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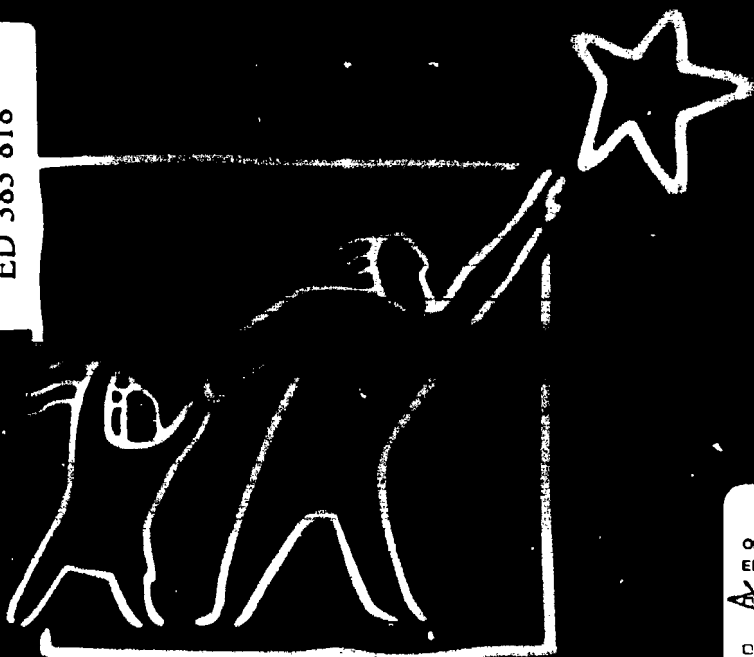
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ABSTRACT

The "1994 National Education Goals Report" consists of three documents, a central report focusing on core indicators, a volume of state data, and this volume of national data about the educational progress the nation and states are making. This volume contains comprehensive sets of measures to describe national progress toward the eight national education goals. Sixteen core indicators describe progress toward six goals; no indicators have yet been developed for the newest goals, parental participation and teacher education and professional development. Exhibits, in graph and chart form, illustrate 16 core indicators: (1) the Children's Health Index; (2) immunizations; (3) family reading and storytelling; (4) preschool participation; (5) high school completion; (6) mathematics achievement; (7) reading achievement; (8) international mathematics achievement comparison; (9) international science achievement comparisons; (10) adult literacy; (11) participation in adult education; (12) participation in higher education; (13) student drug and alcohol use; (14) sale of drugs at school; (15) student and teacher victimization; and (16) disruptions in class by students. Sixty-five exhibits illustrate these indicators. One appendix contains technical notes and sources, and the other provides acknowledgments. (SLD)

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GOALS REPORT

1994

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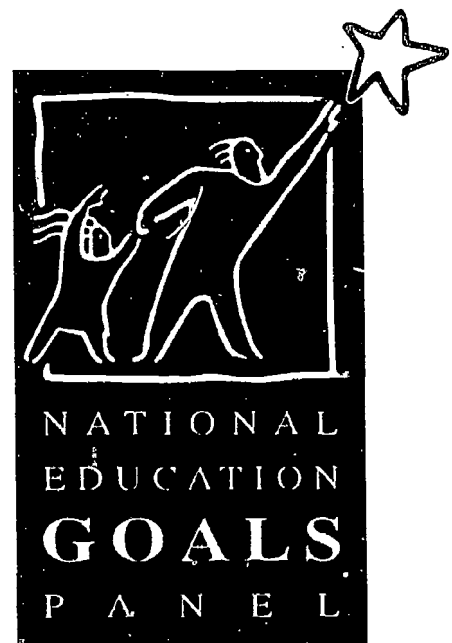
VOLUME ONE: NATIONAL DATA

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DATA FOR
THE NATIONAL EDUCATION
GOALS REPORT

Volume One:
National Data



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Foreword

On behalf of the National Education Goals Panel, I am pleased to present the *1994 National Education Goals Report*, the fourth in a series of annual reports to measure progress toward the National Education Goals through the year 2000. Not only does 1994 mark the fifth anniversary of the 1989 Education Summit in Charlottesville, Virginia, which spurred the creation of the National Education Goals, but 1994 also brings significant changes and exciting new challenges to the Goals Panel.

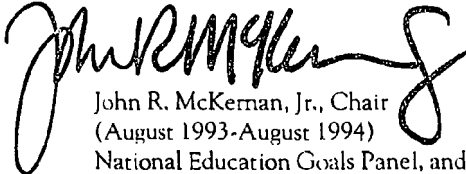
Earlier this year, Congress adopted and the President enacted the *Goals 2000: Educate America Act*, which significantly expanded the role of the Goals Panel. While reporting the amount of educational progress the nation and states are making continues to be one of the Panel's main responsibilities, the Goals Panel is also responsible for:

- building a national consensus for education improvement;
- accelerating progress by reporting on promising or effective actions being taken at the national, state, and local levels to achieve the Goals;
- identifying actions that federal, state, and local governments should take to enhance progress toward achieving the Goals and to provide all students with a fair opportunity to learn; and
- working in partnership with the newly created National Education Standards and Improvement Council to review the criteria for voluntary content, performance, and opportunity-to-learn standards reflecting high expectations for all students.

The *1994 Goals Report* consists of three documents. The *National and State Data Volumes* include comprehensive sets of measures to describe our educational progress at the national level and the amount of progress that individual states have made against their own baselines. The central document, the *1994 Goals Report*, focuses on sixteen policy-actionable core indicators to convey to parents, educators, and policymakers how far we are from where we should be and what we must do in order to reach our destination.

Attainment of the National Education Goals will require commitment on the part of all Americans, and we encourage all states and local communities to become active participants in the "Goals Process" by adopting education goals, setting ambitious standards, and improving data collection systems so that we can regularly monitor and share results.

Sincerely,



John R. McKernan, Jr., Chair
(August 1993-August 1994)
National Education Goals Panel, and
Governor of Maine

Governors

Evan Bayh, Chair
(August 1994-August 1995)
National Education Goals Panel, and
Governor of Indiana

Arne H. Carlson,
Governor of Minnesota

Jim Edgar,
Governor of Illinois

John Engler,
Governor of Michigan

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Governor of Utah

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State Representative, North Carolina

G. Spencer Coggs,
State Representative, Wisconsin

Robert T. Connor,
State Senator, Delaware

Doug Jones,
State Representative, Idaho

Preface

Planning, design, and production of the *1994 National Education Goals Report* and the accompanying *National and State Data Volumes* were the responsibility of Cynthia Prince, Associate Director for Analysis and Reporting, and Leslie Lawrence, Education Associate, of the National Education Goals Panel.

Justin Boesel, Babette Gutmann, and Allison Henderson of Westat, Inc., supplied invaluable technical assistance and statistical support services. Jim Page and Kelli Sechrist of Impact Design, Inc., contributed expertise in graphic design, layout, and report production. Additional graphics were designed by Ogilvy, Adams and Rinehart and by the National Geographic Society.

Portions of the text were written by Cynthia Prince, Anne Lewis, and Leslie Lawrence, with assistance from Emily Wurtz. Scott Miller of Editorial Experts, Inc., contributed essential editorial support.

Special thanks go to members of the National Education Goals Panel's Working Group for helpful critiques of earlier drafts of the Report, especially members of the Reporting Committee: Patricia Brown, John Burkett, Alison Englund, Lori Gremel, W. Davis Lackey, Leo Martin, Mary Rollefson, Marjorie Steinberg, Susan Traidman, and Georgia Jackson VanAdestine.

The *1994 Goals Report* would not have been possible without the hard work, thoughtful planning, and careful review provided by all of these individuals. Their dedication and assistance are gratefully acknowledged.

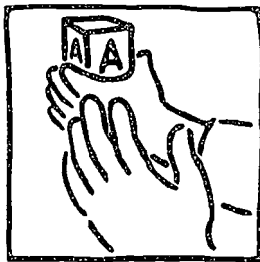
Ken Nelson
Executive Director
National Education Goals Panel

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The National Education Goals



GOAL 1: Ready to Learn

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

Objectives:

- All children will have access to high-quality and developmentally appropriate preschool programs that help prepare children for school.
- Every parent in the United States will be a child's first teacher and devote time each day to helping such parent's preschool child learn, and parents will have access to the training and support parents need.
- Children will receive the nutrition, physical activity experiences, and health care needed to arrive at school with healthy minds and bodies, and to maintain the mental alertness necessary to be prepared to learn, and the number of low-birthweight babies will be significantly reduced through enhanced prenatal health systems.



Goal 2: School Completion

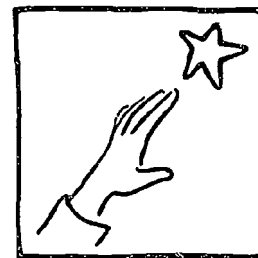
By the year 2000, the high school graduation rate will increase to at least 90 percent.

Objectives:

- The Nation must dramatically reduce its school dropout rate, and 75 percent of the students who do drop out will successfully complete a high school degree or its equivalent.
- The gap in high school graduation rates between American students from minority backgrounds and their non-minority counterparts will be eliminated.

Goal 3: Student Achievement and Citizenship

By the year 2000, all students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, 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.

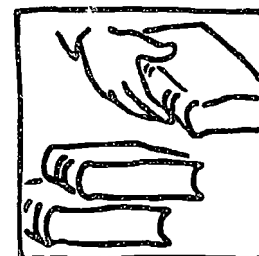


Objectives:

- ❑ The academic performance of all students at the elementary and secondary level will increase significantly in every quartile, and the distribution of minority students in each quartile will more closely reflect the student population as a whole.
- ❑ The percentage of all students who demonstrate the ability to reason, solve problems, apply knowledge, and write and communicate effectively will increase substantially.
- ❑ All students will be involved in activities that promote and demonstrate good citizenship, good health, community service, and personal responsibility.
- ❑ All students will have access to physical education and health education to ensure they are healthy and fit.
- ❑ The percentage of all students who are competent in more than one language will substantially increase.
- ❑ All students will be knowledgeable about the diverse cultural heritage of this Nation and about the world community.

Goal 4: Teacher Education and Professional Development

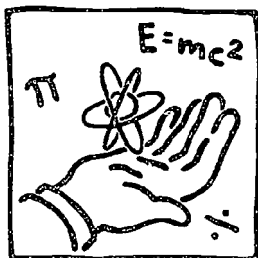
By the year 2000, the Nation's teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century.



