities, the disabled, women -- these have all, at one time or another in the Nation's history, been deprived of an equal opportunity for education. In some cases these inequities have been corrected by the natural evolution of society. In other cases they have been eliminated through legislation or the courts. In still others they remain a significant problem, one that American society must solve if it is to remain strong and vital.

Political and business leaders as well as educators have recognized that the failure to educate any significant segment of American society ultimately threatens the Nation's ability to compete in a global marketplace. For this reason, the educational system at every level has developed and promoted programs designed to serve at-risk children in all categories. Some of these have been in existence for many years. Others are new and highly experimental.

Long-Standing Programs for At-Risk Children

In 1983, the National Commission on Excellence in Education applied the phrase "at-risk" to the Nation as a whole. In 1985, the National Governor's Association applied the same phrase to those students who, because of the environment in which they live or the circumstances of their birth and upbringing, are most likely to fail in school, drop out, and in time pose substantial problems for society as a whole. The typical at-risk student starts behind more advantaged students in the first grade, is performing two years behind grade level by the sixth grade, and by the twelfth grade has either dropped out of school or is four years behind.

Educators tend to regard all at-risk children as having less than equal access, if only because circumstances have denied them a fair chance to finish school with a good education. While they know they cannot eliminate the conditions that have led to these inequities, school reformers have striven to devise programs and strategies that can compensate for whatever deprivation at-risk children have suffered.

Under Chapter I of the Education Consolidation and Improvement Act of 1981, the Department's major program for educating the disadvantaged, nearly $7 billion currently assists elementary and secondary schools where 5.5 million of these children are enrolled. The ethnic breakdown of Chapter I beneficiaries include 5 percent Native American or Asian, 28 percent Black but not Hispanic, 27 percent Hispanic, and 41 percent White but not Hispanic. In addition to Chapter I, which is a Federal program, more than half the States have their own "compensatory education programs."

Disabilities and difficulties with the English language also place many students at risk of failure in school. About 4.5 million U.S. children under the age of 21 have disabilities, while about 2.4 million students are limited-English-proficient (LEP). Federal law requires a "free, appropriate public education" for all disabled children. U.S. Department of Education funds augment State and local support. Similarly, these three sources enable most LEP students to receive services, at least at the elementary level. In addition to the U.S. Department of Education, several other Federal agencies provide education-related services to disadvantaged students.

New Programs for the Disadvantaged

In order to solve the problems faced by disadvantaged children, U.S. educators are experimenting with innovative approaches to teaching and learning. Experimental in nature, these programs illustrate the intention of many U.S. educators to reinvent the educational system in order to address social and economic ills that affect the classroom performance of millions of at-risk children. A few of these programs are described below:

- **Stanley Pogrow's Higher Order Thinking Skills (HOTS)** -- a program designed for Chapter 1 elementary school children. HOTS is based on the idea that current drill-and-practice remedial programs do not develop children's intellectual abilities. Instead, HOTS uses computers and Socratic questioning techniques to develop learning skills that strengthen the student in all academic areas. In a typical HOTS program, students spend at least 35 minutes a day in the computer lab in groups of 15 or fewer. Teachers use a scripted manual for each lesson. The first segment of 15 to 20 minutes consists of intensive conversation with the teacher, generally focusing on linkages between the previous day's work and concepts learned earlier. The teacher challenges and probes each student answer. Students must clearly articulate and justify their responses. Following this discussion, a new challenge is given, and students test their ideas on the computer. After mastering problems, students share their findings and strategies with each other.

- **Henry Levin's Accelerated Schools** -- a program designed to enrich learning for educationally disadvantaged students. This program is characterized by high expectations for students, an elevated status for teachers, and the substantial involvement of parents. Levin believes that students will live up to adult expectations for them, and he insists that both teachers and parents expect students, regardless of background, to master a body of knowledge and skills at a rapid pace. So convinced is Levin of the essential role of parents that in most of his participating schools parents are required to sign contracts committing themselves to become involved in specific activities. There is a great deal of independence from school to school, including the right for each school to set its own goals; but the Accelerated Schools model recommends that all participating schools have as a goal to raise the performance levels of every student to at least grade level by the time he or she leaves school. In a typical Accelerated Schools program teachers are encouraged to move quickly through lessons, to enliven the classroom by developing the students' ability to think independently, and by relating instructional materials to the students' daily experience. The curriculum is organized according to themes that cut across traditional academic disciplines, and students are arranged in heterogeneous ability groups. The model encourages experimentation, and teachers use such techniques as peer tutoring and cooperative learning.

- **James Comer's School Development Program** -- a process designed to change the climate of schools that primarily serve disadvantaged children and youth to make schools more responsive to their needs and those of their families. The Comer program uses school-based decision making and revitalized bonds between the school, the family, and the community to help children learn, parents function more effectively in supporting and educating their children, and teachers develop professionally. The Schools Development Program is a process that includes three essential features: the School Planning and Management Team (SPMT), the Mental Health Team (MHT), and the Parent Program. The SPMT is the most important element of the program. This team is the governing body in a Comer school, and is made up of the principal, teachers, other school staff, a parent representative, and an expert in child development. The MHT is made up of classroom teachers, resource teachers, administrators, psychologists, social workers, and nurses who focus on improving school climate. By design, the MHT doesn't focus on individual children but looks at patterns that emerge in the school and seeks ways to solve recurrent problems. The Parents Program is designed to involve parents in social activities, volunteer activities, workshops, and home-learning activities. Parents select at least one representative to serve on the SPMT.

- **Robert Slavin's Success for All** -- a program based on research that links the academic problems of children in their formative years (e.g., retention or poorly developed reading skills) to being at subsequent risk of dropping out. Success for All is designed to ensure that children do not experience this initial failure and are therefore able to reach the third grade with adequate basic skills. For best results, the sponsors of Success for All recommend a full-day preschool and kindergarten that emphasize language development, readiness, and self-concept. The children use the Peabody Language Development Kits and a program called Story Telling and Retelling (STAR). In grades 1-2, trained tutors work with children who are failing to keep up with classmates in reading. In addition to tutoring, daily 90-minute reading sessions are held with small homogeneous ability groups. The kindergarten and first-grade programs emphasize language skills and provide children with phonetically regular mini-books which they read to each other in pairs. In the second and third grades, students use basal readers, but not workbooks. In these grades the reading program emphasizes cooperative learning activities built around partner reading, identification of characters, settings, problems, and solutions in narratives. At all levels children are required to read books of their own choosing for twenty minutes at home. Students are assessed every eight weeks to determine if alternative teaching strategies, changes in reading group placement, or need for tutoring services is required. The Success for All program also has a Family Support Team and a Facilitator who works with teachers in all schools to help them implement the program.

- **Theodore Sizer's Essential Schools Coalition** -- a program with the theme that "more is less." The developers believe that most high schools have too many offerings. Consequently, the Essential Schools Coalition focuses on student mastery and achievement in "essential" academic skills -- reading, writing, and mathematics. Essential Schools try to make students active learners by reducing the teacher/pupil ratio and by the use of coaching and personalized education. The program encourages teachers to have high aspirations and performance standards for their students. However, teachers are expected to be fair, tolerant, and generous in their exercise of authority. Schools participating in the Essential Schools Coalition must agree to develop school faculty governing boards, participate in staff development, share information on their school, undergo a self evaluation every three years, and demonstrate sufficient funds in their budget to support the required activities.

- **Marie Clay's Reading Recovery** -- an intensive early-intervention program for first grade children who are having trouble with reading. Based on years of research in New Zealand, Reading Recovery is designed to promote success by teaching reading strategies before a pattern of failure can develop. The program includes procedures for the teaching of reading, a staff development program directed by a "teacher leader" with a year's training, and a set of administrative systems that work together for quality control. In most cases, Reading Recovery teachers select the lowest achieving students in the first grade and provide them with one-on-one tutoring for 30 minutes each day. These tutoring sessions supplement rather than replace regular reading lessons, and they include both reading and writing activities as well as strategies to develop children's reasoning and thinking skills. When the Reading Recovery teacher concludes that a child has become a proficient reader, the treatment is discontinued; the success of individual programs is often measured by the rate of discontinuation.

- **High School Partnership Academies** -- a program designed to provide academic and vocational training to disadvantaged students who lack skills for entry-level jobs. Academies build a partnership between business and public schools by satisfying corporate needs for employees in rapidly developing fields of employment and establish a model for dealing with youth unemployment. General Partnership Academies operate as a three-year school-within-a-school for students in grades 10 through 12. Students must meet certain entry criteria -- including a reading achievement level of at least grade 6 and sufficient motivation and self-discipline to succeed in the program. Although Academy programs vary from site to site, most have the following characteristics: (1) support from local business or government employees; (2) a school-within-a-school organizational structure; (3) a curriculum that integrates academic content, vocational training, job skills, and general enrichment; (4) a selection process that identifies at-risk students with academic potential and a commitment to the occupational area of the Academy (e.g., business, health, computer science); (5) clearly defined rules understood by students, parents, teachers, and administrators; (6) paid work experience for qualified students; and (7) school and district support for the program, including the granting of adequate preparation time for teachers. Each Academy has a Coordinator who is responsible for the daily operation of the program. Students are scheduled as a group; and teachers are organized as teams, with a common planning period each day. Academies usually have the extra personnel required to reduce class size to 15-20 students per hour. All students are assigned a mentor from the business partner and log work experience either in the summer or during their senior year.

Participating businesses are asked to provide the following types of assistance: (1) sharing in decision-making authority with district personnel, (2) designating corporate employees who may assist Academy staff, (3) offering students part-time or summer jobs, (4) sponsoring the mentor program, and (5) serving as hosts for field trips to supplement student's in-class learning.

- **Mortimer Adler's Paideia Program** -- based on the idea that all children are entitled to the same education both in terms of content and instructional methodology. Thus all children are given the same course of study, regardless of background or ability. Adler's program is based on three methods of instruction: (1) Didactic Instruction -- the classroom activity which focuses on teacher lectures (the kind of instruction more appropriate for the "acquisition of knowledge"); (2) Coaching -- one-on-one instruction in which the teacher/coach or a peer works closely with students to improve their skills rather than assuming that students are able to transfer general corrective statements to their own work (the kind of instruction most appropriate for the "development of the intellect"); and (3) Socratic seminars -- discussions among students and teachers based primarily on questions asked to explore ideas (designed to improve the students' expression of ideas, their ability to support ideas with relevant information, and develop better thinking and listening habits).

- **Computer-Assisted Instruction** -- a technology that is being adopted by schools across the country. One company, Computer Curriculum Corporation (CCC), has been researching, developing, and marketing educational software for over two decades. Nationally, CCC is used to instruct nearly 750,000 students. The software is designed to give instant feedback, positive reinforcement for student achievement, and tutoring when necessary -- all tailored to the performance level of the individual student. Using this technology, students can achieve mastery of several different subjects (reading, language arts, math, basic computer literacy, and science); and the subjects are selected by the school district to match its curricular goals. Typically, CCC is set up in a computer lab used solely for that purpose and staffed by trained para-professionals. The software is designed to complement the schools' curricula and help the schools reach achievement and testing goals. Audio packages are available for use with students who have linguistic problems. At the beginning of the academic year, students are assessed with a set of questions. Depending on the student's performance and the school's goals, the initial assessment provides an estimate of the number of sessions required for the student to demonstrate mastery. That estimate then translates into specified number of minutes on-line for each of the target

subject areas (e.g., 11 and 13 minutes a day, respectively, for math and reading). CCC also provides extensive performance reports -- available for each subject at the student, class, and grade levels. Districts can choose daily, weekly, monthly, or other reporting formats for the monitoring of student progress. Students log on by name and unique identification number. Questions are calibrated to begin at the difficulty level mastered at the student's last session. Correct answers are rewarded by colorful displays of fireworks, ribbons, or other positive feedbacks. Incorrect answers are followed by an encouraging phrase, and a second incorrect response is followed by the right answer along with a demonstration of the correct approach. Students can ask for on-line tutorial help if they are unable to answer a question. At the end of the session, the computer indicates the number attempted, the number and percentage correct.

"TO PROMOTE EDUCATIONAL EXCELLENCE"

Virtually all recent reform efforts have addressed either the problems of at-risk children or the more general problem of educational excellence. To be sure, the two are interrelated; but even students who do not share common at-risk factors -- i.e., a disadvantaged background, a physical or mental disability, or a linguistic problem -- too often fail to perform at a satisfactory level; and educators point to a long-term decline in test scores as an indication that the system is not working as well as should in order to prepare the Nation's youth for success in the 21st century, which promises to be global in its intellectual concerns and highly competitive in its economic activities.

Because of the adoption in 1989 of National Education Goals, U.S. educational assessment has been increasingly designed to measure progress toward the achievement of each of these six original Goals. This new focus has alerted the public to specific weaknesses in the system and has provided them with preliminary information so that they can track improvement (or the lack of it) in these six areas of concern.

The development of standards of learning for the subjects which were added in 1994 under Goal 3, i.e., foreign languages, civics and government, and economics, has begun, but no assessments are yet available. Standards with regard to the arts were completed in 1994. Possible assessment of progress with relation to the two new goals, teacher education and professional development, and parental participation, is yet to be determined. Therefore, the succeeding pages describe the progress toward the fulfillment of the six original goals only.

Progress Toward the Fulfillment of the National Goals

The initial problem facing those responsible for monitoring the education system is the rapid but conscientious development of benchmark standards and measurements to use in assessing progress.

In some areas, instruments such as the National Assessment of Education Progress (NAEP) were already available. In other areas, more pointed and precise standards and tests had to be devised. The process has been careful; yet results are already apparent in each of the areas included in the six original National Education Goals, though in some more than others.

Goal #1

By the year 2000, all children in America will start school ready to learn.

Goal #1 addresses the conditions that conspire to produce literally millions of at-risk children in the United States: the breakdown of the family, poverty, disease, malnutrition, and a growing skepticism toward the idea that education can significantly improve a child's chances for success. Students who enter the first grade with a vocabulary of fewer than a hundred words, who have no understanding of numbers, and who have received no encouragement to exercise their natural intellectual curiosity are doomed to failure from the outset. In confronting the conditions addressed in Goal #1, education leaders immediately recognized the necessity to clarify the meaning of the phrase "ready to learn." After deliberating on the various implications of the phrase, the National Education Goals Panel finally concluded that "'being ready' means being prepared to participate successfully in formal schooling."