Objectives:

- ❑ All teachers will have access to preservice teacher education and continuing professional development activities that will provide such teachers with the knowledge and skills needed to teach to an increasingly diverse student population with a variety of educational, social, and health needs.
- ❑ All teachers will have continuing opportunities to acquire additional knowledge and skills needed to teach challenging subject matter and to use emerging new methods, forms of assessment, and technologies.
- ❑ States and school districts will create integrated strategies to attract, recruit, prepare, retrain, and support the continued professional development of teachers, administrators, and other educators, so that there is a highly talented work force of professional educators to teach challenging subject matter.

- Partnerships will be established, whenever possible, among local educational agencies, institutions of higher education, parents, and local labor, business, and professional associations to provide and support programs for the professional development of educators.

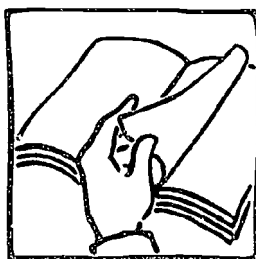


Goal 5: Mathematics and Science

By the year 2000, United States students will be first in the world in mathematics and science achievement.

Objectives:

- Mathematics and science education, including the metric system of measurement, will be strengthened throughout the system, especially in the early grades.
- The number of teachers with a substantive background in mathematics and science, including the metric system of measurement, will increase by 50 percent.
- The number of United States undergraduate and graduate students, especially women and minorities, who complete degrees in mathematics, science, and engineering will increase significantly.



Goal 6: Adult Literacy and Lifelong Learning

By the year 2000, 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.

Objectives:

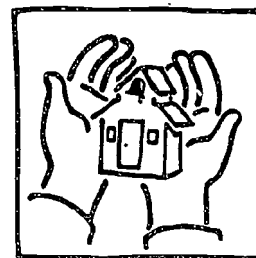
- Every major American business will be involved in strengthening the connection between education and work.
- All workers will have the opportunity to acquire the knowledge and skills, from basic to highly technical, needed to adapt to emerging new technologies, work methods, and markets through public and private educational, vocational, technical, workplace, or other programs.
- The number of quality programs, including those at libraries, that are designed to serve more effectively the needs of the growing number of part-time and midcareer students will increase substantially.
- The proportion of the qualified students, especially minorities, who enter college, who complete at least two years, and who complete their degree programs will increase substantially.
- The proportion of college graduates who demonstrate an advanced ability to think critically, communicate effectively, and solve problems will increase substantially.
- Schools, in implementing comprehensive parent involvement programs, will offer more adult literacy, parent training and lifelong learning opportunities to improve the ties between home and school, and enhance parents' work and home lives.

Goal 7: Safe, Disciplined, and Alcohol- and Drug-free Schools

By the year 2000, 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.

Objectives:

- ☑ Every school will implement a firm and fair policy on use, possession, and distribution of drugs and alcohol.
- ☑ Parents, businesses, governmental and community organizations will work together to ensure the rights of students to study in a safe and secure environment that is free of drugs and crime, and that schools provide a healthy environment and are a safe haven for all children.
- ☑ Every local educational agency will develop and implement a policy to ensure that all schools are free of violence and the unauthorized presence of weapons.
- ☑ Every local educational agency will develop a sequential, comprehensive kindergarten through twelfth grade drug and alcohol prevention education program.
- ☑ Drug and alcohol curriculum should be taught as an integral part of sequential, comprehensive health education.
- ☑ Community-based teams should be organized to provide students and teachers with needed support.
- ☑ Every school should work to eliminate sexual harassment.

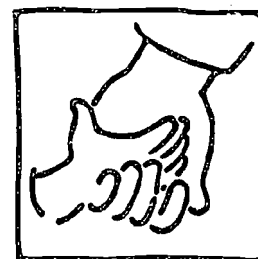


Goal 8: Parental Participation

By the year 2000, every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children.

Objectives:

- ☑ Every State will develop policies to assist local schools and local educational agencies to establish programs for increasing partnerships that respond to the varying needs of parents and the home, including parents of children who are disadvantaged or bilingual, or parents of children with disabilities.
- ☑ Every school will actively engage parents and families in a partnership which supports the academic work of children at home and shared educational decisionmaking at school.
- ☑ Parents and families will help to ensure that schools are adequately supported and will hold schools and teachers to high standards of accountability.





Introduction

"If you're not keeping score, you're just practicing."

Vince Lombardi

In any sport, it is difficult to determine how well your team is doing unless you have complete, accurate, and up-to-date information on the team's performance. If you want to determine your team's standing and see how far you are from first place, you also need measures that allow you to compare your team to the very best in the league. Most important, if you expect to win, then all players must work cooperatively to achieve common goals.

Until recently, it was not possible for the United States to apply these same principles to our education system to determine whether we were making the kind of progress needed to remain internationally competitive. As recently as four years ago, the United States had no nationwide goals to provide focus and consistency in order to determine whether we were all working toward high-performance education results. With the exception of mathematics, no voluntary nationwide standards existed to determine what students should know and be able to do in any of the core subjects. In a number of key areas, we lacked the necessary data to judge whether we were making sufficient progress or falling further behind.

Public dissatisfaction with low levels of student performance, increasing global economic competition, and consistently poor showings on international assessments led policymakers to conclude five years ago that the United States had been spending too much time merely practicing and had not devoted sufficient attention to improving performance. The National Education Goals were created in 1990 to reverse that trend. This fourth annual report of the National Education Goals Panel is designed to help parents, educators, and policymakers score our education performance by reporting where the nation and the states stand with respect to each of the National Education

Goals, where we *should* be if we expect to reach the Goals by the year 2000, and which actions are necessary in order for us to reach our destination.

The National Education Goals

In 1989, the nation's Governors and the President reached agreement at an education summit convened in Charlottesville, Virginia, that unless the nation established clear education goals and all citizens worked cooperatively to achieve them, the United States would be woefully unprepared to face the technological, scientific, and economic challenges of the 21st century. The 1989 Education Summit led to the adoption of six National Education Goals which set high expectations for education performance at every stage of a learner's life, from the preschool years through adulthood. In 1994, Congress adopted the six Goals and expanded the number to eight, underscoring the critical roles that teachers and parents play in improving the nation's education performance. The Goals state that 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 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, 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. 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.
5. United States students will be first in the world in mathematics and science achievement.
6. 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.
7. 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.
8. Every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children.

The National Education Goals Panel

Following the adoption of the National Education Goals, the White House and the National Governors' Association established the National Education Goals Panel. Its primary purpose at that time was to monitor and report annual progress toward the Goals at the national and state levels. In March of 1994, Congress codified the National Education Goals and established the Goals Panel as an independent federal agency by enacting the *Goals 2000: Educate America Act*. The eighteen-member bipartisan Goals Panel now consists of eight Governors, four members of Congress, four State Legislators, the U.S. Secretary of Education, and the Assistant to the President for Domestic Policy.

Congress also considerably expanded the Goals Panel's charge in the new legislation. While monitoring and reporting progress toward the Goals continues to be one of the primary duties of the Goals Panel, the Panel is also responsible for:

- building a national consensus for the reforms necessary to achieve education improvement;

- reporting on promising or effective actions being taken at the national, state, and local levels to achieve the Goals;
- identifying actions that federal, state, and local governments should take to enhance progress toward achieving the Goals and to provide all students with a fair opportunity to learn; and
- collaborating with the newly created National Education Standards and Improvement Council to review the criteria for voluntary content, performance, and opportunity-to-learn standards.

The 1994 National Education Goals Report

For the past three years the Goals Panel has measured progress toward each of the Goals by establishing baseline performance measures around the time of the Charlottesville Summit, and by updating the baselines as new data become available. While this information does tell us where we currently stand, the Goals Panel has never set specific targets to determine where we *should* be each year if we expect to reach the National Education Goals by the year 2000. This year the Panel begins that process by making four fundamental changes to the annual Goals Report so that it is more useful and more understandable.

As was the case last year, the 1994 Report consists of three documents. The *National* and *State Data Volumes* contain comprehensive sets of indicators to describe our educational progress at the national level and the amount of progress made by individual states against their own baselines. However, the central document, the *1994 National Education Goals Report*, has been expanded and revised so that it:

1. Focuses on a limited set of core education indicators to measure progress. If policymakers, educators, and the public focus on improving performance on these core indicators, the nation should be able to raise its overall level of "educational health" over time.
2. Focuses on indicators that are policy-actionable, so that policymakers and the public will have a better understanding of what they can do to improve educational performance.
3. Begins the process of setting challenging, yet meaningful, benchmarks for performance so that the American public clearly understands how far we are from where we should be.

4. Identifies data gaps at both the national and state levels that impede the Panel's ability to measure progress toward the Goals, so that the Panel and its partners can design short- and long-term strategies for filling these gaps.

Core Indicators

Sixteen core indicators are the central focus of the 1994 *Goals Report*. They were selected with the assistance of members of the Goals Panel's Resource and Technical Planning Groups, who were asked to recommend a small set of indicators for the core that were, to the extent possible:

- comprehensive across the Goals;
- most critical in determining whether the Goals are actually achieved;
- policy-actionable; and
- updated at frequent intervals, so that the Panel can provide regular progress reports.

The core indicators are discussed in detail in the 1994 *National Education Goals Report*. The sixteen are:

GOAL 1: READY TO LEARN

1. Children's Health Index
2. Immunizations
3. Family-child reading and storytelling
4. Preschool participation

GOAL 2: SCHOOL COMPLETION

5. High school completion

GOAL 3: STUDENT ACHIEVEMENT AND CITIZENSHIP

6. Mathematics achievement
7. Reading achievement

GOAL 4: TEACHER EDUCATION AND PROFESSIONAL DEVELOPMENT

(No core indicators have been selected for this new Goal yet. They will be addressed in future Goals Reports.)

GOAL 5: MATHEMATICS AND SCIENCE

8. International mathematics achievement comparisons
9. International science achievement comparisons

GOAL 6: ADULT LITERACY AND LIFELONG LEARNING

10. Adult literacy
11. Participation in adult education
12. Participation in higher education

GOAL 7: SAFE, DISCIPLINED, AND ALCOHOL- AND DRUG-FREE SCHOOLS

13. Overall student drug and alcohol use
14. Sale of drugs at school
15. Student and teacher victimization
16. Disruptions in class by students

GOAL 8: PARENTAL PARTICIPATION

(No core indicators have been selected for this new Goal yet. They will be addressed in future Goals Reports.)