The second major problem posed by Goal #1 was the lack of any direct way to measure the Nation's progress toward achieving readiness for school. In its report Measuring Progress Toward the National Education Goals: Potential Indicators and Measurement Strategies, issued on March 25, 1991, the Goals Panel rejected the idea of "a pre-school national readiness test." However, the Panel later endorsed the development of an "Early Childhood Assessment System" for the Nation. This "system," voluntary and to some degree different from State to State, would be designed to collect information about a nationally representative sample of children -- from their teachers, their parents, and from the children themselves -- at several times during the kindergarten year. According to the Report of the National Goals Panel,

> The information collected would address five critical dimensions of children's growth and readiness for learning. These are:
>
> Physical Well-Being and Motor Development
>
> - The various aspects of a child's health and physical growth, ranging from being rested, fed, properly immunized, and healthy, to the development of skills and abilities for running and jumping and using crayons and puzzles.

Social and Emotional Development

- The sense of personal well-being that allows a child to participate fully and constructively in classroom activities by taking turns, following directions, working independently and as a group member, and developing friendships.

Approaches Toward Learning

- The qualities of curiosity, creativity, motivation, independence, cooperation, interest, and persistence that enable children from all cultures to get involved in and maximize their learning.

Language Usage

- The uses of oral and written language -- talking, listening, scribbling, composing, and being read to -- that enable children to communicate effectively with others and express their thoughts, feelings, and experiences.

Cognition and General Knowledge

- The familiarity with basic information, including patterns and relationships, causes and effects, and solving problems in everyday life.

Though this assessment system is still in the process of development, the Goals Panel, using NAEP and other resources, has already begun to monitor progress in pursuit of Goal #1. Some of the signs are encouraging. Others are less so.

For example, over the past two decades, more and more children have begun to attend preschool programs. Between 1973 and 1991, the percentage of three- to five-year-olds enrolled in nursery school nearly doubled, from 19 percent to 37 percent. And this is not simply the result of affluence. Enrollments have increased for all children, regardless of family income, although they have remained substantially higher for children from high-income families than for children from middle- or low-income families.

On the other hand, the quality of preschool programs is not uniformly high. For example, in 1990, preschool centers were more likely to meet recommended quality standards for older children (three to five years of age) than for infants and toddlers.

One of the most important strategies recommended for the achievement of Goal #1 is greater family involvement with children. Research indicates that children whose parents show an interest in the early learning of their children, particularly during the first three years, are most likely to succeed when they

enter kindergarten and the first grade. Yet in 1991, fewer than half of all preschoolers were read to daily and fewer than half were told stories by their parents several times a week. Only about one-third were taken to visit a library during the previous month. However, in 1991, about three-fourths of all three- to five-year olds were taken to parks and playgrounds during the previous month. Both activities are important; yet too few parents are involved in motivating their children to read and learn.

During the year 1993, the Goals Panel worked with other agencies and organizations to define and develop further the Early Childhood Assessment System in order to allow parents, teachers, and the general public to know whether or not children are starting school ready to learn and whether or not reform efforts are helping them to do so. More revealing data is being collected.

Many educators regard the achievement of Goal #1 as the key to revitalizing the U.S. education system. If children come to school physically, emotionally, and intellectually prepared to learn, they argue, then the achievement of the other Goals will come naturally and inevitably. Moved by this conviction, many public policy leaders are calling for a greater emphasis on preschool and kindergarten activities and expanded health care for young people. Some members of Congress are suggesting Federal legislation to address these issues.

Goal #2

<u>The high school graduation rate will increase to at least 90 percent.</u>

Given an increasing demand for advanced education and postsecondary training in the highly competitive international marketplace, educators and business leaders are concerned that a large number of U.S. students are dropping out of high school to take unskilled jobs or to accept public assistance. The loss of this potential may be too great for the economic system to bear, and Goal #2 addresses the necessity to keep more young people in high school and to encourage greater numbers to enroll in some form of postsecondary education or training.

In confronting the problem of dropouts, the Nation's educators again faced problems of definition and methodology. After examination of several alternatives, the Goals Panel recommended the creation of a "Voluntary State/Local Student Record System" that would eventually provide comparable state high school completion and dropout data to be reported on a regular basis.

In the meantime, the Goals Panel pursued other ways to obtain data on this important aspect of the Nation's education system. For example, the panel's 1992 Report updated information on the percentage of 19- to 20-year-olds and 23- to 24-year-olds who received a high school diploma or the equivalent. The findings reported included the following:

- In 1991, the high school completion rate for 19- to 20-year-olds and 23- to 24-year-olds was 85 percent -- five points below the target goal of 90 percent. Although the completion rates for both groups dropped by one percentage point, these differences were not statistically significant, though still cause for concern and continued monitoring.

- Between 1975 and 1991, high school completion rates for 19- to 20-year-olds improved nine percentage points for Blacks, three percentage points for Whites, and two percentage points overall.

- Completion rates for Hispanics have remained consistently lower than the rates for other groups. Among Hispanics 16- to 24-year-olds who were born outside of the 50 states and the District of Columbia, 43 percent were dropouts, compared to a dropout rate of only 8 percent for non-Hispanics born outside the United States. However, when one looks exclusively at Hispanics born within the U.S., their dropout rate is still more than double that of non-Hispanics. The U.S. Department of Education has funded several major programs to study and recommend solutions for the problem of Hispanic dropouts.

- In 1991, 13 percent of all 16- to 24-year-olds in the United States were high school dropouts. Although this represents a one-percentage-point increase from 1990, the change is not statistically significant. Again, the figure is cause for concern and continued monitoring.

As for the reasons why students leave school, a recent study indicates that the two most cited motives for dropping out of school are: (1) a dislike of school, and (2) an inability to keep up with the work. Male students were especially likely to cite school-related reasons for dropping out, while females were more inclined to cite family- and job-related factors.

A good many of those who leave school would be inclined to return if schools could accommodate their academic and personal needs. For example, a survey reveals that 86 percent of Blacks, 67 percent of Hispanics, and 56 percent of Whites say they would return to school if they felt they could get a good job after graduation. Also, 85 percent of blacks, 57 percent of Hispanics, and 53 percent of Whites say they would return if they felt they could graduate.

Clearly the achievement of Goal #2 depends on motivation as well as on classroom proficiency. Young people must be convinced that remaining in school will significantly benefit their lives

for decades to come. They must be moved to consider long-term consequences as well as short-term benefits and to weigh their future potential carefully before they decide to walk away from the opportunities that education affords. Providing young people with incentives to succeed in school is one of the greatest challenges facing the U.S. education system.

Goal #3

> 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.[1]

This Goal addresses the inability of millions of U.S. students to master advanced skills and knowledge in the most fundamental areas of the curriculum, a weakness clearly identified in both national and international tests. While our young people seem to have mastered the most basic skills, too many are unable to understand complicated ideas in prose or to solve mathematical problems at an advanced level.

Test results over the past five years indicate that U.S. students are making some progress toward the achievement of Goal #3, but these results are by no means reassuring. Only a portion of those tested had mastered the basic knowledge and skills required to live up to the expectations of this Goal. For example:

- In 1988, 11 percent of all American 8th graders had not mastered simple reading comprehension. By 1990, 60 percent of these same low-achieving students (now in the 10th grade) had mastered simple reading comprehension, but 40 percent still had not.
- In 1988, 55 percent of all American 8th graders had not mastered simple operations with decimals and fractions. By 1990, over one-third of these same lower-achieving students (now in the 10th grade) had mastered this type of knowledge, but about two-thirds still had not.

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[1] In 1994 the U.S. Congress added foreign languages, civics and government, economics and arts to the list of subjects in which students will demonstrate competency. These subjects are not included in this section.

- In 1988, 26 percent of all American 8th graders had not mastered everyday science knowledge about the natural world (e.g. the fact that the moon does not produce its own light but reflects the light of the sun). By 1990, over half of these same lower-achieving students (now in the 10th grade) had mastered this type of knowledge, but 45 percent had not.

Even among higher achieving students, the gap between current ability and the achievement of Goal #3, while narrowing, is still substantial.

- In 1988, 22 percent of all American 8th graders had mastered simple problem solving. By 1990, nearly two-thirds of these same higher-achieving students (now in the 10th grade) were able to solve more complex mathematical problems, but about one-third could not.

- In 1988, 27 percent of all American 8th graders had mastered knowledge of fundamental concepts upon which more complex science knowledge can be built. By 1990, 34 percent of these higher-achieving students (now in the 10th grade) had mastered more complex scientific concepts (e.g. the ability to predict outcomes in problems dealing with dominant genes and problems involving radioactive half-life), but 66 percent had not.

- For all 8th-grade achievement groups and for all content areas analyzed (reading, mathematics, and science), Blacks, Hispanics, those enrolling in a vocational curriculum in the 10th grade, and those whose parents had less education were least likely to demonstrate academic progress over the next two years.

- As for overall performance in mathematics and science during the past several years, the NAEP mathematics results show that only about 25 percent of eighth graders are at or above the proficiency level, and just about 60 percent are at or above the basic level of achievement.

The 1992 Report of the Goals Panel focused on Advanced Placement examinations in the core areas, and here analysts found some cause for optimism. Major new findings include the following:

- For every 1,000 11th and 12th graders in 1992, 78 Advanced Placement examinations were taken in the core subjects, an increase of six since 1991.

- Nearly two-thirds of the examinations were graded at 3 or above, which is generally high enough to make students eligible for college credit.

Since Goal #3 also deals with citizenship, the Report offered new information concerning community service:

- Regardless of students' sex, race, ethnicity, socio-economic status, or the urban nature of their schools, students seldom perform community service. In 1990, nearly eight out of ten 10th graders reported that they rarely or never performed community service.

- Between 1976 and 1988, the percentage of 18- 20-year-olds who registered to vote and who actually voted remained fairly steady at about 50 and 35 percent, respectively.

The achievement of Goal #3 depends to some degree on the willingness of State and local authorities to require more advanced courses of U.S. students, to assign more homework, and to insist on higher performance standards. It is clear from international comparisons that many U.S. students are not challenged to the same degree as are students from other countries. Educators are just beginning to understand this discrepancy and to take corrective action. Improvement should follow.

Goal #4

U.S. students will be first in the world in science and mathematics achievement.

This goal is of particular importance to the U.S. business community since it addresses those skills most needed in the work place. Perhaps for this reason, this Goal is stated exclusively in terms of international competition, since more and more corporations are beginning to understand their mission in terms of a global market. Given the current need for highly trained scientists and technicians, and given the fact that 80 percent of the work force for the year 2000 is already on the job, it is small wonder that business leaders are concerned about the performance of U.S. students on international comparative tests in science and mathematics.

According to a report by the National Center for Education Statistics, in 1990, U.S. students faced significant problems in these crucial areas. Researchers found inadequacies both in instruction and in student attitude.

- In 1990, most students were not receiving the kinds of instruction needed to apply science ideas outside of the classroom, and many teachers did not have adequate facilities or supplies to pursue these types of instruction. Only 56 percent of 8th-grade teachers reported that they had adequate laboratory facilities or were well-supplied with instructional materials and resources. Only 46 percent say they have gone beyond the textbook in determining what they are to teach.

- In 1990, students in higher grades had less positive attitudes toward science and mathematics than students in lower grades. Females were especially likely to exhibit increasingly negative attitudes in the higher grades.

- Substantial numbers of secondary schools have not yet identified science and mathematics as instructional priorities. In 1990, 35 percent of 12th graders attended schools where science was identified as a priority; and 57 percent of 12th graders attended schools where mathematics was considered a priority.

- In 1991, only 78 percent of all high school science teachers held a degree in science or science education, while 68 percent of all high school mathematics teachers held a degree in mathematics or mathematics education. These levels were not statistically different from those collected in 1988.

On the other hand, there was some indication of improvement in specific areas of science and mathematics education.

- During the past six years, the numbers of Advanced Placement examinations taken in science and mathematics have increased substantially.

- Between 1989 and 1990, the number of science degrees awarded to U.S. citizens (per 1,000 22-year-olds) increased slightly, while the number awarded in mathematics remained the same.

In January of 1992, The National Center for Education Statistics of the U.S. Department of Education issued a Research-and-Development Report (International Mathematics and Science Assessments: What Have We Learned?) which outlined the results of the six international surveys on mathematics and science achievement -- in which students from the United States have "fared quite poorly" -- and concluded by noting the following trends:

- The more students are taught, the more they learn and the better they perform on the tests. There are significant differences in the content of instruction among countries at common levels of schooling.

- Use of a differentiated curriculum based on tracking is negatively associated with student performance on the international assessments and also reduces opportunities for some students to be exposed to more advanced curriculum.

- The school affects learning in some areas more than in others.

- Countries committed to keeping students enrolled in secondary school score less well on the international surveys, since their primary goal is to reach greater numbers of students rather than to promote the highest level of academic achievement. Japan is an exception. Even with high retention rates at the secondary level, Japanese students perform very well on the mathematics and science achievement surveys.

- Generally, the "best students" in the United States do poorer on the international surveys when compared with the "best students" from other countries.

The report calls for "more deliberate consideration of policy concerns in the design of international assessments" and an application of what is learned to curriculum development and programming."

The 1992 Goals Panel Report offered new information on mathematics and science achievement in the year 1991. This information included the scores of U.S. students and five other nations. The results:

- American 13-year-olds were outperformed by students in Hungary, Korea, and Taiwan in three of four areas tested in a 1991 international assessment.

- American students were also outperformed by students in Korea, Switzerland, and Taiwan in all areas tested in a 1991 international mathematics assessment, and by students in France and Hungary in four out of five areas tested.

In some respects, American students have greater opportunities than students in other nations. For example, compared to students in France, Hungary, Korea, Switzerland, and Taiwan, American 13-year-olds are generally more likely to do science experiments, to use computers, and to have more books in their homes. However, despite these advantages, they spend less time on homework and more time watching television.