It is important to understand that the indicators selected for the core are not necessarily the ideal measures of progress, nor are they all policy-actionable. They do represent, however, the best currently available measures. The list will be expanded as other central measures become available for the original six Goals (e.g., new student achievement levels in science), and for the two new Goals on Teacher Education and Professional Development, and Parental Participation.

While this small core of indicators has the distinct advantage of bringing greater focus to our discussions about national and state progress, the Panel acknowledges that sixteen indicators cannot possibly capture the breadth or depth of the educational needs that we face. Therefore, a much broader range of indicators for each Goal is presented in the accompanying *National and State Data Volumes*.

The Goals Process

Meeting the challenges of the next century will require the involvement of all Americans: public officials, educators, parents, business and community leaders, and students. Becoming active participants and improving our ability to gauge our education performance will enable us to make better decisions that will benefit our schools. One of the most important roles that the Goals Panel plays is encouraging collaborative efforts to improve education that are taking place at all levels of governance and, hopefully, in every community.

The heart of the Goals Process is *informed* decision-making. Citizens need accurate, reliable information to determine the strengths and weaknesses of their educa-

tion systems and to make decisions that will allow those systems to perform at more ambitious levels. The Goals Process can help communities determine how well they are doing, where they would like to be, and what they will have to do to move their results in the desired direction. It involves three essential steps:

- adopting and adapting the National Education Goals to reflect high expectations for all learners and cover a lifetime of learning, from the preschool years through adulthood;
- assessing current strengths and weaknesses, and building a strong accountability system to measure and report progress regularly toward all of the goals; and
- setting performance milestones to serve as checkpoints along the way.

Once these steps have been taken and the community has made a long-term commitment to evaluate its progress, it will need to identify potential barriers to success, develop strategies to overcome them, and use the information it is collecting along the way to fine-tune its own approach to education improvement.

A new product created by the Goals Panel, the Community Action Toolkit, is designed to help communities implement the Goals Process. The Toolkit includes a

handbook which outlines the steps required to collect reliable data so that informed decisionmaking can take place at the local level. The Toolkit also includes advice on organizing community leaders and communicating educational strengths, weaknesses, and priorities to the general public. Information about the Toolkit can be obtained by returning the questionnaire located in the back of this document to the Goals Panel.


Next Steps

Five years ago the White House and the nation's Governors, later joined by Congress and State Legislators, began a process intended to result in a rapid rebuilding of the nation's education system. By the end of the century, they agreed, the commitment made by policymakers, communities, educators, students, and parents should be turning those ambitious goals into reality.

That process is nearly at midpoint. A permanent foundation has been laid and considerable information has been gathered on progress, though it will require continued improvements before it can be considered complete in all areas. This *1994 National Education Goals Report* introduces the essential areas in which policymakers need to act and the public needs to be involved, if we are serious about keeping score, not simply practicing.



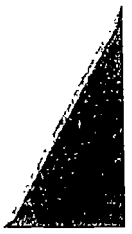
Indicators for the National Volume

2000

1994

GOAL 1

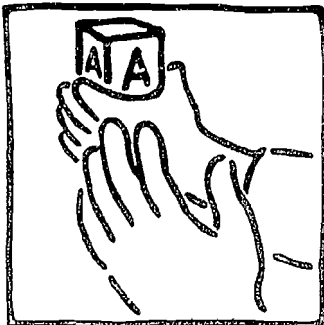
Ready to Learn

2000



1994

GOAL 1



Ready to Learn

Infants born in the coming year will enter the first grade in the year 2001. Will the nation be able to say that these children are the most ready to learn of any group of six-year-olds in our history? On the basis of the dimensions of school readiness that the National Education Goals Panel has identified (physical well-being and motor development, social and emotional development, approaches toward learning, language usage, and cognition and general knowledge), we have much to do. The "we" means all of us—parents, health and education personnel, policymakers, and others involved with institutions that support infants and young children.

The dimensions of readiness tell us that being ready to learn means more than simply having rudimentary academic skills. In fact, data reported in last year's National Volume indicated that very few kindergarten teachers believe that children must know how to count or recite the alphabet before entering their classes. The characteristics that kindergarten teachers believed were most important for school readiness were those that begin in infancy, such as the ability to communicate, curiosity, and sociability.

Even earlier, mothers who have received prenatal care throughout a pregnancy, avoided drugs and alcohol, and made sure that their babies started life with proper medical care and nutrition are much more likely to have healthy infants who will grow into young children ready to learn when they enter school. We now know that an alarming number of infants in this country are born with one or more health and developmental risks.

We also know that a large number of the very young do not enjoy a childhood most adults would consider desirable. Many are not receiving the kind of support that enriches childhood. Only about one-half of three- to five-year-olds are read to every day by their parents, and about the same percentage of two-year-olds have been fully immunized for major childhood diseases. Poor children in particular (constituting about one-fourth of those enrolling in school each year) are less likely than others to be enrolled in preschool. The gaps in care between poor children and those in wealthier families, identified in earlier Reports, remain large.

Children who start school with health problems, limited ability to communicate, or a lack of curiosity are at greater risk of subsequent school failure than other children. Helping these children after they enter school is a costly remedy for failing to nurture them when they were very young. However, assuring that every child is ready to learn is important beyond the money that would be saved. A commitment to meet this Goal would bring together families, communities, businesses, schools, and other support resources for the purpose of giving all children the opportunities to become effective, competent learners. By sharing this common mission to nurture America's youngest citizens, we become a stronger society. And young children growing up in such a society, where childhood is protected and enriched, will be ready, even eager, to learn.

GOAL 1

Ready to Learn

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

Objectives

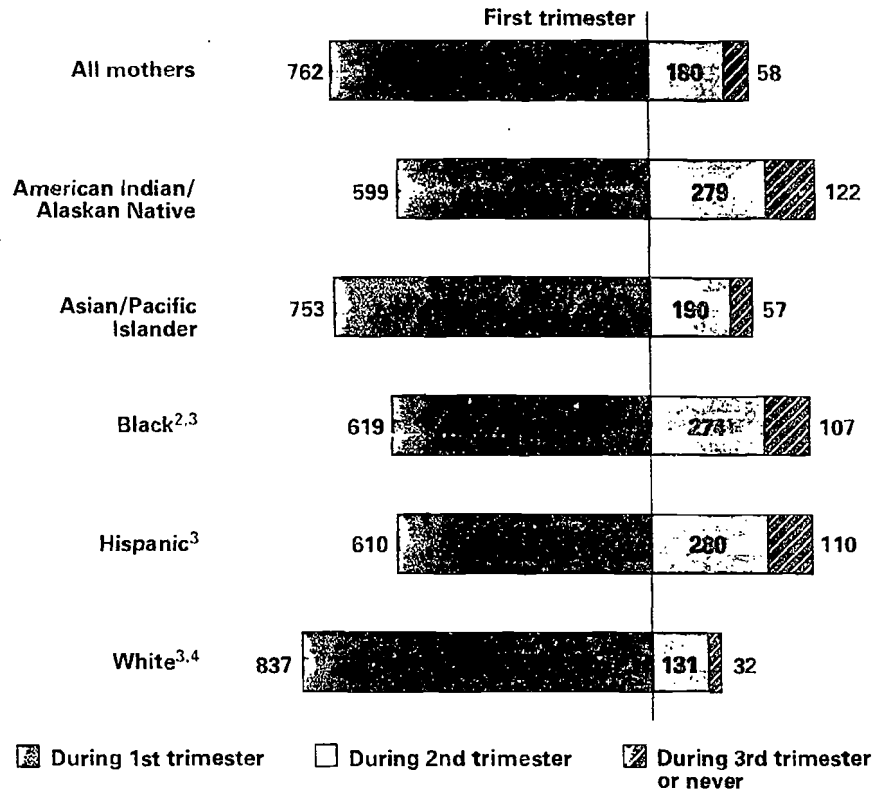
- ▣ All children will have access to high-quality and developmentally appropriate preschool programs that help prepare children for school.
- ▣ Every parent in the United States will be a child's first teacher and devote time each day to helping such parent's preschool child learn, and parents will have access to the training and support parents need.
- ▣ Children will receive the nutrition, physical activity experiences, and health care needed to arrive at school with healthy minds and bodies, and to maintain the mental alertness necessary to be prepared to learn, and the number of low-birthweight babies will be significantly reduced through enhanced prenatal health systems.

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**Exhibit 1
Prenatal Care**

Point at which mothers first began prenatal care¹ in 1991;
number per 1,000

In 1991, 762 out of every 1,000 mothers (76%) began prenatal care during their first trimester of pregnancy; 180 per 1,000 (18%) did not begin prenatal care until their second trimester; and 58 per 1,000 (6%) did not begin prenatal care until their third trimester or never received prenatal care.



¹ First visit for health care services during pregnancy.

² Excludes Blacks of Hispanic origin.

³ Data shown only for states with an Hispanic-origin item on their birth certificates. See technical notes in Appendix A.

⁴ Excludes Whites of Hispanic origin.

The number of mothers who began prenatal care during their first trimester of pregnancy remained relatively unchanged between 1990 and 1991.

Change Since 1990

Point at which mothers first began prenatal care;¹ number per 1,000:

	During 1st trimester		During 2nd trimester		During 3rd trimester or never	
	1990	1991	1990	1991	1990	1991
All	758	762	181	180	61	58
American Indian/ Alaskan Native	579	599	292	279	129	122
Asian/Pacific Islander	751	753	191	190	58	57
Black ^{2,3}	607	619	281	274	112	107
Hispanic ³	602	610	278	280	120	110
White ^{3,4}	833	837	133	131	34	32

¹ First visit for health care services during pregnancy.

² Excludes Blacks of Hispanic origin.

³ Data shown only for states with an Hispanic-origin item on their birth certificates. See technical notes in Appendix A.

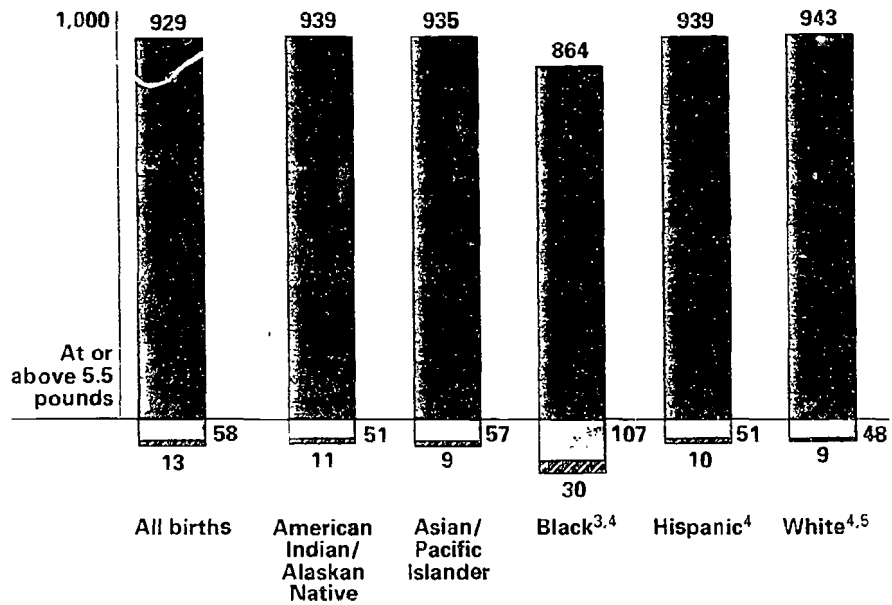
⁴ Excludes Whites of Hispanic origin.

Source: National Center for Health Statistics, 1994

This exhibit updates information presented in the 1993 Goals Report

Exhibit 2 Birthweight

Number per 1,000 births above and below 5.5¹ and 3.3² pounds, 1991



In 1991, 929 out of every 1,000 infants born in the United States (93%) were above the standard for low birthweight. Seventy-one out of every 1,000 (7%) were below the standard. Black infants were twice as likely as those from other racial/ethnic groups to be born at low birthweight.

■ At or above 5.5 lbs. □ Between 5.5 and 3.3 lbs. ▨ At or below 3.3 lbs.

¹ Below 5.5 pounds is defined as Low Birthweight.
² Below 3.3 pounds is defined as Very Low Birthweight.
³ Excludes Blacks of Hispanic origin.
⁴ Data shown only for states with an Hispanic-origin item on their birth certificates. See technical notes in Appendix A.
⁵ Excludes Whites of Hispanic origin.

Change Since 1990

Number per 1,000 births above and below 5.5¹ and 3.3² pounds:

	At or above 5.5 pounds		Between 5.5 and 3.3 pounds		At or below 3.3 pounds	
	1990	1991	1990	1991	1990	1991
All	930	929	57	58	13	13
American Indian/ Alaskan Native	939	939	51	51	10	11
Asian/Pacific Islander	935	935	56	57	9	9
Black ^{3,4}	867	864	104	107	29	30
Hispanic ⁴	940	939	50	51	10	10
White ^{4,5}	944	943	47	48	9	9

The numbers of infants born above and below the standard for low birthweight remained relatively unchanged between 1990 and 1991.

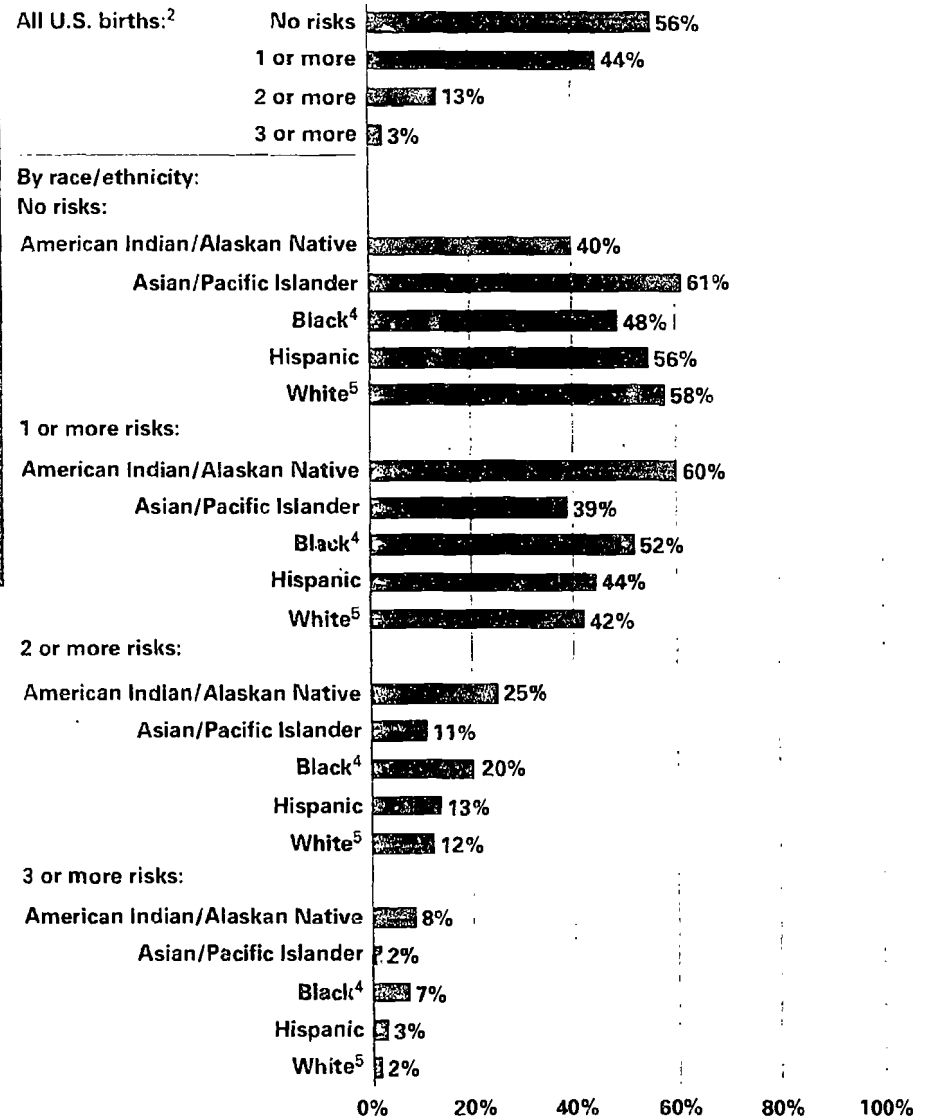
¹ Below 5.5 pounds is defined as Low Birthweight.
² Below 3.3 pounds is defined as Very Low Birthweight.
³ Excludes Blacks of Hispanic origin.
⁴ Data shown only for states with an Hispanic-origin item on their birth certificates. See technical notes in Appendix A.
⁵ Excludes Whites of Hispanic origin.

Source: National Center for Health Statistics, 1994
 This exhibit updates information presented in the 1993 Goals Report.

Exhibit 3 Children's Health Index

Percentage¹ of infants born in the U.S.² with 1 or more health and developmental risks,³ 1991

School success is partly determined by conditions that affect children's health and development long before they enter school. In 1991, nearly one-half of all infants born in the United States began life with one or more factors (such as low maternal weight gain or tobacco/alcohol use by their pregnant mothers) that are considered risks to their long-term health and educational development.



¹ Percentages are based on the number of births used to calculate the risk index, not the actual number of births. Birth records that were missing three or more pieces of information needed to calculate the index were excluded from the calculation. See technical notes in Appendix A.

² Four states (California, Indiana, New York, and South Dakota) did not collect information on all six risks on the state birth certificate. These states and the territories are not included in the U.S. total. New Hampshire is included in the U.S. total, but not in the race/ethnicity totals because New Hampshire does not collect information on Hispanic origin.

³ Risks are late (in third trimester) or no prenatal care, low maternal weight gain (less than 21 pounds), mother smoked during pregnancy, mother drank alcohol during pregnancy, three or more older siblings, or closely spaced birth (within 18 months of previous birth).

⁴ Excludes Blacks of Hispanic origin.

⁵ Excludes Whites of Hispanic origin.

**Exhibit 3
Children's Health Index (continued)**

Change Since 1990¹

Percentage² of infants born in the U.S.³ with 1 or more health and developmental risks⁴

	No risks		One or more risks		Two or more risks		Three or more risks	
	1990	1991	1990	1991	1990	1991	1990	1991
All U.S. Births ³	55%	56% *	45%	44% *	14%	13% *	4%	3% *
American Indian/ Alaskan Native	37%	40% *	63%	60% *	28%	25% *	9%	8% *
Asian/Pacific Islander	62%	61% *	38%	39% *	11%	11%	3%	2% *
Black ⁵	46%	48% *	54%	52% *	22%	20% *	7%	7%
Hispanic	54%	56% *	46%	44% *	14%	13% *	3%	3%
White ⁶	57%	58% *	43%	42% *	12%	12%	3%	2% *

¹ Interpret with caution. In cases noted with an asterisk, we are confident that change has occurred.
² Percentages are based on the number of births used to calculate the risk index, not the actual number of births. Birth records that were missing three or more pieces of information needed to calculate the index were excluded from the calculation. See technical notes in Appendix A.
³ Five states (California, Indiana, Oklahoma, New York, and South Dakota) did not collect information on all six risks on the state birth certificate in 1990; four states (California, Indiana, New York, and South Dakota) did not collect information on all six risks in 1991. These states and the territories are not included in the U.S. total. New Hampshire is included in the U.S. total, but not in the race/ethnicity totals because New Hampshire does not collect information on Hispanic origin.
⁴ Risks are late (in third trimester) or no prenatal care, low maternal weight gain (less than 21 pounds), mother smoked during pregnancy, mother drank alcohol during pregnancy, three or more older siblings, or closely spaced birth (within 18 months of previous birth).
⁵ Excludes Blacks of Hispanic origin.
⁶ Excludes Whites of Hispanic origin.

The percentage of infants born in the U.S. with one, two, or three or more health risks decreased from 1990 to 1991.

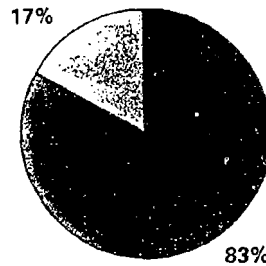
Source: National Center for Health Statistics and Westat, Inc., 1994
 This exhibit updates information presented in the 1993 Child Report.