In 1993, in its publication State Indicators of Science and Mathematical Education, the Council of Chief State School Officers released findings that were highly relevant to the achievement of Goal #4. Some of what they reported was positive; however, much of the information suggested that the Nation's educators still have a formidable task ahead in establishing world leadership in the areas of mathematics and science.

- From 1990 to 1992, 18 states made significant improvement in average student proficiency.

- In the content area of the eighth grade mathematics NAEP test, nine states improved student proficiency in Numbers and Operations, 14 states improved in Measurement, 10 states improved in algebra and functions, and four states improved in geometry.

- Only two states showed significant improvement on the average proficiency of black students and four states showed significant improvement in the proficiency of Hispanic students.

These figures are disappointing. They suggest opportunities lost and enormous challenges in the immediate future. But if excellence is an elusive goal, the system is making progress in the area of access.

- According to the Chief State School Officers, in 1992, 87 percent of public high school students were taking mathematics -- a 3 percent increase since 1990.

- The percentage of students taking Advanced Algebra by graduation is up to 55 percent, a 6-percent increase from 1990-1992.

- As of 1992, slightly more than half of high school graduates now take three years of high school mathematics, with states varying from 31 to 73 percent.

- By the 1991-1992 school year, 75 percent of high school students were taking a science course -- a 3 percent increase since 1990.

- As of 1992, 49 percent of students took Chemistry by graduation, which means that about half of the graduates take three high school science courses -- an increase of 4 percent since 1990.

As these figures suggest, part of the problem has been the shrinking pool of students taking mathematics and science courses. For this reason, educators have long recognized the necessity to enroll more women and minority students in advanced classes. In the past they had been substantially underrepresented, a fact that sheds significant light on the failure of women and some minorities to earn advanced science and math degrees at the postsecondary level. Several indicators suggest that the system is making progress. Among these are the following:

- Gender differences in science and mathematics courses continued to decline from 1990 to 1992. In most states, male and female participation is the same except in the most advanced mathematics and physical science courses, where males mostly continue to enroll.

- At advanced levels of science and mathematics, Asian Americans have the greatest enrollments, and Hispanic students have the greatest increase in enrollments.

- Enrollments increased at about the same rate for blacks and whites. In 1990, the national rates of students taking chemistry by graduation were about four of 10 blacks, six of 10 Asian Americans, four of 10 Hispanics, and five of 10 whites.

- Over the past decade, measurable progress has been made in equalizing the number of men and women taking advanced science courses. In fact, differences in advanced science and mathematics courses by gender declined slightly from 1990 to 1992, continuing a ten-year pattern. In 1992, males and females had equivalent course enrollment rates up to the advanced levels of mathematics and science in 20 reporting states. Females comprised 46 percent of students taking calculus, 52 percent taking chemistry, and 44 percent taking physics. As of 1982, females comprised 42 percent of students taking calculus, 48 percent taking chemistry, and 33 percent taking physics.

- Minority trends in science have also been encouraging. Specifically, our schools have made some progress in increasing participation of minority students in science and mathematics during the 1980s. From 1982 to 1990, chemistry enrollments increased 24 percent among Hispanic students and 19 percent among blacks, based on national sample data. In 1990, 40 percent of students in this group were taking chemistry by graduation. By comparison, chemistry enrollments increased 18 percent among whites (to 52 percent), and 13 percent among Asian Americans (to 64 percent).

- Minorities have also made some gains in mathematics. From 1982 to 1990, algebra enrollments increased 18 percent among blacks. In 1990, 39 percent of these minority students were taking Advanced Algebra by graduation. Advanced Algebra enrollments went up 13 percent among whites (to 52 percent), and 3 percent among Asian-Americans (to 59 percent).

Unfortunately, despite increased access to mathematics and science courses, the achievement of women and minorities has failed to improve substantially, according to the report. In only two states did African-American students show significant improvement, and in only four states did Hispanic students measurably improve their proficiency.

In addition, there is still a demonstrable inequity in the number of women and minorities who teach mathematics and science. However, there is also some cause for optimism.

- The majority of high school science teachers are male, but the gender distribution varies by field. For example, in mathematics, 55 percent of teachers are female, while 22 percent of physics teachers and 37 percent of biology teachers are female. The percentage of female teachers in mathematics varies by state from 21 to 69 percent, and the percentage of females in physics varies from 10 to 49 percent.

- In elementary and secondary schools, 31 percent of the student population is from a race/ethic minority group. This statistic can be compared to state data which show that 11 percent of high school mathematics teachers and 8 percent of science teachers are from a minority group. In virtually all states a large disparity exists between the supply of minority mathematics and science teachers and the population of minority students. The percent of new minority teachers is slightly greater than the current minority representation in the science-mathematics teaching force, and the percentage of female teachers is substantially greater.

It is obvious that in a large and dynamic modern society, problems that have been generations in the making cannot be solved quickly or easily. However, the Council of Chief State School Officers has charted definite progress in mathematics and science over a decade and more recent improvement over the two-year period between 1990 and 1992.

Few people believe that the current rate of progress in these fields is sufficient to enable the United States to maintain a position of leadership in the global marketplace. In the improvement of performance by minorities and women lies the key to U.S. achievement in mathematics and the sciences.

Goal #5

Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

Literacy

Adult literacy is a major problem in the United States. Indeed, illiteracy is more widespread in this country than in other industrialized nations, and the failure to read and write effectively has removed many potentially productive people from the work force as well as prevented them from exercising their full rights as citizens and fulfilling their ultimate potential as human beings.

Goal #5 also speaks to the continuing necessity for adults as well as children to be open to new educational opportunities. In the changing economic landscape, jobs, indeed, whole industries, are suddenly rendered obsolete by new technologies and new needs. Those who can adapt to new challenges are much more likely to prosper, and education prepares individuals as well as nations for change. For this reason, the Nation's leaders have urged all U.S. citizens to become lifelong learners. Literacy is a prerequisite for such a life.

No one knows precisely how many adults are functionally illiterate. Indeed, part of the problem in eliminating illiteracy lies in the changing definition of "literacy" itself. The following list of definitions suggest the evolving nature of the concept:

- In 1930, the Civilian Conservation Corps, a federal jobs program, defined functional literacy as three or more years of schooling.

- In 1947, the U.S. Census Bureau defined functional literacy as five or more years of schooling.

- In 1952, the Bureau changed its definition to six or more years of schooling. In 1960, the U.S. Office of Education adopted an eighth grade education as the standard; and by 1970, many experts were saying that completion of high school was necessary for functional literacy. (Adult Literacy and New Technologies: Tools for a Lifetime, Technology Assessment Board, U.S. Congress, p. 4.)

- The 1991 National Adult Literacy Act defined literacy as "...an individual's ability to read, write, and speak in English, and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and develop one's knowledge and potential."

- The National Adult Literacy Survey, conducted by the Educational Testing Service for the National Center for Education Statistics, has adopted the following definition of literacy: "...using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential."

It is significant that these latter definitions include more than merely school completed or even the ability to read basic sentences. They suggest the opportunity to move freely and easily in society, to secure worthy employment, and to achieve intellectual, social, and economic goals that may vary from individual to individual.

In addition to problems of definition, no one is certain just how many Americans have literacy needs. A 1991 Census Bureau report on the 1989 adult population ages 20 and over gives some indications:

- Approximately 19 million adults have eight years or less of schooling.

- Approximately 22 million were classified as illiterate in the Bureau's 1982 English Language Proficiency Study.

- Approximately 35 million have been classified as functionally incompetent on literacy tasks by the National Adult Performance Level Study (1975).

- Approximately 38 million have less than 12 years of schooling.

Some analysts have pointed out that several subgroups of the total population exhibited a high likelihood of literacy problems. Among these would be the following:

- o approximately 26 million who report speaking a language other than English at home;
- o approximately six million who report speaking English "not well" or "not at all;"
- o approximately eight million job seekers whose literacy skills test below adequate level; and
- o and 11 to 15 million job seekers who perceive a need for better literacy skills.
  (quoted in Adult Literacy and New Technologies: Tools for a Lifetime, Office of Technology Assessment, U.S. Congress, p. 6.)

These various studies and estimates indicate the difficulty of defining the scope of the U.S. literacy problem and tracking progress toward the achievement of this Goal. However, in September of 1993, the National Adult Literacy Survey (NALS) released the first nationally representative data on the literacy skills of the Nation's adults (aged 16 and older). Data included types of literacy skills, levels, and how these skills are distributed across the population. Basic arithmetic skills were also tested. The results indicated that some 90 million adults -- about 47 percent of the U.S. adult population -- demonstrate low levels of literacy. In addition, the report revealed the following:

- o 21 to 23 percent of adults -- or some 40 to 44 million of the 191 million U.S. adults demonstrated skills at the lowest level of achievement. At this level (Level 1), respondents were asked to perform such tasks as totaling an entry on a bank deposit slip, locating the time or place of a meeting on a form, and identifying a piece of specific information in a brief news article.
- o Some 25 to 28 percent of the respondents, representing about 50 million adults nationwide, demonstrated skills at the next level of proficiency (Level 2) on each of the literacy scales. While their skills were more varied than those of individuals performing at Level 1, their repertoire was still quite limited. For example, adults at this level were able to calculate the total cost of a purchase and determine the difference in price between two items. They could also locate a particular intersection on a street map and enter background information on a simple form.

- Nearly one-third of the survey participants, or about 61 million adults nationwide, could perform at Level 3. Those at this level were able to understand and make use of information from a fairly long text and to determine whether to use addition, subtraction, multiplication, or division in solving a problem based on information contained in the directive.

- Eighteen to 21 percent of the respondents, or 34 to 40 million adults, performed at the two highest levels -- Levels 4 and 5. These adults could perform challenging tasks based on long, complicated documents and text passages.

- Many factors help to explain why so many adults demonstrated English literacy skills in the lowest proficiency level. Twenty-five percent of the respondents who performed at this level were immigrants who may have been just learning to speak English. nearly two-thirds of those at Level 1 (62 percent) had terminated their education before completing high school. A third were age 65 or older, and 26 percent had physical, mental. or health conditions that kept them from participating fully at work, school, housework, or other activities. Nineteen percent of the respondents at Level 1 reported having visual difficulties that affect their ability to read print.

- The approximately 90 million adults who performed at Levels 1 and 2 did not necessarily perceive themselves as being at risk. Across the literacy scales, 66 to 75 percent of the adults in the lowest level and 93 to 97 percent in the second lowest level described themselves as being able to read or write English "well" or "very well." Moreover, only 14 to 25 percent of the adults at Level 1, and 4 to 12 percent in Level 2 said they get a lot of help from family members or friends with reading everyday documents and performing basic arithmetic tasks. Researchers concluded that it's possible their skills, while limited, allow them to meet some -- and perhaps even most -- of their personal and occupational needs.

- The literacy proficiencies of young adults assessed in 1992 were somewhat lower, on average, than the proficiencies of young adults who participated in a 1985 literacy survey -- 11 to 14 points lower in comparable categories. Although other factors may also be involved, these performance discrepancies are probably due in large part to changes in the demographic composition of the population -- in particular, the dramatic increase of young Hispanic adults, many of whom were born in other countries and are learning English as a second language.

- Predictably, adults with relatively few years of education were more likely to perform at lower literacy levels than those who completed high school or received some type of postsecondary education. For example, on each of the three literacy scales, some 75 to 80 percent of adults with 0 to 8 years of education are at Level 1, while fewer than 1 percent are at Levels 4 and 5. In contrast, among adults with a high school diploma, 16 to 20 percent are at the lowest level on each scale, while 10 to 13 percent are at the two highest levels. Only 4 percent of adults with four-year-college degrees are at Level 1; 44 to 50 percent are at the two highest levels.

- Black, American Indian/Alaskan Native, Hispanic, Asian/Pacific Islander adults were more likely than White adults to perform at the lowest two literacy levels. These performance differences are affected by many factors. For example, with the exception of Asian/Pacific Islander adults, individuals in these groups tended to have completed fewer years of schooling in this country than had White individuals. Further, many adults of Asian/Pacific Islander and Hispanic origin were born in other countries and were likely to have learned English as a second language.

- With one exception, for each racial or ethnic group, individuals born in the United States outperformed those born abroad. The exception occurs among black adults, where there was essentially no difference (only 3-7 points. Among White and Asian/Pacific Islander adults, the average differences between native-born and foreign-born individuals range from 26 to 41 points across the literacy scales. Among Hispanic adults, the differences range from 40 to 94 points in favor of the native born.

The report concluded:

- Literacy can be thought of as a currency in this society. Just as adults with little money have difficulty meeting their basic needs, those with limited literacy skills are likely to find it more challenging to pursue their goals -- whether these involve job advancement, consumer decisionmaking, citizenship, or other aspects of their lives. Even if adults who performed at the lowest literacy levels are not experiencing difficulties at present, they may be at risk as the nation's economy and social fabric continue to change.

Though this report did not prescribe solutions to the problem of widespread illiteracy, it established benchmark standards for future studies of progress toward the achievement of Goal #5.

Lifelong Learning

The idea of lifelong learning is linked to the assumption that in order to compete in a rapidly changing marketplace, American workers will have to be more adaptable to on-the-job changes and to face the reality that they may have to learn new skills in order to survive. Yet U.S. workers seem unwilling to face the possibility that their jobs may disappear or that they may have to adapt to new challenges and techniques in the work place.

- o A study conducted by Cornell University found that U.S. workers were far more likely than Belgian, German, or Japanese workers to predict that their present job skills will be quite useful in five years. U.S. satisfaction with current job skills contrasts most sharply with the work force in Japan, where fewer than one in five workers predict that their present skills will be sufficient to meet job demands in the future.

- o Delegating responsibility to employees to inspect quality, improve productivity, and design better ways to do their own jobs has been found to be a characteristic common to many competitive, high performance companies. Yet U.S. workers were much less likely than German and Japanese workers to report that they strongly agreed that workers would be expected to think up better ways to do their jobs.