**Exhibit 4
Immunizations**

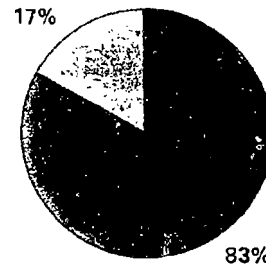
Percentage of 2-year-olds¹ who completed their basic immunization series for selected diseases, 1992

In 1992, 55% of all 2-year-olds had been fully immunized for major childhood diseases.

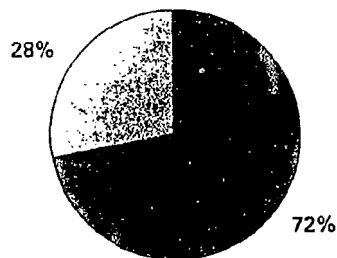
Measles/Mumps/Rubella²



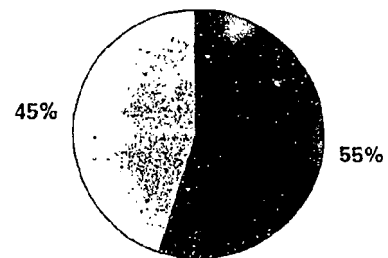
DTP/DT³



Polio⁴



Complete Immunizations⁵



Immunized

Not immunized

¹ Children 19-35 months of age.

² One vaccination for measles or for measles/mumps/rubella.

³ Diphtheria-tetanus-pertussis/diphtheria-tetanus. Three or more doses of vaccine.

⁴ Three or more doses of vaccine.

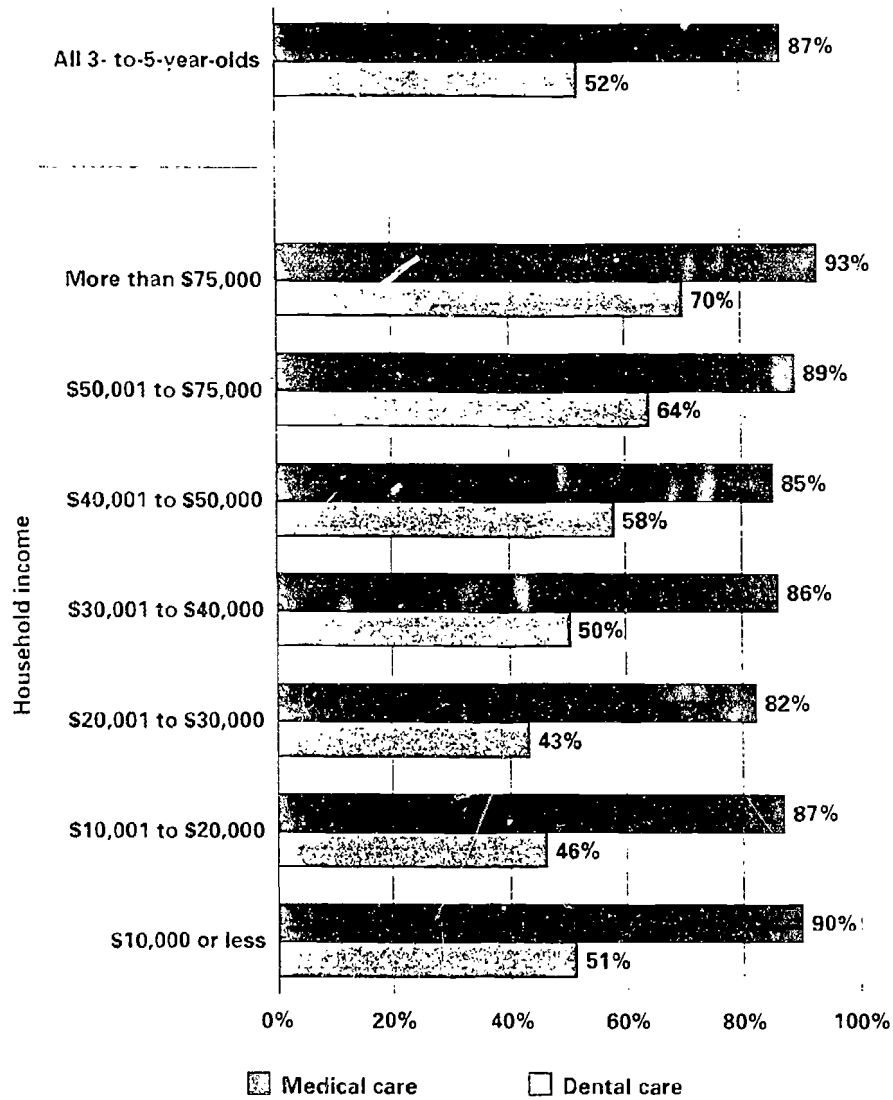
⁵ Four doses of diphtheria-tetanus-pertussis vaccine, three doses of polio vaccine, and one dose of measles or measles/mumps/rubella vaccine.

Source: National Center for Health Statistics and Centers for Disease Control and Prevention, 1993
This exhibit modifies and updates information presented in the 1993 Civil Report.

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Exhibit 5 Medical and Dental Care

Percentage of 3- to 5-year-olds¹ who received medical² and dental³ care within the previous 12 months, 1993



Nearly nine out of ten 3- to 5-year-olds visited a doctor during 1993 for routine health care; about half visited a dentist.

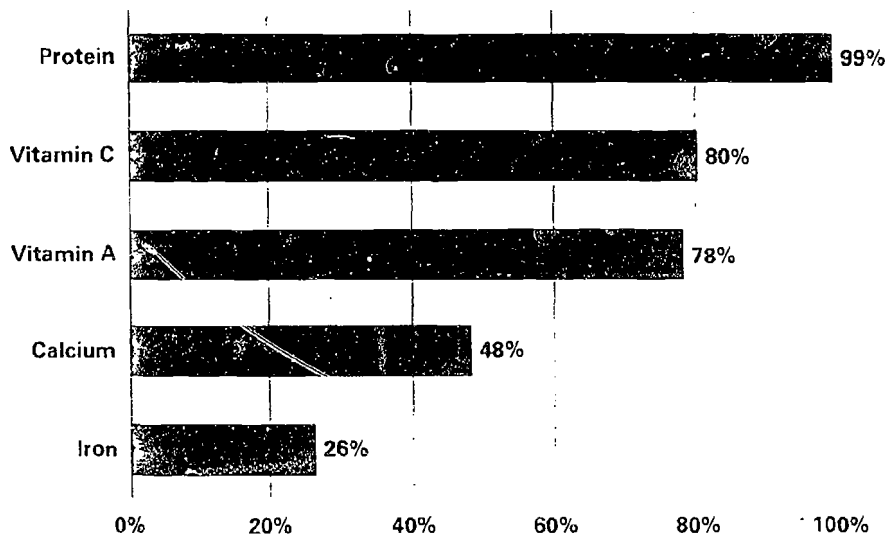
¹ Excluding those enrolled in kindergarten.
² Includes visits for routine checkups and immunizations.
³ Includes visits to dentists and dental hygienists.

Source: National Center for Education Statistics and Westat, Inc., 1993.
 This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 6 Child Nutrition

Percentage of 1- to 5-year-olds who received the minimum RDA¹ of various nutrients, 1986

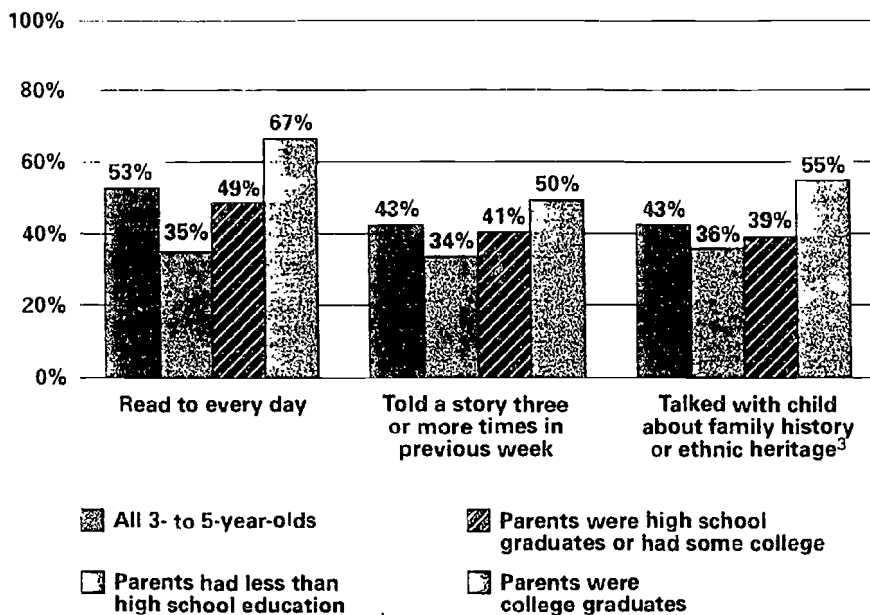
In 1986, nearly all preschool children received adequate amounts of protein in their diets. However, only eight out of ten received the recommended amounts of Vitamins A and C, only about half received the recommended amounts of calcium, and only about one-fourth received the recommended amounts of iron.



¹ Recommended Dietary Allowance.

Source: Human Nutrition Information Service, 1988.
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 7
Family-Child Language and Literacy Activities
Percentage of 3- to 5-year-olds¹ whose parents² engaged in language and literacy activities with them regularly, 1993



During 1993, about half of all preschoolers were read to daily by parents or other family members. Less than half were told stories several times per week or talked to about family history or ethnic heritage on a regular basis.

¹ Excluding those enrolled in kindergarten.
² Parent or another family member.
³ One or more times in the previous month.

Change Since 1991¹

Percentage of 3- to 5-year-olds² whose parents³ told them a story three or more times in the previous week:⁴

	1991	1993
All	39%	43% *
Parents had less than high school education	32%	34%
Parents were high school graduates or had some college	38%	41% *
Parents were college graduates	42%	50% *

Between 1991 and 1993, the percentage of 3- to 5-year-olds whose parents regularly told them a story increased.

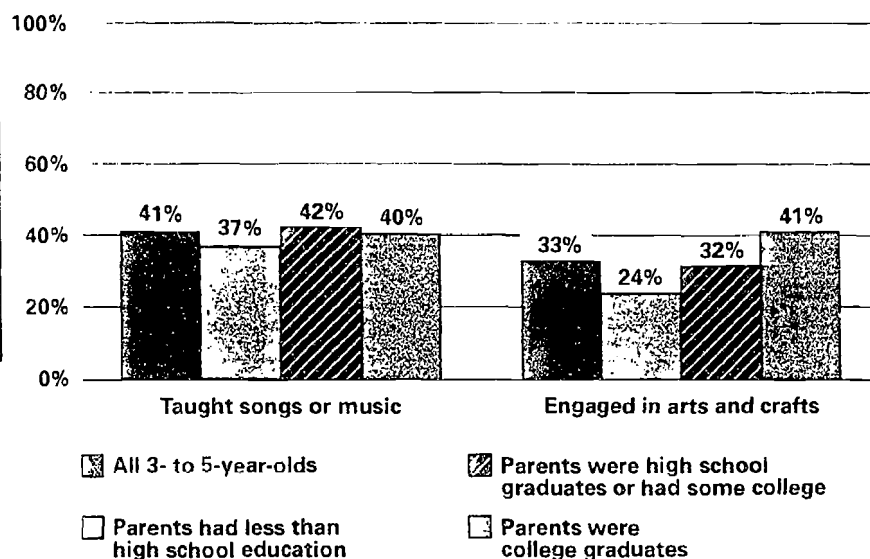
¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.
² Excluding those enrolled in kindergarten.
³ Parent or another family member.
⁴ Change since 1991 in the percentage of 3- to 5-year-olds whose parents read to them every day could not be determined because of changes in the wording of the survey question. Data on the percentage of 3- to 5-year-olds whose parents talked with them about family history or ethnic heritage were not collected prior to 1993.

Source: National Center for Education Statistics and Westat, Inc., 1991, 1992, and 1993
This exhibit repeats information presented in the 1993 Goals Report.

**Exhibit 8
Family-Child Arts Activities**

Percentage of 3- to 5-year-olds¹ whose parents² engaged in arts activities with them regularly,³ 1993

In 1993, about four out of ten 3- to 5-year-olds were taught songs or music by their parents regularly. One-third engaged in arts and crafts with their parents on a regular basis.



¹ Excluding those enrolled in kindergarten.
² Parent or another family member.
³ Three or more times in the previous week.

Since 1991, the percentage of 3- to 5-year-olds who engaged in music or arts and crafts with their parents on a regular basis remained about the same.

Change Since 1991¹

Percentage of 3- to 5-year-olds² whose parents³ engaged in arts activities with them regularly:⁴

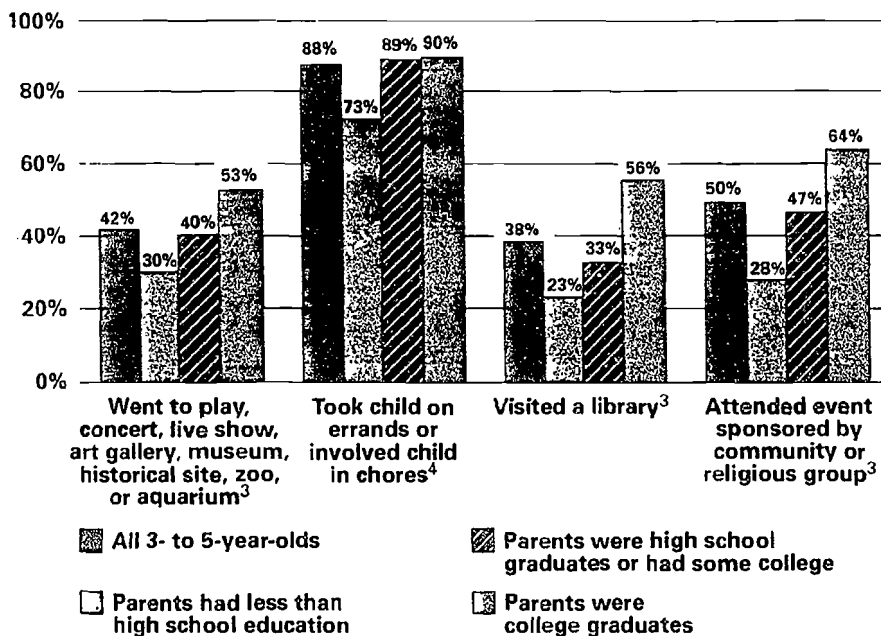
	Taught songs or music		Engaged in arts and crafts	
	1991	1993	1991	1993
All	39%	41%	35%	33%
Parents had less than high school education	38%	37%	34%	24% *
Parents were high school graduates or had some college	39%	42% *	31%	32%
Parents were college graduates	41%	40%	42%	41%

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.
² Excluding those enrolled in kindergarten.
³ Parent or another family member.
⁴ Three or more times in the previous week.

Source: National Center for Education Statistics and Westat, Inc., 1991, 1992, and 1993
 This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 9 Family-Child Learning Opportunities

Percentage of 3- to 5-year-olds¹ whose parents² regularly engaged them in opportunities to help them learn, 1993



In 1993, nearly nine out of ten 3- to 5-year-olds participated in errands or family chores with their parents regularly. However, fewer participated regularly in other types of family activities that can help them learn, such as attending events sponsored by community or religious groups (50%); going to plays, concerts, live shows, art galleries, museums, historical sites, zoos, or aquariums (42%); or visiting a library (38%).

¹ Excluding those enrolled in kindergarten.
² Parent or another family member.
³ One or more times in the previous month.
⁴ Three or more times in the previous week.

Change Since 1991¹

Percentage of 3- to 5-year-olds² whose parents³ regularly⁴ engaged them in opportunities to help them learn:⁵

	Went to play, concert, live show, art gallery, museum, historical site, zoo, or aquarium		Visited a library	
	1991	1993	1991	1993
All	48%	42% *	35%	38% *
Parents had less than high school education	38%	30%	18%	23%
Parents were high school graduates or had some college	46%	40% *	30%	33%
Parents were college graduates	56%	53%	53%	56%

Between 1991 and 1993, more 3- to 5-year-olds regularly visited a library with their parents. However, fewer 3- to 5-year-olds were regularly taken by their parents on outings to plays, concerts, live shows, art galleries, museums, historical sites, zoos, or aquariums.

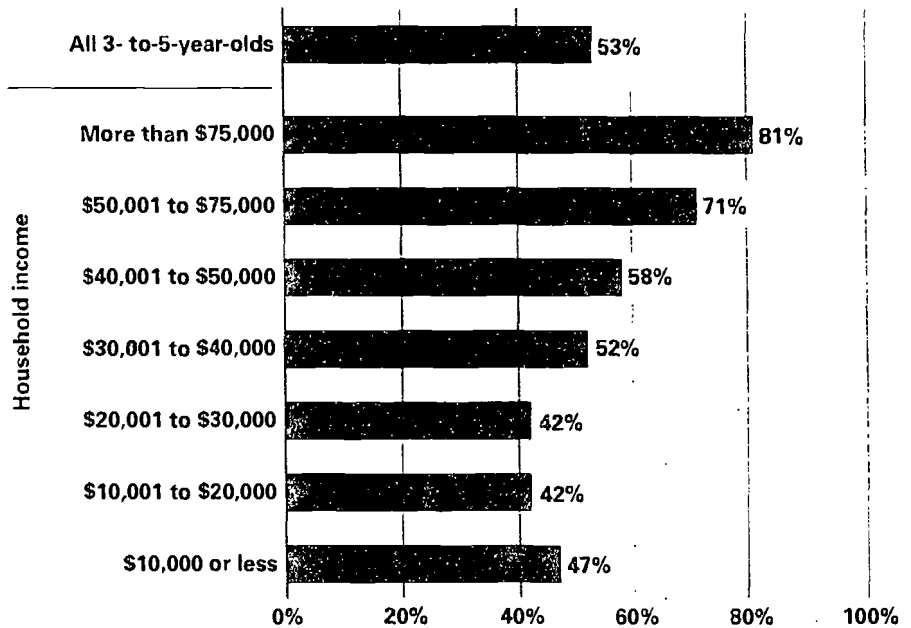
¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.
² Excluding those enrolled in kindergarten.
³ Parent or another family member.
⁴ One or more times in the previous month.
⁵ Data on family-child learning opportunities other than parent-child outings and visiting a library were not collected prior to 1993.

Source: National Center for Education Statistics and Westat, Inc., 1991, 1992, and 1993
 This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 10
Preschool Participation

Percentage of 3- to 5-year-olds¹ enrolled in preschool,² 1993

During 1993, less than half of all 3- to 5-year-olds from households with incomes of \$30,000 or less were enrolled in preschool.

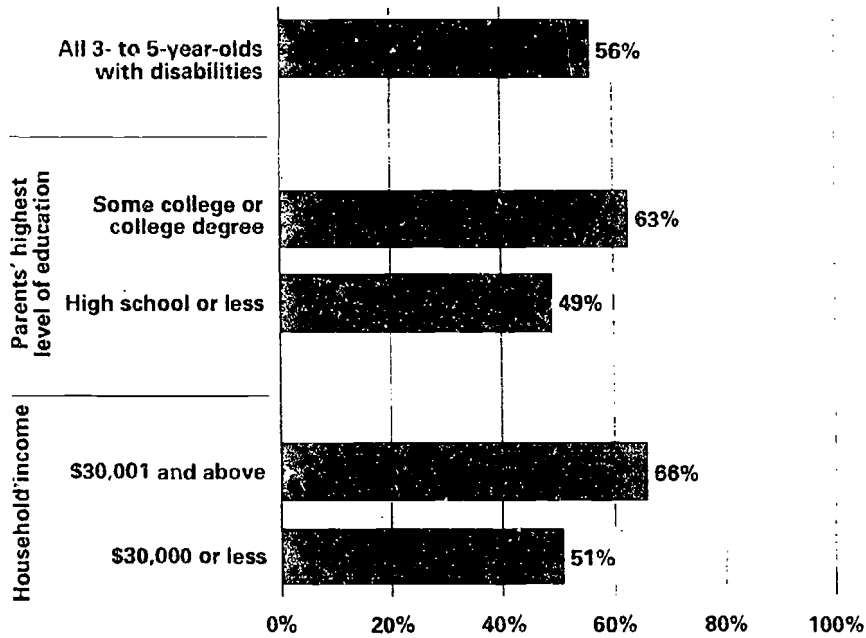


¹ Excluding those enrolled in kindergarten.