(National Education Goals Report, 1992)

Obviously, Americans must learn to be more adaptable -- more open to new educational challenges, particularly those that provide such basic skills as reading and writing. In many respects the problem of illiteracy, like the problem of dropouts, is one of motivation. A number of programs have been developed to address current deficiencies. However, many of those who would profit most from such initiatives are as yet unwilling to take advantage of the opportunity afforded them.

Goal #6

Every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

Most U.S. educators and public policy leaders acknowledge that drugs and violence have played a role in the decline of the Nation's schools. Though every school is not significantly affected by these problems, all too many are -- particularly in major urban areas. Not only are alcohol and other drugs available on or near the campuses of many elementary and secondary schools, but in recent years a wave of violence has swept over the public

school system that has affected not only students, but teachers and administrators as well. Though recent trends in drug use have been modestly encouraging, violence seems to continue unchecked in many populous areas; and murder is now the prime cause of death among young blacks.

The 1992 Goals report included an update of information on the use of alcohol and other drugs by 12th graders and on the degree to which young people have been the victims of violent crimes. As for drug use, the Report offered some encouraging news as well as some disturbing figures:

- Between 1990 and 1991, overall use of alcohol and cocaine among 12th graders declined. Fifty-four percent reported using alcohol during the past 30 days (down from 57 percent in 1990), while 1 percent used cocaine (down from 2 percent in 1990). Reported marijuana use remained at 14 percent.

- Between 1980 and 1991, use of alcohol and other drugs at school has declined noticeably, according to student reports. For example, at-school use of marijuana dropped from 21 percent to 5 percent; at-school use of alcohol dropped from 14 percent to 7 percent; and at-school cocaine use dropped from 3 percent to 1 percent.

- On the other hand, according to a 1991 study, students in progressively higher grades were less likely to disapprove of adults consuming large quantities of alcohol or marijuana, and were more likely to engage in these behaviors themselves.

- In contrast, student disapproval of adults using cocaine was consistently high across grades, and the percentage of students using cocaine was consistently low.

While alcohol and other drug use was declining, violence was on the upswing; and many students were victimized, in most cases by other young people.

- Between 1990 and 1991, the number of 12th graders who reported being threatened with a weapon at school increased from 13 percent to 16 percent.

- This figure is consistent with a pattern of increases in instances of student victimization at school from 1980 to 1991. In 1980, 34 percent of students reported theft of property, and by 1991 the figure had risen to 42 percent. In 1980, 25 percent said their property had been vandalized, and by 1991 the figure stood at 28 percent. Between 1980 and 1991, the percentage of students who had been threatened with a weapon rose from 11 percent to 15 percent, and those who had been

threatened without a weapon climbed from 19 percent to 26 percent. During the same period, the number of students deliberately injured in some way other than with a weapon increased from 11 percent to 15 percent, and those injured with a weapon rose from 5 percent to 7 percent.

Student use of drugs is greater outside of school and at school events than in school, but acts of violence are all too common during school hours.

- In 1991, as noted above, 7% of 10th-grade students reported using alcohol at school during the school day within the previous year. On the other hand, 12% used alcohol near school, and 19% used alcohol at a school dance, game, or other event.

- Substantial numbers of 8th and 10th graders are also victims of violent acts, theft, and vandalism at school, according to student reports. Threats and injuries to younger students are more common than to students in higher grades. For example, 19 percent of 8th graders have been threatened with a weapon and 9 percent have actually been injured by a weapon, as contrasted only 16 and 7 percent for 12th graders. Likewise, 34 percent of 8th graders have had their personal property vandalized, as opposed to only 28 percent of 12th graders.

However, the 1992 Goals Panel report showed some progress in restoring discipline to the classroom. The picture is still disturbing, but the improvement is measurable.

- Between 1988 and 1991, fewer high school teachers reported that student misbehavior interfered with their teaching, and more felt that principals and other teachers consistently enforced school rules. In 1988, 41 percent cited student discipline as a significant deterrent to teaching. while in 1991 the number had fallen to 33 percent. In 1982, 82 percent believed the principal backed them in the enforcement of rules and 50 percent believed that other teachers were supportive. In 1991, those figures had risen to 86 percent and 61 percent respectively.

- In 1991, 68 percent of all high school teachers felt that they had substantial control over their students in the classroom -- up from 67 percent in 1988.

However, there are some trends that suggest discipline is still a growing problem in some areas.

- Skipping school and classes is a fairly common practice among students in Grades 8, 10, and 12, especially among Hispanics and among students in higher grades.

- The percentage of 12th graders who skipped class increased by two percentage points between 1990 and 1991.

These figures suggest both progress and continuing problems in the achievement of Goal #6. In addition to the statistics on drug and alcohol use and student victimization, the Goals Panel also reports that teachers are the victims of abuse, both verbal and physical, though the latter is rare. Too many students also lack the discipline to maintain good attendance records and to be serious about their studies while in class. Clearly all segments of society must cooperate if these problems are to be solved. Schools and government have a part to play in achieving this goal, but they cannot effect significant change without the cooperation of families and communities.

CONCLUSION

The establishment of the six original National Education Goals has enabled the Nation for the first time in its history to develop standards of performance for all schools and to measure progress toward the achievement of those standards. This edition of Progress of Education in the United States of America is a preliminary report on the success of the reform movement. Clearly, the Nation has not yet developed all the instruments and benchmarks necessary to track the dynamics of the current system. Nor has it had the time to set standards of measurement of progress for the two new Goals adopted in 1994. The task of self-improvement is significantly complicated by the fact that methods of evaluation must be invented at the same time that solutions to the problems are being devised. Yet time does not permit a more leisurely and sequential way of proceeding.

However, already the pace of reform is quickening, even as standards and tests are falling into place. In two years -- halfway to the year 2000 -- we should know a great deal more about how far we've come and how far we've yet to go. Indeed, the next volume of Progress of Education in the United States of America should tell educators with some degree of certainty whether or not the National Education Goals are realistic and attainable.

PART IV

SELECTED RECENT STUDIES OF U.S. EDUCATION

SELECTED RECENT STUDIES OF U.S. EDUCATION

BY GENERAL TOPIC

Alsalam, Nabeel et al. The Condition of Education, 1993. Washington: U.S. Department of Education, 1993.

An overview of U.S. Education organized around 60 "indicators." These indicators are statistical facts that shed light on such questions as access, achievement, curriculum, financing, size, classroom climate, and diversity.

Barzun, Jacques. Begin Here: The Forgotten Conditions of Teaching and Learning. Chicago: University of Chicago Press, 1991.

A collection of essays written by a noted commentator on American education. This volume explores such diverse topics as teaching methods, curriculum, and the effects of television on learning.

Chubb, John E. and Moe, Terry M. Politics, Markets and America's Schools. Washington: Brookings Institution, 1990.

The authors propose a "new system of public schools" that would substitute the "indirect control" of the market for the "direct control" of government agencies through the use of vouchers that would enable parents to choose from among schools.

Finn, Chester. We Must Take Charge: Our Schools and Our Future. New York: Free Press, 1991.

The author discusses the education reform movement, maintaining that the subject must be approached with four concepts in mind: (1) school organization, (2) belief that a good education is a vital cultural value, (3) higher education and employers' standards for students and employees, and (4) families supporting positive attitudes toward schools.

Fiske, Edward B. et al. Smart Schools, Smart Kids: Why Do Some Schools Work?. New York: Simon and Schuster, 1991.

An analysis of schools that are effective with recommendations for a number of specific education reforms based on the analysis.

Fullan, Michael G., with Suzanne Stiegelbauer. The Meaning of Educational Change. New York: Teachers College Press of Columbia University, 1991.

This book -- by the Dean of the Faculty of Education, University of Toronto -- is a critique of the current education reform movement and a suggested agenda for legitimate and successful change.

Gronlund, Laurie E. Striving for Excellence: The National Education Goals Volume II. Washington, DC: Educational Resources Information Center (ERIC), October 1993.

This ERIC digest describes issues, exemplary programs, promising practices, and research results related to the National Education Goals.

Grymes, John A., Harwarth, Irene Baden et al of the National Center for Education Statistics. Historical Trends: State Education Facts 1969 to 1989. Washington: U.S. Department of Education, 1992.

This volume is a collection of statistics and tables that track the progress of state education over several decades.

The Joint Study Group on the National Education Goals of the National School Boards Association. National Education Goals: America's School Boards Respond. Washington: U.S. Department of Education, 1992.

This pamphlet shows the relevance of the National Education Goals to the Nation's local school boards and discusses ways in which boards can promote the achievement of the Goals.

National Council on Education Standards and Testing. Raising Standards for American Education: A Report to Congress, the Secretary of Education, The National Goals Panel and the American People. Washington: U.S .Department of Education, 1992.

This report recommended the creation of voluntary national education standards and a voluntary national system of student assessments.

National Dissemination Study Group and the National Diffusion Network. Educational Programs That Work: A Collection of Proven Exemplary Educational Programs and Practices, 1993, 19th edition. Longmont, Colorado: Sopris West Incorporated, 1993.

This compilation, which appears annually, is a state-by-state survey of educational programs that have been reviewed and proven successful. The programs fall into three categories: active projects, projects with limited activity, and projects with services no longer available. A one-page project profile for each activity is included.

National Education Commission on Time and Learning. Prisoners of Time. Washington: National Education Commission on Time and Learning, 1994.

This report provides an overview on the relationships between time and learning in the Nation's schools, cites the deficiencies of time spent on academic learning, and makes recommendations to correct those deficiencies.

National Education Goals Panel. The National Education Goals Report: Building a Nation of Learners, 1991. Washington: National Education Goals Panel, 1991.

The first of a series of annual reports on progress toward the achievement of the National Education Goals. The volume contains data defining the current status of the Nation's education system, additional information on the Goals and accompanying objectives, and comparable State data.

National Education Goals Panel. The National Education Goals Report: Building a Nation of Learners, 1992. Washington: National Education Goals Panel, 1992.

The second report on the progress of the U.S. toward the achievement of its National Education Goals.

National Education Goals Panel. The National Education Goals Report: Building a Nation of Learners, 1993. Washington: National Education Goals Panel, 1993.

The third annual publication updating progress toward the achievement of the National Education Goals.

Snyder, Thomas D., Griffith, Jeanne, et al of the National Center for Education Statistics. Digest of Education Statistics, 1993. Washington: U.S. Department of Education, 1993.

This annual publication is the most comprehensive compilation of statistics and facts on U.S. education.

Stripling, Barbara K. Libraries for the National Education Goals. Syracuse, NY: Syracuse University, ERIC Clearinghouse on Information Resources, April 1992.

A summary of information about the role of libraries in the vast array of educational efforts and what they are doing to meet the national goals.

Wu, Shi-Chang et al, National Center for Education Statistics. America's High School Sophomores: A Ten Year Comparison. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, June 1993.

A study of high school sophomores in 1980 and 1990 that compares the experiences of students, identifying changes in in-school and out-of-school activities, academic achievement, self-concept and values, plans and aspirations.

BY NATIONAL GOALS

Goal 1

Kisker, Ellen Eliason et al. A Profile of Child Care Settings: Early Education and Care in 1990, v. I. Washington: U.S. Department of Education, 1991.

A study of the extent and characteristics of formal early education and care programs for pre-school children. Volume I examines such aspects as sponsorship, operating schedules, enrollment, staffing, teacher wages, health and testing services, and fees charged to parents.

Love, John M. et al. Transitions to Kindergarten in American Schools. Washington: U.S. Department of Education, RMC Research Corporation, 1992.

This final report of the National Transition Study examines the problems surrounding transition from pre-school to kindergarten and from kindergarten to public schools. The report also examines strategies used to establish continuity and to ensure successful transitions.

Seppanen, Patricia S., de Vries, Dianne Kaplan, and Seligson, Michelle. National Study of Before- and After-School Programs. Washington: U.S. Department of Education, 1993.

This report contains a survey and analysis of existing before- and after-school child-care programs in the United States. The authors also draw some conclusions based on the data and discuss implications for future policy and practice.

Goal 2

American Institutes for Research. National Dropout Statistics Field Test Evaluation. Washington: U.S. Department of Education, 1992.

A complete statistical survey of the problem of dropouts, with some analysis of the figures.

Goal 2 Work Group, Office of Educational Research and Improvement. Goal 2: High School Completion. Washington, DC: U.S. Department of Education, October 1993.

This volume, one of a series entitled Reaching the Goals, is designed to share information with policymakers about both effective and ineffective approaches, so as to guide the development of programs that can succeed in realizing Goal 2.

Goal 3

McMillen, Marilyn M. et al, National Center for Education Statistics. Dropout Rates in the United States: 1992. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, September 1993.

This fifth annual dropout report to Congress presents data for 1992 on high school dropout and retention rates. In addition, it contains detailed data on demographic and socioeconomic levels for high school completion and graduation rates data.

National Assessment Governing Board. Reading Framework for the 1992 National Assessment of Educational Progress. Washington, DC: U.S. Department of Education, 1992.

NAEP reports, also known as "The Nation's Report Card," provides descriptive information about student strengths and weaknesses in reading and a number of other subjects.

Sizer, Theodore. Horace's School: Redesigning the American High School. Boston: Houghton Mifflin, 1992.

A fictional principal provides the vehicle for Sizer to define what he believes to be a model school. Sizer favors a curriculum that emphasizes strong academic courses.

Blank, Rolf K. and Gruebel, Doreen. State Indicators of Science and Mathematics Education, 1993. Washington: The Council of Chief State School Officers, 1993.

This study is an analysis and evaluation of new State Science and Mathematics Indicators for the 1991-92 school year.

Eisenhower National Clearinghouse. Guidebook to Excellence 1994: A Directory of Federal Resources for Mathematics and Science Education Improvement. Washington, DC: U.S Government Printing Office, 1994.

A comprehensive directory of Federal offices, programs, and facilities for K-12 education in mathematics and science.

Federal Coordinating Council for Science, Engineering, and Technology (FCCSET). By the Year 2000: First in the World. Washington: FCCSET, 1991.

This report surveys current programs designed to improve mathematics and science education in the United States. Those examined include pre-college programs, undergraduate programs, and Federal initiatives. The report also suggests "possible new initiatives" to be pursued at every level.

Mullis, In a V.S. et al for Educational Testing Service. The State of Mathematics Achievement. Washington: U.S. Department of Education, 1991.

This substantial document uses numerous tables and figures to define the current performance level of U.S. students in virtually every area of mathematical achievement.

The National Research Council. Everybody Counts: A Report to the Nation on the Future of Mathematics Education. Washington: National Academy Press, 1989.

This report examines questions relevant to mathematics education, including potential students, potential teachers, curriculum, teaching methods, and the special challenge of attracting women and minorities into the study of mathematics.

App, Anne H., compiler. Papers Presented at the Design Conference for the National Assessment of Vocational Education. Washington: U.S. Department of Education, 1991.

As its title suggests, this volume is a collection of papers delivered at a March, 1991 conference of educators with expertise in the field of vocational training. This conference addressed such important issues as the relationship of vocational education to employment, the best method of assessing the outcomes of vocational education, and the practical impact of the 1990 Perkins Act.

Carnevale, Anthony P. and Porro, Jeffrey D., American Society for Training and Development. QUALITY EDUCATION: School Reform for the New American Economy. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, 1994.

A report on the need to simultaneously reform the schools and to modernize the workplace. It sets out a set of principles and strategies on which employers and educators should base their efforts to achieve reform.

Chan Kopka, Teresita L. et al, National Center for Education Statistics. Adult Education: Employment-Related Training. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, May 1994.

A report of employed adults (17+) that were enrolled in a part-time educational activitiy over a 12-month period. It also determines what types of training courses they enrolled in.

Goal 5 Work Group, Office of Educational Research and Improvement. Goal 5: Adult Literacy and Lifelong Learning. Washington, DC: U.S. Department of Education, July 1993.

This volume, one of a series entitled Reaching the Goals, focuses on issues in postcompulsory education related to skills needed by adults as learners, workers, and citizens.

Hopstock, Paul, Young, Malcolm B., and Zehler, Annette M. Serving Different Masters: Title VII Evaluation Practice and Policy. Washington: U.S. Department of Education, 1993.

This study examines bilingual education programs and special alternative projects funded by the Federal government, programs and projects designed to improve the linguistic skills of those for whom English is a second language.

Kirsch, Irwin S. et al for Educational Testing Service. Adult Literacy in America. Washington: U.S. Department of Education, 1993.

This document summarizes the results of the National Adult Literacy Survey -- a cooperative effort planned by the National Center for Education Statistics and the Division of Adult Education and Literacy of the U.S. Department of Education.

Langer, Judith A. et al for Educational Testing Service. Learning to Read in Our Nation's Schools. Washington: U.S. Department of Education, 1990.

This report is based on the 1988 assessment of the reading achievement of American school children in the 4th, 8th, and 12th grades. Its major findings include comments on the reading proficiency of American students, the differences among various identifiable groups, the influence of home environment, the degree to which reading is emphasized in schools, and the reading habits of children off-campus.

Office of Technology Assessment. Adult Literacy and New Technologies: Tools for a Lifetime. Washington: U.S. Congress, 1993.

This study analyzes the problem of illiteracy in the United States and then outlines policy options, including the use of technology.

Goal 6

Goal 6 Work Group, Office of Educational Research and Improvement of the U.S. Department of Education. Goal 6: Safe, Disciplined, and Drug-Free Schools. Washington: U.S. Department of Education, 1993.

This volume, one of a series titled Reaching the Goals, defines the problems of drug use and violence in U.S. schools, summarizes current research, and suggests strategies to address these problems.

Muraskin, Lana D., Westat, Inc. Promising Drug Prevention Programs: An Interim Report to Congress. Washington: U.S. Department of Education, 1993.

This report describes promising school and community programs designed to reduce alcohol and drug use among young people.

National Clearinghouse for Alcohol and Drug Information. Success Stories from Drug-Free Schools: A Guide for Educators, Parents, & Policymakers. Washington, DC: U.S. Department of Education, 1991.

A compilation of schools under the U.S. Department of Education's Drug-Free School Recognition Program. The schools' leaders explain, in their own words, their strategy for drug prevention.

Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse. Research and Intervention: Preventing Substance Abuse in Higher Education. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, April 1994.

A report compiling views of the higher education community on alcohol and other drug abuse prevention on the college campus. Major articles are provided in four issues: prevention theory, intervention research, environmental influences and assessment.

Office of the President. National Drug Control Strategy. Washington: The White House, 1989, 1990, 1991, and 1992.

This annual report is a comprehensive plan for Federal drug control activities for the fiscal year to follow. It also contains an update on the status of drug use and drug education.

Resource Team on National Education Goal 6. Schools Free of Drugs and Violence. Washington: U.S. Department of Education, 1991.

This pamphlet defines the twin problems of drug use and violence in U.S. schools, discusses strategies, and outlines the role of parents, teachers, schools, and communities in the achievement of Goal 6.

U.S. Department of Education. Learning to Live Drug Free: A Curriculum Model for Prevention. Washington: U.S. Department of Education, 1990.

This booklet provides a flexible model for classroom-based prevention efforts for kindergarten through grade 12.

BY ADDITIONAL TOPIC

Choice

Glenn, Charles. Choice of Schools in Six Nations. Washington: U.S. Department of Education, 1989.

This volume is a survey of school choice in France, the Netherlands, Belgium, Britain, Canada, and West Germany, with a preface and introduction showing the relevance of these other systems to the U.S. reform movement.

Disadvantaged Students

The Advisory Committee on Testing in Chapter 1. Reinforcing the Promise, Reforming the Paradigm. Washington: U.S. Department of Education, 1993.

After examining current testing practices, this report concludes that the time is now appropriate for Chapter 1 testing to concentrate more on promoting student learning and less on measuring regulatory compliance.

Knapp, Michael S. and Turnbull, Brenda J. Better Schooling for the Children of Poverty. Washington: U.S. Department of Education, 1990.

This report proposes a new framework for considering effective curriculum and instruction in the education of the disadvantaged.

Knapp, Michael S. et al. Academic Challenge for the Children of Poverty, Volume 1: Findings and Conclusions 1993. Washington, DC: U.S. Department of Education, Office of Policy and Planning, 1993.

This full report documents the three-year study of the curriculum and instruction typically offered in schools serving disadvantaged students; comparing newer, alternative approaches to more conventional teaching of basic skills.

National Assessment of Chapter 1 Independent Review Panel. Reinventing Chapter 1: The Current Chapter 1 Program and New Directions. Washington: U.S. Department of Education, 1993.

This report examines the Federal government's program to assist disadvantaged children improve their educational performance. The Review Panel's conclusion: as currently structured the Chapter 1 program is not accomplishing its goals and is in need of revision. The Panel makes concrete recommendations for improvement.

Finance

Kozol, Jonathan. Savage Inequalities: Children in America's Schools. New York: Crown, 1991.

The author paints a bleak picture of education for minorities and the poor in a system where some schools are well-financed and others lack the basic funds necessary for effective education.

The Secretary's Commission on Achieving Necessary Skills. Learning a Living: A Blueprint for High Performance. Washington, DC: U.S. Department of Labor, April 1992.

This report describes the economic choices facing the U.S., defines the workforce issue and makes recommendations to set the nation on the path to a high-performance future.

Higher Education

Anderson, Martin. Impostors in the Temple. New York: Simon and Schuster, 1992.

This volume examines current problems in American higher education and offers solutions. In addition to exploring such issues as financial scandals and sexual harassment, the author also highlights the activities of powerful groups that exert excessive influence on the governing boards of colleges and universities.

Bok, Derek Curtis. Universities and the Future of America. Durham, North Carolina: Duke University Press, 1990.

In this expansion of a lecture series delivered at Stanford, the author calls for a realigning of priorities by colleges and universities to address the nation's most pressing social problems.

D'Sousa, Dinesh. Illiberal Education: The Politics of Race and Sex on Campus. New York: Free Press, 1991.

The author argues that affirmative action policies in college admissions and the introduction of multicultural curricula have promoted ignorance and racism.

Graff, Gerald. Beyond the Culture Wars: How Teaching the Conflicts Can Revitalize American Education. New York: Norton, 1992.

The author argues that recent educational conflicts over political and social issues are positive signs and should be utilized as a way to revitalize higher education.

Kimball, Roger. Tenured Radicals: How Politics Has Corrupted Our Higher Education. New York: Harper and Row, 1990.

The author discusses "individuals, symposia, schools, groups, etc. that he believes are destroying the values, methods, and goals of traditional humanistic studies.

Smith, Page. Killing the Spirit: Higher Education in America. New York: Viking, 1990.

This history of higher education in the United States contains a critique of current trends in colleges and universities that the author considers destructive to teaching and learning.

Sykes, Charles J. The Hollow Men: Politics and Corruption in Higher Education. Washington: Regnery-Gateway, 1990.

The author uses Dartmouth College as the focus for his examination of recent changes in the social and intellectual contexts of American colleges and universities.

International

Alexander, Kern and Williams, Vivian, eds. Reforming Education in a Changing World: International Perspectives, Blacksburg, Virginia and Oxford, England: Oxford Round Table, 1991.

This volume consists of a collection of papers on educational reform presented at Oxford by 21 scholars from around the world. Nine of the essays focus on the United States, but there are also essays on reform in the United Kingdom, Bulgaria, Romania, Czechoslovakia, Guyana, Zimbabwe, and Malawi.

Ginsburg, Alan et al. International Education Comparisons. Washington: U.S. Department of Education, 1992.

This short pamphlet offers brief comparisons of a number of education systems, focusing on such topics as governance and structure, school population, curriculum, student performance, recent reforms, funding, classroom size, and nature of instruction.

Private Schools

Benson, Peter and McMillen, Marilyn Miles. Private Schools in the United States: A Statistical Profile, with Comparisons to Public Schools. Washington: U.S. Department of Education, 1991.

This volume is a quantitative study of private education in the United States and includes an analysis of key findings.

Teaching and Teachers

Feistrizer, C. Emily. Alternative Teacher Certification: A State-by-State Analysis 1990. Washington: National Center for Education Information, 1990.

This report surveys the 50 States to determine what kinds of alternative certification programs for teachers are in place and what constituencies they are serving. It is composed largely of survey results with only a small segment of analysis.

Freedman, Samuel G. Small Victories: The Real World of a Teacher, Her Students, and Their High School. New York: Harper and Row, 1990.

This is an account of the author's year as an observer at Seward Park High School on the Lower East Side of Manhattan. He focuses on the classroom of Jessica Siegel, an English teacher.

Goodlad, John I. Teachers for Our Nation's Schools. San Francisco: Jossey-Bass, 1990.

The author calls for a professionalism among teachers comparable to that of physicians and lawyers.

Johnson, Susan Moore. Teachers at Work: Achieving Success in Our Schools. New York: Basic Books, 1990.

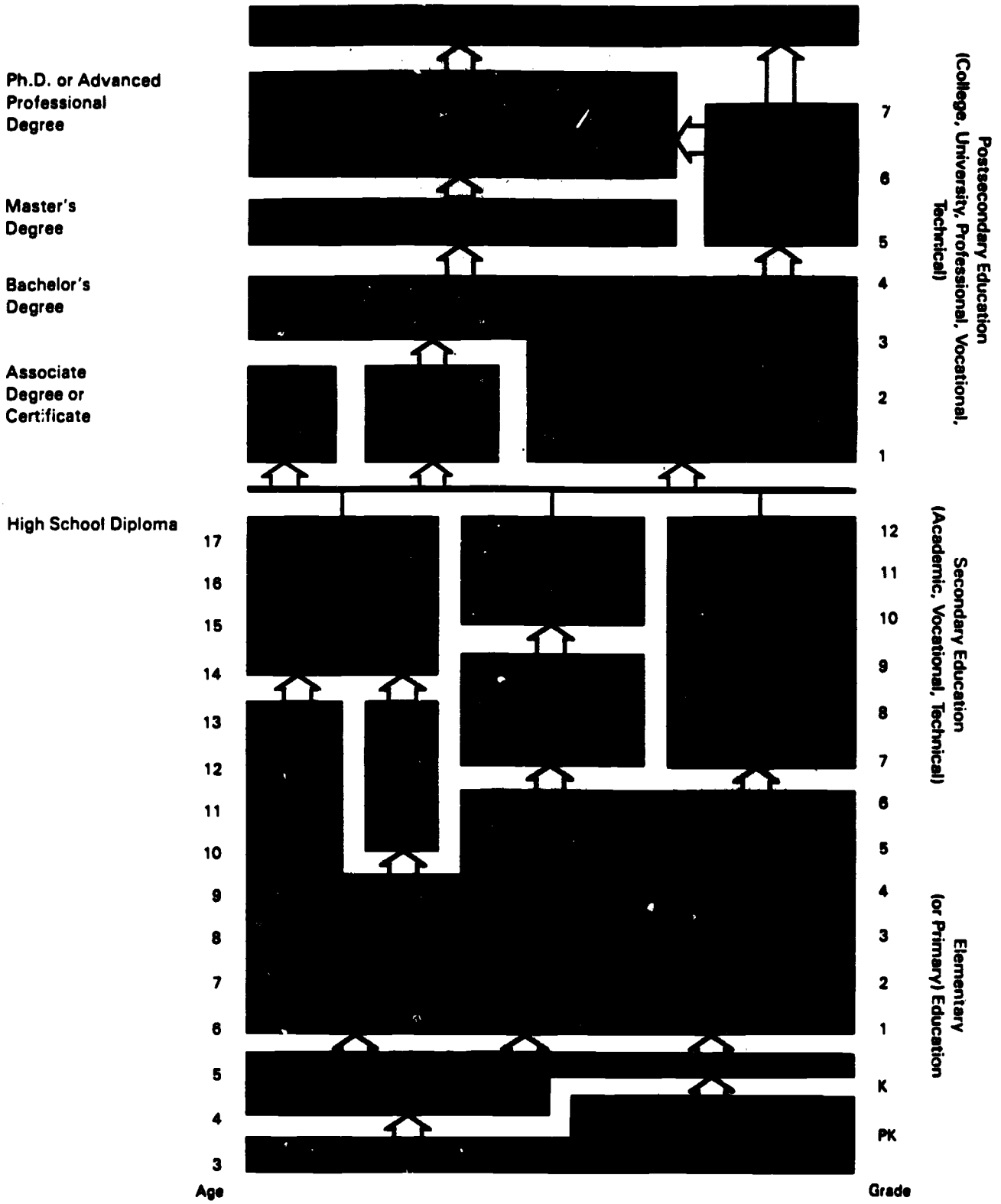
This study, based on interviews with 115 teachers from public and private schools, gives a psychological picture of a teacher in school.