² Includes those enrolled in nursery schools, prekindergarten programs, preschools, daycare centers, and Head Start; also includes 3- to 5-year-olds with disabilities.

Source: National Center for Education Statistics and Westat, Inc., 1993
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 11
Preschool Programs for Children With Disabilities
Percentage of 3- to 5-year-olds¹ with disabilities enrolled in
preschool,² 1993



Fifty-six percent of all 3- to 5-year-olds with disabilities attended preschool programs in 1993.

¹ Excluding those enrolled in kindergarten.

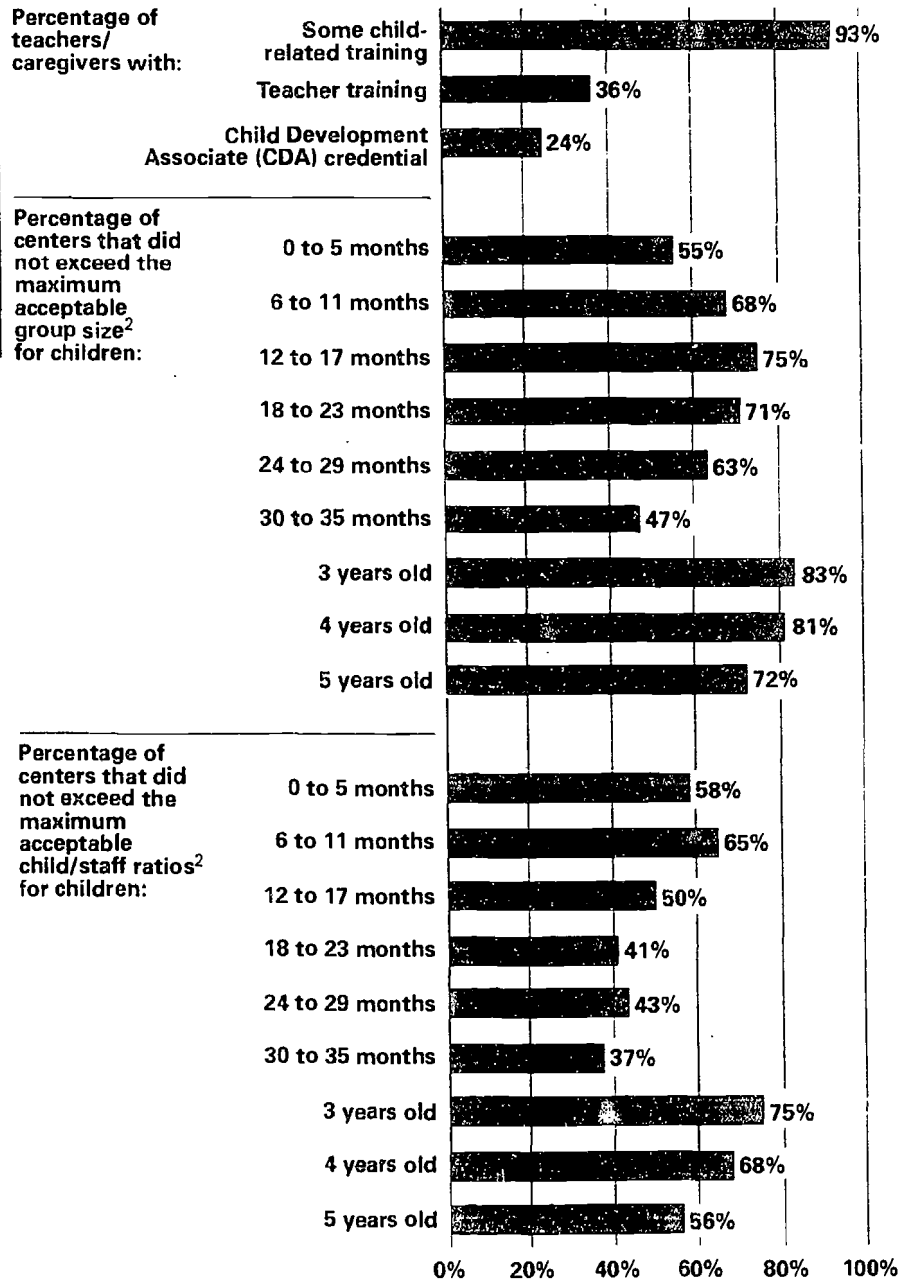
² Includes those enrolled in nursery schools, prekindergarten programs, preschools, daycare centers, and Head Start.

Source: National Center for Education Statistics and Westat, Inc., 1993
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 12 Quality of Preschool Centers

Characteristics of preschool centers¹ and teachers, 1990

In 1990, preschool centers were more likely to meet recommended standards for group size and child/staff ratios for 3- to 5-year-olds than for infants and toddlers.



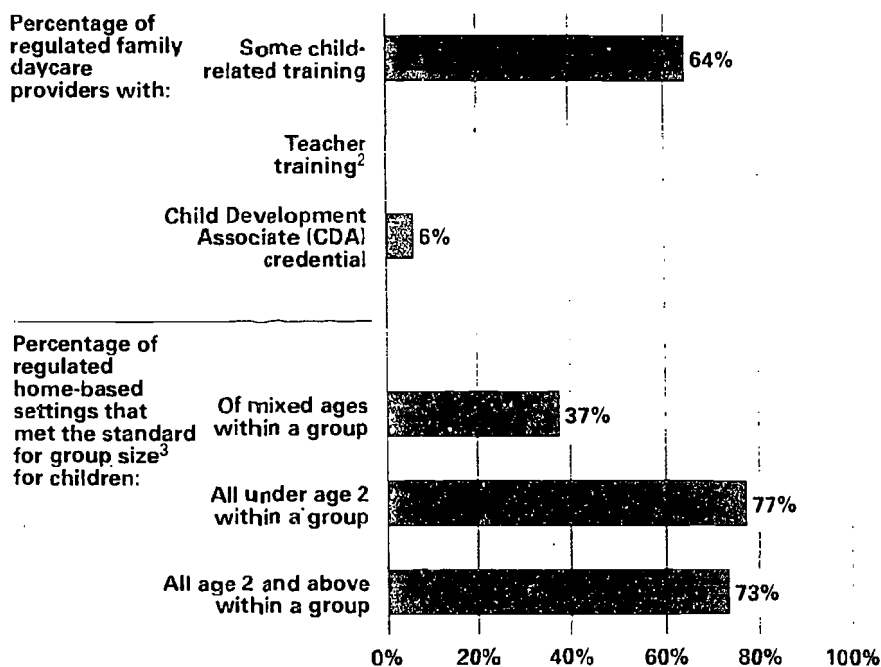
¹ Complete description of preschool centers can be found in Appendix A.

² The maximum acceptable group size recommended by the National Association for the Education of Young Children (NAEYC) is 8 for infants, 12 for 1- to 2-year-olds, and 20 for 3- to 5-year-olds. The maximum acceptable child/staff ratio is 10 children per staff member for groups containing 3- to 5-year-olds only, 6 children per staff member for groups containing 2-year-olds only, and 4 children per staff member for groups containing infants and 1-year-olds only. NAEYC standards include an acceptable range of practice on these variables. The figures reported are based on the maximum acceptable numbers, rather than the optimal numbers. Some states also set their own standards in these areas.

Source: Mathematica Policy Research, Inc., 1991 and 1992
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 13
Quality of Home-Based Preschool Settings

Characteristics of regulated home-based preschool settings¹ and regulated family daycare providers, 1990



Caregivers in home-based preschool settings were less likely than teachers in preschool centers to have child-related training and a Child Development Associate credential.

¹ Complete description of regulated home-based preschool settings can be found in Appendix A.

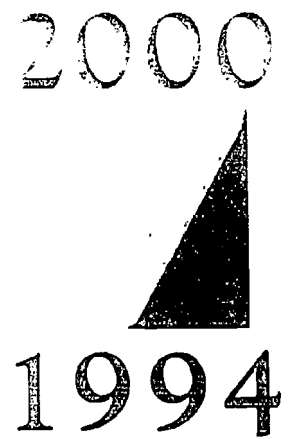
² Data not available.

³ The standard for group size recommended by Health, Education, and Welfare Day Care Requirements for regulated family daycare providers without helpers who care for children who are all under age 2 within a group is 3. The group size standard for all children aged 2 and above within a group is 6, and the standard for a group of children of mixed ages within a group is 5.

Source: Mathematica Policy Research, Inc., 1991 and 1992
This exhibit repeats information presented in the 1993 Goals Report.

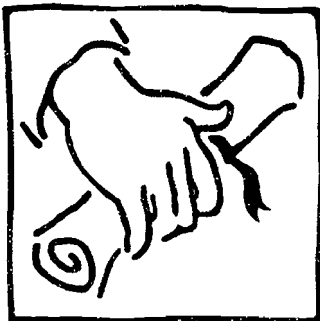
GOAL 2

School Completion



GOAL 2

School Completion



A generation ago, school dropouts did not face insurmountable barriers that prevented them from making a living. Today's young dropouts face a different world. Employment opportunities are expanding for those with higher skill levels—those most able to adapt to technological changes—and rapidly disappearing for those with only rudimentary skills. American workplaces are rapidly changing, and workers with advanced skills are being rewarded with higher wages. The youth who left school before graduating in 1990 can expect to earn less than one-half as much as the high school dropout of 1973. Over a lifetime, today's dropout will earn, on average, \$200,000 less than a high school graduate.

These individual decisions to drop out—made by approximately 380,000 youths in grades 10-12 in 1992—have enormous economic consequences for society as well. One-half of the heads of households on welfare failed to finish high school. Of the more than 1.1 million persons incarcerated in 1990, 82 percent were high school dropouts. The average annual cost of supporting one prisoner—\$22,500 a year—would provide six children with a year of Head Start. It is much more cost-effective to provide the learning environment and support that enable young people to complete school, rather than pay for the consequences of their decisions to drop out.