Riley, Richard W., U.S. Secretary of Education. A Teacher's Guide to the U.S. Department of Education. Washington, DC: U.S Department of Education, Spring 1994.

An expanded edition of the U.S. Department of Education's services to teachers and other practitioners. Also included are a summary of the recently passed GOALS 2000: Educate America Act, a directory of the Department's regional offices, etc.

FIGURE AND TABLES

Figure 1.—The structure of education in the United States



NOTE—Adult education programs, while not separately delineated above, may provide instruction at the elementary, secondary, or higher education level. Chart reflects typical patterns of progression rather than all possible variations.

SOURCE: U.S. Department of Education, National Center for Education Statistics.

Table 1.–Enrollment in educational institutions, by level and control of institution: Fall 1990 to fall 1994
[In thousands]

Level of instruction and type of control	Fall 1990	Fall 1991	Fall 1992[1]	Fall 1993[1]	Estimated fall 1994
1	2	3	4	5	6
All levels	60,268	61,594	62,601	63,424	64,519
Public	52,061	53,346	54,122	54,803	55,754
Private	8,206	8,248	8,478	8,621	8,765
Elementary and secondary education[2]	46,448	47,235	48,109	48,824	49,819
Public	41,217	42,036	42,735	43,353	44,254
Private	5,232	5,199	5,375	5,471	5,565
Grades K–8[3]	33,973	34,572	35,209	35,654	36,170
Public	29,878	30,498	30,997	31,374	31,837
Private	4,095	4,074	4,212	4,280	4,333
Grades 9–12	12,475	12,663	12,901	13,170	13,649
Public	11,338	11,538	11,738	11,979	12,417
Private	1,137	1,125	1,163	1,191	1,232
Higher education[4]	13,820	14,359	14,491	14,600	14,700
Public	10,845	11,310	11,388	11,450	11,500
Private	2,975	3,049	3,104	3,150	3,200

[1]Preliminary.
[2]Includes enrollments in local public school systems and in most private schools (religiously affiliated and nonsectarian). Excludes subcollegiate departments of institutions of higher education, residential schools for exceptional children, and Federal schools. Excludes preprimary pupils in schools that do not offer first grade or above.
[3]Includes kindergarten and some nursery school pupils.
[4]Includes full–time and part–time students enrolled in degree–credit and nondegree–credit programs in universities and 2–year and 4–year colleges.

NOTE.–Higher education enrollment projections are based on the middle alternative projections published by the National Center for Education Statistics. Because of rounding, details may not add to totals. Some data have been revised from previously published figures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1994.*

Table 2.–Number of teachers in educational institutions, by level and control of institution: Fall 1990 to fall 1994
[In thousands]

Level of instruction and type of control	Fall 1990	Fall 1991	Fall 1992[1]	Fall 1993[1]	Estimated fall 1994
1	2	3	4	5	6
All levels	3,570	3,613	3,655	3,712	3,738
Public	2,972	3,013	3,043	3,095	3,111
Private	599	600	613	617	627
Elementary and secondary education[2]	2,753	2,787	2,821	2,871	2,890
Public	2,398	2,432	2,458	2,507	2,520
Private	355	355	363	364	370
Elementary[3]	1,680	1,713	1,742	1,771	1,769
Public	1,426	1,459	1,482	1,510	1,506
Private	254	254	260	261	263
Secondary	1,073	1,074	1,079	1,100	1,122
Public	972	973	976	997	1,014
Private	101	101	103	103	108
Higher education[4]	817	826	835	842	848
Public	574	581	585	588	591
Private	244	245	250	253	257

[1]Preliminary.
[2]Includes teachers in local public school systems and in most private schools (religiously affiliated and nonsectarian). Excludes subcollegiate departments of institutions of higher education, residential schools for exceptional children, and Federal schools. Excludes preprimary pupils in schools that do not offer first grade or above. Teachers are reported in full–time equivalents.
[3]Includes kindergarten and some nursery school teachers.
[4]Includes full–time and part–time faculty with the rank of instructor or above in universities, other 4–year colleges, and two–year colleges.

NOTE.–Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1994.*

Table 3.—Years of school completed by persons age 25 and over and 25 to 29, by sex and race: 1940 to 1993

Age, year, and sex	Percent, by years of school completed								
	All races			White[1]			Black and other races[1]		
	Less than 5 years of elementary school	4 years of high school or more	4 or more years of college	Less than 5 years of elementary school	4 years of high school or more	4 or more years of college	Less than 5 years of elementary school	4 years of high school or more	4 or more years of college
1	2	3	4	5	6	7	8	9	10
	Males and females								
25 and over									
April 1940	13.7	24.5	4.6	10.9	26.1	4.9	41.8	7.7	1.3
April 1950	11.1	34.3	6.2	8.9	36.4	6.6	32.6	13.7	2.2
April 1960	8.3	41.1	7.7	6.7	43.2	8.1	23.5	21.7	3.5
March 1970	5.3	55.2	11.0	4.2	57.4	11.6	14.7	36.1	6.1
March 1980	3.4	68.6	17.0	2.6	70.5	17.8	8.8	54.6	11.1
March 1989	2.5	76.9	21.1	2.0	78.4	21.8	5.6	67.3	16.9
March 1990	2.4	77.6	21.3	2.0	79.1	22.0	5.4	68.7	16.5
March 1991	2.4	78.4	21.4	2.0	79.9	22.2	5.0	69.6	16.7
March 1992	2.8	80.8	21.4	1.8	82.2	22.1	4.1	72.9	17.2
March 1993	2.1	81.5	21.9	1.7	82.7	22.6	4.1	74.7	17.7
25 to 29									
April 1940	5.9	38.1	5.9	3.4	41.2	6.4	27.0	12.3	1.6
April 1950	4.6	52.8	7.7	3.3	56.3	8.2	16.1	23.6	2.8
April 1960	2.8	60.7	11.0	2.2	63.7	11.8	7.2	38.6	5.4
March 1970	1.1	75.4	16.4	0.9	77.8	17.3	2.2	58.4	10.0
March 1980	0.8	85.4	22.5	0.8	86.9	23.7	1.0	77.0	15.2
March 1989	1.0	85.5	23.4	0.9	86.0	24.4	1.2	83.1	18.1
March 1990	1.2	85.7	23.2	1.2	86.3	24.2	1.1	82.5	18.2
March 1991	1.0	85.4	23.2	1.0	85.8	24.6	0.6	83.1	16.4
March 1992	0.9	88.1	23.6	0.9	88.5	25.0	0.9	85.7	16.9
March 1993	0.7	88.2	23.7	0.7	88.5	24.7	0.5	87.0	18.7
	Males								
25 and over									
April 1940	15.1	22.7	5.5	12.0	24.2	5.9	46.2	6.9	1.4
April 1950	12.2	32.6	7.3	9.8	34.6	7.9	36.9	12.6	2.1
April 1960	9.4	39.5	9.7	7.4	41.6	10.3	27.7	20.0	3.5
March 1970	5.9	55.0	14.1	4.5	57.2	15.0	17.9	35.4	6.8
March 1980	3.6	69.2	20.9	2.7	71.0	22.1	10.3	55.3	11.9
March 1990	2.7	77.7	24.4	2.2	79.1	25.3	5.9	69.1	18.3
March 1991	2.7	78.5	24.3	2.2	79.8	25.4	6.0	70.1	17.8
March 1992	2.3	81.0	24.3	1.9	82.3	25.2	4.5	73.0	18.8
March 1993	2.2	81.8	24.8	1.8	83.0	25.7	4.7	74.9	19.0
	Females								
25 and over									
April 1940	12.4	26.3	3.8	9.8	28.1	4.0	37.5	8.4	1.2
April 1950	10.0	36.0	5.2	8.1	38.2	5.4	28.6	14.7	2.4
April 1960	7.4	42.5	5.8	6.0	44.7	6.0	19.7	23.1	3.6
March 1970	4.7	55.4	8.2	3.9	57.7	8.6	11.9	36.6	5.6
March 1980	3.2	68.1	13.6	2.5	70.1	14.0	7.6	54.1	10.4
March 1990	2.2	77.5	18.4	1.8	79.0	19.0	5.0	68.4	15.1
March 1991	2.1	78.3	18.8	1.8	79.9	19.3	4.1	69.1	15.8
March 1992	2.0	80.6	18.6	1.7	82.0	19.1	3.8	72.9	15.9
March 1993	2.0	81.3	19.2	1.7	82.5	19.7	3.5	74.5	16.5

[1]Persons of Hispanic origin are included, as appropriate, in the "white" or in the "black and other races" category.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *U.S. Census of Population, 1960, Vol. 1*, part 1; Current Population Reports, Series P–20; Series P–19, No. 4; and unpublished data from the Current Population Survey.

Table 4.—High school graduates compared with population 17 years of age: 1869–70 to 1993–94

[Numbers in thousands]

School year	Population 17 years old[1]	High school graduates					Graduates as a percent of 17-year-olds
		Total[2]	Sex		Control		
			Male	Female	Public[3]	Private[4]	
1	2	3	4	5	6	7	8
1869–70	815	16	7	9	---	---	2.0
1879–80	946	24	11	13	---	---	2.5
1889–90	1,259	44	19	25	22	22	3.5
1899–1900	1,489	95	38	57	62	33	6.4
1909–10	1,786	156	64	93	111	45	8.8
1919–20	1,855	311	124	188	231	80	16.8
1929–30	2,296	667	300	367	592	75	29.0
1939–40	2,403	1,221	579	643	1,143	78	50.8
1949–50	2,034	1,200	571	629	1,063	136	59.0
1959–60	2,672	1,858	895	963	1,627	231	69.5
1969–70	3,757	2,889	1,430	1,459	2,589	300	76.9
1979–80	4,262	3,043	1,491	1,552	2,748	295	71.4
1986–87	3,754	2,694	---	---	2,429	265	71.8
1987–88	3,849	2,773	---	---	2,500	273	72.1
1988–89	3,842	2,727	---	---	2,459	268	71.0
1989–90	3,574	2,588	---	---	2,320	268	72.4
1990–91	3,417	2,503	---	---	2,235	268	73.2
1991–92	3,381	2,471	---	---	2,212	259	73.1
1992–93[5]	3,430	2,512	---	---	2,255	257	73.2
1993–94[5]	3,440	2,513	---	---	2,255	258	73.1

[1]Derived from Current Population Reports, Series P–25. 17-year-old population adjusted to reflect October 17-year-old population.

[2]Includes graduates of public and private schools.

[3]Data for 1929–30 and preceding years are from Statistics of Public High Schools and exclude graduates of high schools which failed to report to the Office of Education.

[4]For most years, private school data have been estimated based on periodic private school surveys. For years through 1957–58, private includes data for subcollegiate departments of institutions of higher education and residential schools for exceptional children.

[5]Public high school graduates based on state estimates.

---Data not available.

NOTE.—Includes graduates of regular day school programs. Excludes graduates of other programs, when separately reported, and recipients of high school equivalency certificates. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1994.*

Table 5.—Earned degrees conferred by institutions of higher education, by level of degree and sex of student: 1990–91 to 1994–95

Level of degree and sex	1990–91	1991–92	Estimated 1992–93	Estimated 1993–94	Estimated 1994–95
1	2	3	4	5	6
Associate degrees	481,720	504,231	497,000	504,000	518,000
Males	198,634	207,481	207,000	210,000	216,000
Females	283,086	296,750	290,000	294,000	302,000
Bachelor's degrees	1,094,538	1,436,553	1,145,000	1,165,000	1,178,000
Males	504,045	820,811	529,000	537,000	548,000
Females	590,493	615,742	616,000	628,000	630,000
Master's degrees	337,168	352,838	364,000	370,000	377,000
Males	156,482	161,842	170,000	176,000	182,000
Females	180,686	190,996	194,000	194,000	195,000
First–professional degrees	71,948	74,146	73,900	74,700	75,100
Males	43,846	45,071	43,900	44,000	44,100
Females	28,102	29,075	30,000	30,700	31,000
Doctor's degrees	39,294	40,659	41,200	41,300	41,300
Males	24,756	25,557	25,600	25,200	24,800
Females	14,538	15,102	15,600	16,100	16,500

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1994.*

Table 6.—Total expenditures of educational institutions, by level of instruction and by type of control: 1989–90 to 1993–94

[In billions]

Level of instruction and type of control	1989–90	1990–91	1991–92	Estimated 1992–93	Estimated 1993–94
1	2	3	4	5	6
All levels	$382.1	$414.7	$439.0	$462.7	$484.0
Public	309.2	335.1	353.8	372.2	388.8
Private	72.9	79.6	85.1	90.5	95.2
Elementary and secondary expenditures[1]	230.3	248.9	261.8	275.3	285.4
Public	212.1	229.4	241.6	253.8	263.5
Private[2]	18.2	19.5	20.2	21.5	21.9
Higher education expenditures[3]	151.8	165.8	177.2	187.4	198.6
Public	97.1	105.6	112.3	118.4	125.3
Private	54.7	60.1	64.9	69.0	73.3

[1]Includes current expenditures, capital outlay, and interest on school debt.
[2]Estimated.
[3]Includes current expenditures and additions to plant value.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1994.*

Table 7.–Total expenditures of educational institutions related to the gross domestic product, by level of institution: 1959–60 to 1993–94

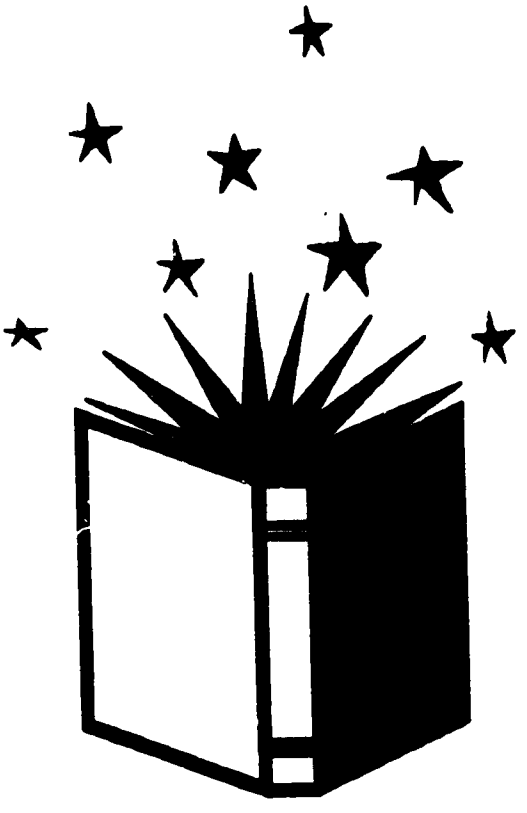
Year	Gross domestic product (in billions)	School year	Total expenditures for education (amounts in millions)					
			All educational institutions		All elementary and secondary schools		All colleges and universities	
			Amount	As a percent of gross domestic product	Amount	As a percent of gross domestic product	Amount	As a percent of gross domestic product
1	2	3	4	5	6	7	8	9
1959	$494.2	1959–60	$23,860	4.8	$16,713	3.4	$7,147	1.4
1969	959.5	1969–70	68,459	7.1	43,183	4.5	25,276	2.6
1970	1,010.7	1970–71	75,741	7.5	48,200	4.8	27,541	2.7
1971	1,097.2	1971–72	80,672	7.4	50,950	4.6	29,722	2.7
1972	1,207.0	1972–73	86,875	7.2	54,952	4.6	31,923	2.6
1973	1,349.6	1973–74	95,396	7.1	60,370	4.5	35,026	2.6
1974	1,458.6	1974–75	108,664	7.4	68,846	4.7	39,818	2.7
1975	1,585.9	1975–76	118,706	7.5	75,101	4.7	43,605	2.7
1976	1,768.4	1976–77	126,417	7.1	79,194	4.5	47,223	2.7
1977	1,974.1	1977–78	137,042	6.9	86,544	4.4	50,498	2.6
1978	2,232.7	1978–79	148,308	6.6	93,012	4.2	55,296	2.5
1979	2,488.6	1979–80	165,627	6.7	103,162	4.1	62,465	2.5
1980	2,708.0	1980–81	182,849	6.8	112,325	4.1	70,524	2.6
1981	3,030.6	1981–82	197,801	6.5	120,486	4.0	77,315	2.6
1982	3,149.6	1982–83	212,081	6.7	128,725	4.1	83,356	2.6
1983	3,405.0	1983–84	228,597	6.7	139,000	4.1	89,597	2.6
1984	3,777.2	1984–85	247,657	6.6	149,400	4.0	98,257	2.6
1985	4,038.7	1985–86	269,485	6.7	161,800	4.0	107,685	2.7
1986	4,268.6	1986–87	291,974	6.8	175,200	4.1	116,774	2.7
1987	4,539.9	1987–88	313,375	6.9	187,999	4.1	125,376	2.8
1988	4,900.4	1988–89	346,883	7.1	209,377	4.3	137,506	2.8
1989	5,250.8	1989–90	382,062	7.3	230,300	4.4	151,762	2.9
1990	5,546.1	1990–91	414,690	7.5	248,930	4.5	165,760	3.0
1991	5,722.9	1991–92	438,971	7.7	261,767	4.6	177,204	3.1
1992	6,038.5	1992–93[1]	462,700	7.7	275,300	4.6	187,400	3.1
1993	6,377.9	1993–94[1]	484,000	7.6	285,400	4.5	198,600	3.1

[1]Estimated.

NOTE.–Total expenditures for public elementary and secondary schools include current expenditures, interest on school debt, and capital outlay. Data for private elementary and secondary schools are estimated. Total expenditures for colleges and universities include current–fund expenditures and additions to plant value. Excludes expenditures of noncollegiate postsecondary institutions. Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1994;* and Council of Economic Advisers, *Economic Indicators.*

APPENDIX



GOALS
2000

"A World-Class Education for Every Child"

UNITED STATES DEPARTMENT OF EDUCATION

The Goals 2000: Educate America Act

When President Clinton placed his signature on the Goals 2000: Educate America Act on March 31, 1994, he did more than just sign into law this innovative and comprehensive program to improve education. It became the day that America got serious about education.

His action commenced the current phase of an about-face in education that began eleven years ago after the discouraging report "A Nation At Risk" was issued, which described a "rising tide of mediocrity" in American education.

Three times in the last six years, Congress has attempted to pass education reform legislation and each time it has been unable to resolve its differences. The strong bipartisan support for Goals 2000 demonstrates that we are ready to move from "a nation at risk" to a nation on the move.

The enactment of Goals 2000 is the beginning of a new era in school and education reform -- a revolutionary, all-inclusive plan to change every aspect of our education system, while at the same time aligning its individual parts with one another.

It offers an opportunity for those concerned with the state of American education to become involved in the implementation of real change and improvement of our nation's education system, working at the local community and state levels.

And it will create and improve learning opportunities for everyone from pre-school to those who return to school.

By generating enthusiasm in schools and states throughout this nation, it will create thousands of community-based reform efforts, each working for the betterment of our educational system, and each allowing every school and every student to be the best they can be -- to learn to world-class standards.

Goals 2000 will move the nation toward a system that is based on high standards that all students can meet -- a system that will provide both equity and excellence for all of the students in this country.

When we fail to hold all students to high standards, the results are low achievement and the tragic experience of children leaving school without ever having been challenged to fulfill their potential.

High standards lets everyone in the education system know what to aim for. It allows every student, every parent, and every teacher to share in common expectations of what students should know and be able to accomplish. Students will learn more when more is expected of them, in school and at home. And, aligning teacher education, instructional materials, assessment practices, and parental involvement, will create coherence in educational practice.

The American people have said they are ready to move from the old assembly line version of education to a better way of educating their children. They want their children to be part of the new, emerging high-tech, high-knowledge economy of the 21st century.

By transforming the national education goals into a policy for which committed people across our nation can work, President Clinton has helped to ensure that the future of this nation will remain strong and secure and that its citizens will be able to compete and prosper in this new global economic era that is already upon us.

Since early in our history, the public education system of this nation has been a magnet and a model for people throughout the world who yearn to make something better of their lives. It is a beacon of light across the globe, a symbol of our democratic and egalitarian traditions.

Unfortunately, in recent years, this standard has slipped; the beacon has dimmed. That is why the Goals 2000 law is so important, as well as the subsequent enactment of additional education reform legislation like the School-to-Work Opportunities Act, and the revolutionary reauthorization of the Elementary and Secondary Act, both of which are designed to dovetail with Goals 2000. Each of these important changes in the law will offer federal assistance in implementing local education reform...help that is designed to assist, but not interfere with the traditional local character of education.

It has been nearly thirty years since this nation has seen the kind of reform in education that Goals 2000 offers. It is up to us to ensure that we maximize the opportunities this law offers us and work to guarantee a challenging education for every student. For the future of our children and our nation, it is the least we can do.

April 6, 1994

UNITED STATES DEPARTMENT OF EDUCATION

The Goals 2000: Educate America Act
A Strategy for Reinventing Our Schools

American education is in crisis. Our schools are not meeting the needs of students or the demands of our economy for a more skilled, more adaptable work force. And many vocational education and job training programs don't equip beginning or experienced workers with the skills needed for success in the workplace. Without comprehensive education reform across America, our nation's economic strength is in jeopardy.

Recognizing this peril, a large majority of the American people have called for a dramatic overhaul of our nation's public school system. President Clinton's program for change—the Goals 2000: Educate America Act—will help to reform our schools dramatically by establishing high academic and occupational standards and providing support to states and communities to help students reach those standards.

A PLAN THAT WILL WORK

The Goals 2000: Educate America Act is not an experiment; it incorporates the lessons of education reform from communities and states in the 1980s.

- First, raising standards and making course content more challenging really works. When more is expected of students, they work harder and achieve more. When employees know what skills they need to succeed on the job, they will work to achieve them.

- Second, we must change our expectations of teachers. They cannot teach to new standards using the same old ways. We must overhaul teacher training and make continuing professional development an integral part of their job.

- Third, accountability is essential. Schools must be given the tools and the flexibility they need to get the job done and then be held accountable for the results they achieve. There must be real rewards for high performance and significant consequences for failure.

- Fourth, schools can't do the job alone. Parents, businesses, families, community organizations, and public and private agencies that provide

health care, counseling, family support and other social services must be part of community-wide efforts to support students.

- Fifth, in an economy in which what you earn depends on what you learn, learning must never end. Schools, colleges and employers must work together with local, state and federal governments to make lifelong learning a reality for all employees.

The Goals 2000: Educate America Act incorporates and builds on these lessons of the last decade and creates a historic new partnership in which parents, schools, teachers, business and labor leaders, the states, and the federal government all work together to educate all students.

HIGHLIGHTS OF THE LEGISLATION

The Goals 2000: Educate America Act will:

- Set in law the original six National Education Goals — concerning school readiness, school completion, student academic achievement, leadership in math and science, adult literacy, and safe and drug-free schools — and add two new goals related to parental participation and professional development;

- Develop and adopt—for the first time—challenging national performance standards that define what all students should know and be able to do in core subject areas such as science, math, history, English, geography, foreign languages and the arts, and support local reform efforts to make those standards a reality in every classroom;

- Strengthen and improve teacher training, textbooks, instructional materials, technologies and overall school services so that students will have the tools to achieve higher standards;

- Encourage the development of innovative student performance assessments to gauge progress;

- Establish a National Skills Standards Board to promote the development of occupational skill standards that will define what workers will need to know and to ensure that American workers are better trained and internationally competitive; and

- Increase flexibility for states, school districts and schools by waiving rules and regulations that might impede local reform and improvement.

THE NEW NATIONAL PARTNERSHIP FOR EDUCATIONAL EXCELLENCE

The bill encourages a bottom-up approach to reform. States and local communities will develop their own improvement plans, tailored to their special needs. Business and labor will work together to define the knowledge and skills needed to create secure economic futures for employees and employers alike. The federal government will use its resources to assist local reform efforts and help them implement their improvement plans and will support the development of model standards against which states, communities, schools and individuals can measure their progress.

The Federal Role — Setting High Standards

A National Education Standards and Improvement Council (NESIC), comprised of teachers, parents, business groups, civic leaders and others, will be created to:

- Review the efforts by national organizations of subject-matter experts to develop voluntary national content and performance standards in each subject area, such as math, science, history, and geography. These will be clear statements of what students should know and be able to do as they progress through school. The standards will be far more rigorous than what is currently expected of students and will be as challenging as those in other countries.

- Lead the effort to develop better measures of student progress and performance, measures that really reflect what we expect them to learn. New and promising assessment programs are being developed through the country; NESIC will keep track of changes and encourage those that advance the state of the art.

The State Role — Implementing Comprehensive Strategies for Real Improvement

Each state choosing to participate will be asked to develop and implement a comprehensive improvement plan that raises standards and helps all students achieve them. Many states have already begun this work, though few have undertaken anything as ambitious as called for in this legislation. Every state will be challenged to participate and to build on local reforms already under way.

- States will be asked to form a broad-based and representative leadership team, comprised of policy makers, educators, business and

civic leaders, parents and others at the grassroots level. Real and lasting change requires new partnerships working together.

- Many states will want to use the national standards as a benchmark for their own efforts. On a voluntary basis, states may submit to NESIC their content and performance standards for certification that they are as rigorous and challenging as national standards.

- In no state can all students meet challenging new standards as the schools currently operate. A fundamental overhaul is required. States will develop comprehensive reform plans and implementation strategies that will affect every aspect of the state's education system—curriculum, technology, teacher training and licensure, parental and community involvement, school management and accountability—and every local school district and school.

The Local Role — Putting Reform into Action

To make a difference, reform has to occur in every school. Local school districts and individual schools also will develop and implement comprehensive improvement plans, reflecting unique local needs and circumstances, in conjunction with the state's efforts.

For the first year, $105 million in federal funds is available to implement Goals 2000 with additional funds requested in subsequent years. By the second year of funding, states will be required to use at least 90 percent of their funds to support the development and implementation of reform plans in local school districts.

CREATING A WORLD-CLASS WORK FORCE

American students, workers, employers and educators must know what knowledge and skills are required in the workplace. The bill encourages the development and voluntary adoption of national skill standards and certification. This effort is a critical step in establishing a lifelong learning system for all Americans, including high school students not planning to attend a four-year college, unemployed and dislocated workers, and employed workers who want to upgrade their skills. The standards will allow us to build an education and training system that ties schools, colleges and other postsecondary institutions, other job training providers, and employers together in an effort to create a high-skills, high-wage work force.

UNITED STATES DEPARTMENT OF EDUCATION

Goals 2000: Educate America Act
Fact Sheet

OVERVIEW

- Goals 2000 provides resources to states and communities to develop and implement comprehensive education reforms aimed at helping all students reach challenging academic and occupational standards.

LEGISLATIVE UPDATE

- On March 23, 1994, the House of Representatives approved the final Goals 2000 bill with a bipartisan vote of 306-121. On March 26, the Senate approved Goals 2000 with a 63-22 bipartisan vote.

- President Clinton signed the bill on March 31, 1994.

TIMETABLE AND FUNDING

- Congress has appropriated $105 million for Goals 2000 for fiscal year 1994. First-year funds will be available to the states on July 1, 1994. The president has requested $700 million in his 1995 budget proposal to be administered by the Department of Education and $12 million for the Department of Labor to support the National Skill Standards Board.

GOALS 2000: COORDINATION WITH OTHER EDUCATION PROGRAMS

- Goals 2000 is the first step toward making the federal government a supportive partner in state and local systemic reforms aimed at helping all children reach higher standards.

- Other new and existing education and training programs will fit within the Goals 2000 framework of challenging academic and occupational standards, systemic reform, and flexibility at the state and local levels. The aim is to promote greater coherence among federal programs, as well as between federal programs and state and local education reforms.

- For example, the pending School-to-Work Opportunities Act will support state and local efforts to build a school-to-work transition system that will help youth acquire the knowledge, skills, abilities and labor market information they need to make a smooth transition from school to career-oriented work and to further education and training.

- Similarly, the administration's proposed reauthorization of the Elementary and Secondary Education Act of 1965 (ESEA) allows states that have developed standards and assessments under Goals 2000 to use them for ESEA, thereby providing a single set of standards and assessments for states to use for both their reform needs and to meet federal requirements.

- State participation in all aspects of Goals 2000 is voluntary and is not a precondition for participation in other federal programs.

BASIC COMPONENTS OF THE "GOALS 2000: EDUCATE AMERICA ACT"

TITLE I: NATIONAL EDUCATION GOALS

- Codifies the original six National Education Goals concerning school readiness, school completion, student academic achievement, leadership in math and science, adult literacy, and safe and drug-free schools and adds two new goals related to parental participation and professional development.

TITLE II: NATIONAL EDUCATION REFORM LEADERSHIP, STANDARDS AND ASSESSMENTS

- Establishes in law the National Education Goals Panel which will build public support for the goals, report on the nation's progress toward meeting the goals, and review the voluntary national content, student performance, and voluntary opportunity-to-learn standards, and the criteria for certification of these standards.

- Creates a National Education Standards and Improvement Council (NESIC) to examine and certify voluntary national and state content, student performance and opportunity-to-learn standards, and assessment systems submitted by states on a voluntary basis.

- Provides grants to support the development of voluntary model opportunity-to-learn standards as well as assessment systems aligned to state content standards.

TITLE III: STATE AND LOCAL EDUCATION SYSTEMIC IMPROVEMENT

Title III is a state grant program to support, accelerate and sustain state and local education improvement efforts aimed at helping all students reach challenging academic standards. The funds will go for state development of:

- strategies for providing all students an opportunity to learn at higher academic levels;
- strategies for the development or adoption of content standards, student performance standards, student assessments, and plans for teacher training;
- management and governance strategies that promote accountability for results, flexibility, site-based management, and other principles of high-performance management;
- strategies to involve parents and the community in helping all students meet the challenging state standards and for promoting grassroots, bottom-up involvement in reform; and
- strategies for bringing education reform to scale and ensuring that all local educational agencies and schools in the state are involved in developing and implementing needed improvements.

Funds will also be available to states to support the development of a technology plan, which will be coordinated with the overall reform plan.

TITLE IV: PARENTAL ASSISTANCE

- This title establishes a new discretionary grants program to create parent information and resource centers, to help provide parents with knowledge and skills needed to participate effectively in their child's education.

TITLE V: NATIONAL SKILL STANDARDS BOARD

- This title creates a National Skill Standards Board to serve as a catalyst in stimulating the development and adoption of a voluntary national system of occupational skill standards and certification that will serve as a cornerstone of the national strategy to enhance workforce skills.

IMPROVING AMERICA'S SCHOOLS ACT OF 1993

ESEA REAUTHORIZATION SUMMARY SHEET

The reauthorization of federal elementary and secondary education programs provides a critical opportunity to support federal, state, and local efforts in achieving the National Education Goals. The Improving America's Schools Act of 1993 will operate within a framework of systemic reform created by GOALS 2000. These broad reforms will require reinventing federal programs based on principles of effective and equitable education for all students, particularly those in greatest need. These principles emphasize:

- promoting challenging state content and performance standards, and the opportunity for all children to learn to those standards;
- improving teaching and learning, through intensive, sustained and high-quality professional development and other means;
- increasing flexibility to stimulate local initiative and bottom-up reform, coupled with responsibility at all levels of governance to improve student performance;
- linking schools and communities to engage parents in the education of their children in school and at home, to integrate services provided to children, and to promote comprehensive approaches to creating safe and drug-free learning environments; and
- targeting scarce resources where the needs are greatest.

The Act advances these principles by creating a strong, productive partnership among the federal, state, and local governments, and by building on our knowledge about what works. Key provisions follow:

Title I — Helping Children in Need Meet High Standards

Making High Poverty Schools Work (Part A of Title I, formerly Chapter 1): Supports local education agencies (LEAs) in providing high-quality opportunities for students in high-poverty schools to meet challenging state performance standards. New provisions will extend learning time in accelerated rather than remedial classes, expand the number of school-wide programs that serve all children in high-poverty schools, help to achieve effective transitions from preschool to school and school to work, establish accountability based on results, greatly reduce testing, increase effective parental participation, support screening for health problems and coordination with social services, and target funds where needs are greatest.

Even Start Family Literacy Programs: Strengthens the targeting of services to families most in need and extends eligibility for this intergenerational literacy program to teen parents, who are among the most needy.

Education of Migratory Children: Helps provide migratory children the same opportunities as other children to meet challenging state performance standards. A more focused program will target efforts on the most mobile children, whose schooling is most likely to be disrupted.

Education of Neglected and Delinquent Youth: Extends educational services and learning time in state institutions and community day programs for neglected or delinquent children and youth comparable to offerings of LEAs. New provisions will also encourage smooth transitions to enable participants to continue schooling or to enter the job market upon leaving the institution.

Title II — Improving Teaching and Learning

Eisenhower Professional Development Program: Focuses on upgrading the expertise of teachers and other school staff to enable them to teach all children in the core academic subjects set out in challenging state content standards. This act will build on the existing Eisenhower program and support sustained and intensive high-quality professional development focused on achieving high performance standards.

Support and Assistance for ESEA Programs: Builds a coordinated, accessible network of technical assistance to link schools, districts, and states to the Department of Education for information and assistance about federal programs and school reform.

Title III — Expanding Opportunities for Learning

Putting Technology to Work for All Students: Creates a broad, new authority and extends the Star Schools program to support innovative uses of technology to assist teachers and schools in providing all students the opportunity to achieve challenging state performance standards.

Fund for Improvement of Education: Provides national leadership and support for reform efforts, including development of curriculum and assessment frameworks and other activities to help all students reach high standards, education in foreign languages, health education, and recognition programs such as the Blue Ribbon Schools.

Javits Gifted and Talented Education Program: Refocuses program to phase in school-wide strategies that develop the talents of all students, particularly students from low-income areas. G&T instruction can help all students learn to high state performance standards while also challenging gifted and talented students.

Charter Schools: Creates a new authority for providing seed money to develop public charter schools to demonstrate how increasing flexibility within public school systems can produce better results for children.

Arts in Education: Creates a new general authority to support the inclusion of the arts in Goal Three of the National Education Goals.

Inexpensive Book Distribution Program: Gives priority to new projects that serve children with special needs, and encourages capacity-building by limiting the grant period.

Title IV — Safe and Drug-Free Schools and Communities

Expands authority to encompass all of Goal Six to create learning environments that are free of violence and drugs. The legislation calls for comprehensive school and community-wide approaches to making schools and neighborhoods safe and drug-free.

Title V — Promoting Equity

Magnet Schools: Promotes desegregation through creating magnet school programs that are a part of an approved desegregation plan and that are designed to bring students from different social, economic, ethnic, and racial backgrounds together.

Equalization Assistance: Creates a new authority to provide technical assistance to states and local communities working toward more equitable allocation of resources to meet the needs of all students.

Women's Educational Equity: Supports strategies that enhance equal educational access and opportunities for women and girls and encourage their participation in math, science, and other fields in which females have historically been under-represented.

Title VI — Indian Education

Provides Indian children with equal opportunities to learn to challenging state performance standards. Supports professional development and adult education programs. New provisions will strengthen the role and responsibility of states in providing quality education for Indian students.

Title VII — Bilingual Education, Including Immigrant Education

Assists in ensuring that limited English proficient children have the same opportunities as all other children to achieve challenging state standards. The program structure and activities are simplified and strengthened to build local capacity for providing high-quality bilingual programs that build upon the native language that limited English proficient students bring to the schools. In addition, the program includes new provisions to support LEAs that have had recent significant increases in immigrant student populations, emphasizing transition services and coordinating the education of immigrants with regular educational services.

Title VIII — Impact Aid

Restructures and simplifies the impact aid formula to base funding on actual burden imposed by the loss of local revenues.

Title IX — General Provisions

Provides a general waiver authority for federal education programs to allow flexibility in return for clear accountability for improving student performance. New provisions will focus on reducing paperwork and compliance monitoring and replacing them with consolidated applications and quality reviews.

Amendments to the General Education Provisions Act

Simplifies the statute to reduce confusion for grantee, staff, and the public alike; provides greater flexibility in federal and grantee administration; and addresses issues of micro-management. Amendments to the General Education Provisions Act will also reaffirm equity in opportunity for all students and teachers in federal programs.

Amendments to Other Acts

Amendments to the Individuals with Disabilities Education Act (IDEA): Replaces the authority for the Chapter 1 Handicapped program with new provisions in IDEA, in order to serve all children with disabilities.

Amendments to the Stewart B. McKinney Homeless Assistance Act: Addresses major barriers that homeless children face—notably, the cost or difficulty of transportation from their temporary residence to school. Moreover, in light of the large numbers of homeless children who are preschool age, the proposal encourages the extension of program services to preschool children by clarifying that activities for these children can be funded.

SCHOOL TO WORK OPPORTUNITIES
U.S. DEPARTMENT OF EDUCATION ☞ U.S. DEPARTMENT OF LABOR

THE SCHOOL-TO-WORK OPPORTUNITIES EXPERIENCE

FACT SHEET

Objectives

The School-to-Work Opportunities Act established the following objectives for the new initiative:

- Create school-to-work opportunities systems in each state for all secondary school age youth, with a particular focus on youth in the general and vocational track in high school and youth who have dropped out of school.
- Reorganize learning for secondary school-age youth so that, in coordination with GOALS 2000, all youth who participate in school-to-work opportunities systems achieve high academic and occupational standards, are prepared for further post-secondary education and training, and are prepared for first jobs in high-skill, high-wage careers.
- Build partnerships locally, statewide, and federally among schools, employers, labor, community organizations, and parents to develop and sustain school-to-work opportunities as part of a lifelong learning system for the United States.

What School-to-Work Will Look Like

The legislation sets out the following parameters of a school-to-work opportunities experience. Young people should have a learning experience that:

- Involves a planned program of training and structured work experiences coordinated with school-based learning that provides work-based mentoring and instruction in general workplace competencies.*
- Integrates work-based and school-based learning.*
- Provides for selection of a career major and a program of study designed to meet academic standards established by the state for all students.*
- Prepares students for post-secondary education and the acquisition of a skills certificate.
- Builds effective secondary-postsecondary linkages.*
- Exposes students to an array of career opportunities and all aspects of an industry.

(continued on p. 2)

- **Integrates academic and vocational learning.***
- **Helps completing students find jobs and continue their education and training.**

** The asterisk indicates that this element is required in order for a program to be considered a school-to-work system as described in the Act. Existing programs do not have to possess all the features listed above to be considered and counted as school-to-work systems, but they must have all those that are asterisked.*

SCHOOL TO WORK OPPORTUNITIES

U.S. DEPARTMENT OF EDUCATION U.S. DEPARTMENT OF LABOR

FACT SHEET

GOALS 2000 AND SCHOOL-TO-WORK OPPORTUNITIES

GOALS 2000: the Educate America Act was signed into law by the President on March 31, 1994. That new law provides resources to states and communities to ensure that all students reach their full potential. It is based on a simple idea: when more is expected of students, they work harder and reach higher levels of achievement.

Bridges Between GOALS 2000 and School-to-Work Opportunities

O High Academic Standards.

GOALS 2000 establishes a framework to identify world-class academic standards, to measure students' progress, and to offer the support students may need to meet them. The School-to-Work opportunities Act states that students in school-to-work systems would be expected to follow a program of study that meets state academic content standards and, where applicable, the high academic standards set in GOALS 2000.

GOALS 2000 establishes a National Education Standards and Improvement Council to examine and certify voluntary national and state content, student performance, and opportunity-to-learn standards, and assessment systems submitted by states on a voluntary basis. It also authorizes grants to support the development of voluntary model opportunity-to-learn standards.

The movement to develop voluntary national standards has already begun. The National Council of Teachers of Mathematics has prepared mathematics standards, and the U.S. Department of Education is funding creation of standards in the arts, civics and government, English language arts, foreign languages, geography, history and science. These standards will clearly identify what all students should know and be able to do to live and work in the 21st century. The standards will be designed to be internationally competitive.

O Occupational Standards.

GOALS 2000 also creates a National Skill Standards Board to facilitate development of rigorous occupational standards. That Board will identify broad occupational clusters and create a system of standards, assessment and certification for the skills needed in each area. This system of occupational skill standards and certification will serve as a cornerstone of the national strategy to enhance workforce skills. The Board will have significant representation from business, industry and labor.

(continued on p. 2)

Because of GOALS 2000, work-based and school-based training will culminate in award of a skills certificate and a high school diploma that mean something. The skills certificate will give students an industry-recognized and portable credential that indicates mastery of skills in specific occupations. A graduate from Alabama, for example, would be assured that her "biotechnology manufacturing certificate" will be honored and respected in Alaska. Since employers would offer the best jobs to those who met the standards and had attained a skill, students would have more incentive to perform well in school.

- **Systemic Reform.**

  GOALS 2000 is the first step toward making the federal government a supportive partner in state and local systemic reforms aimed at helping all children and young people reach high standards. Like school-to-work opportunities, GOALS 2000 will change the way teachers teach and students learn. Both involve restructuring, rescheduling, and rethinking traditional ways of doing business. Each will be more effective if the two are implemented in coordinated fashion.

Coordination

The School-to-Work Opportunities Act asks states to coordinate their school-to-work plans with the overall education reforms they are planning with GOALS 2000 funding. The aim is to promote greater coherence among federal programs and between federal programs and state and local education reforms.

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