Decisions to drop out have more than economic consequences. Dropouts lose connections to adults and influences that can create purposefulness in their lives, the possibilities for careers, the skills for lifelong learning, healthy choices for themselves, and responsible choices on behalf of others.

This Volume indicates little if any progress on Goal 2 in recent years. While the high school completion rate for 19- and 20-year-olds increased markedly in the early 1980s, it has remained relatively unchanged since then, and is still short of the national Goal of 90 percent. Past Reports clearly indicated that while school-related reasons dominate the explanations for dropping out of school, an alarming number of youths cite pregnancy and conflicts with jobs as reasons for dropping out. Obviously, multiple problems—school failure, teenage pregnancies, and disconnections between school and work, to name a few—must be addressed if Goal 2 is to be achieved.

GOAL 2

School Completion

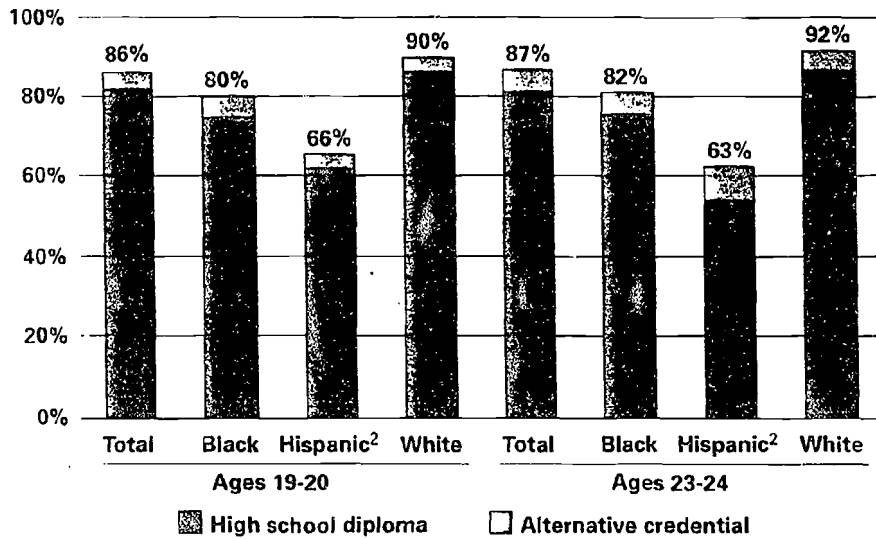
By the year 2000, the high school graduation rate will increase to at least 90 percent.

Objectives

- ▣ The Nation must dramatically reduce its school dropout rate, and 75 percent of the students who do drop out will successfully complete a high school degree or its equivalent.
- ▣ The gap in high school graduation rates between American students from minority backgrounds and their non-minority counterparts will be eliminated.

Exhibit 14
High School Completion Status

Percentage of young adults¹ with a high school credential, 1993



The high school completion rate in 1993 was 86% for 19- to 20-year-olds and 87% for 23- to 24-year-olds. Rates for Black and White students were substantially higher than the rate for Hispanics.

¹ Does not include those still enrolled in high school.

² Hispanic rates may vary more than rates for other groups because of a small sample size.

Change Since 1992¹

Percentage of young adults² with a high school credential:

	Ages 19-20		Ages 23-24	
	1992	1993	1992	1993
All	87%	86%	88%	87%
Black	81%	80%	86%	82%
Hispanic ³	65%	66%	59%	63%
White	91%	90%	92%	92%

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

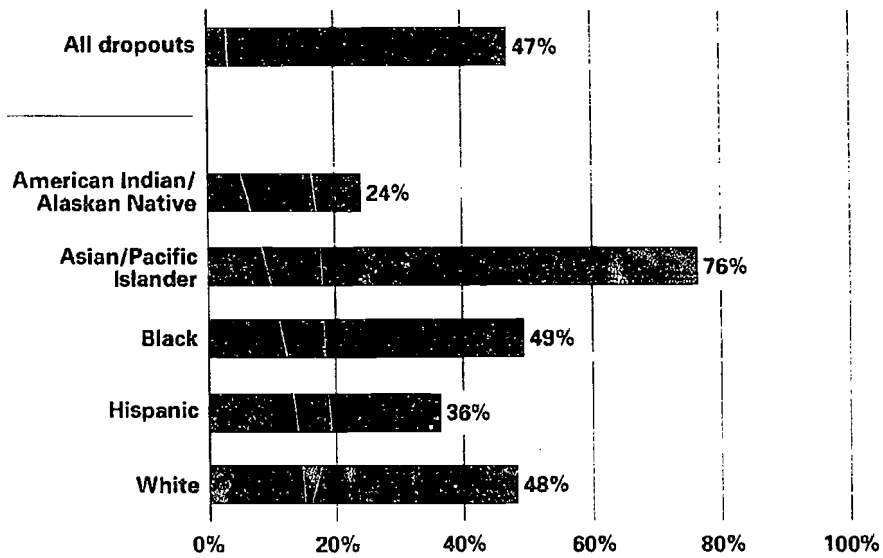
² Does not include those still enrolled in high school.

³ Hispanic rates may vary more than rates for other groups because of a small sample size.

Source: National Center for Education Statistics and Management Planning Research Associates, Inc., 1994
This exhibit updates information presented in the 1993 Goals Report.

Exhibit 15
Dropouts Who Returned to High School

Percentage of 1980 sophomores who dropped out, but then returned and completed high school by 1986

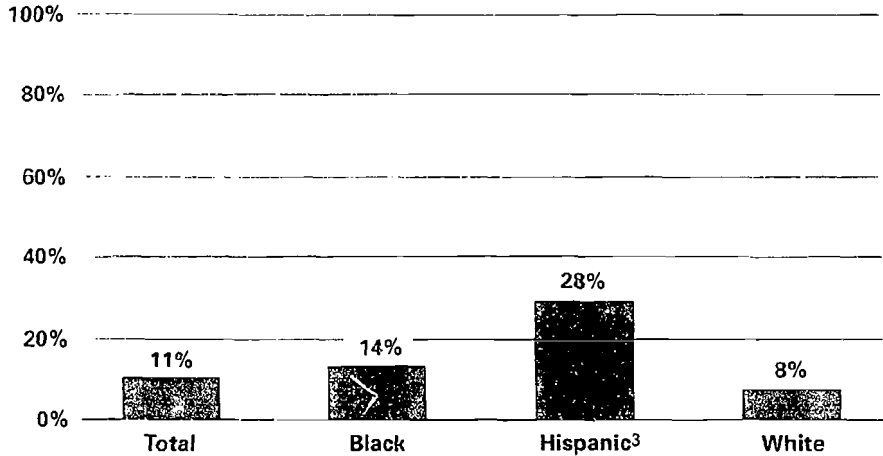


Nearly half of the 1980 sophomores who dropped out returned and completed high school within the following six years.

Source: National Center for Education Statistics, 1989
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 16
High School Dropout Rates

Percentage of young adults¹ 16 to 24 years old without a high school credential,² 1993



The high school dropout rate in 1993 was 11% for 16- to 24-year-olds. The dropout rate for Hispanic students was substantially higher than the rates for Black and White students.

¹ Does not include those still enrolled in high school.

² Includes traditional high school diploma and alternative credential.

³ Hispanic rates may vary more than rates for other groups because of a small sample size.

Change Since 1992¹

Percentage of young adults² 16 to 24 years old without a high school credential:³

	1992	1993
All	11%	11%
Black	14%	14%
Hispanic ⁴	29%	28%
White	8%	8%

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

² Does not include those still enrolled in high school.

³ Includes traditional high school diploma and alternative credential.

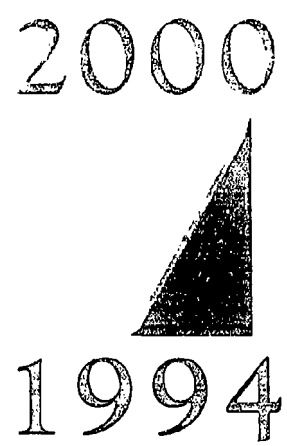
⁴ Hispanic rates may vary more than rates for other groups because of a small sample size.

Source: National Center for Education Statistics, 1994

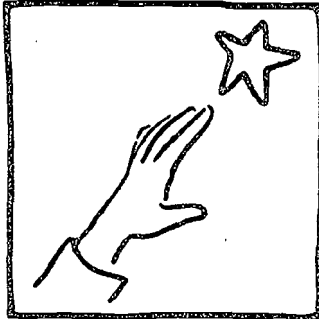
This exhibit updates information presented in the 1993 Goals Report.

GOAL 3

**Student Achievement and
Citizenship**



GOAL 3



Student Achievement and Citizenship

The National Education Goals were created to help prepare American students for the 21st century. As the data in this Volume show, too few students attain high achievement. At the same time, our standards need to match those of the education systems in our competitor nations. Goal 3 states that all students should master challenging subject matter. This means that we need to define:

- Content standards that (a) reflect what we believe all students should know and be able to do, and (b) match or surpass standards for student achievement in other developed countries. Efforts to develop voluntary standards in all major subject areas are under way.
- Performance standards aligned with these content standards. Our tests must measure for the results we want. Performance standards should be broadly discussed by each community to define how good is good enough.

The National Education Goals Panel and the newly authorized National Education Standards and Improvement Council will establish criteria to review standards that are voluntarily submitted. They will also ensure that the standards-development process is broad-based and involves the American public. To inform and involve the public in making sure that all our students are challenged academically is critical to a renewal of the school system. Americans must aim for more than low-level, minimal learning expectations for children and youth if we are to meet Goal 3.

The 1994 National Volume includes some mild encouragement regarding student achievement and young citizen participation. Student achievement in mathematics improved modestly between 1990 and 1992, and voter participation increased among young adults between 1988 and 1992. However, the data also indicate how far we are from achieving the Goal, especially among minority groups. We are still not expecting and supporting all of our students to attain the academic mastery of which they are capable.

GOAL 3

Student Achievement and Citizenship

By the year 2000, all students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, 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.

Objectives

- The academic performance of all students at the elementary and secondary level will increase significantly in every quartile, and the distribution of minority students in each quartile will more closely reflect the student population as a whole.
- The percentage of all students who demonstrate the ability to reason, solve problems, apply knowledge, and write and communicate effectively will increase substantially.
- All students will be involved in activities that promote and demonstrate good citizenship, good health, community service, and personal responsibility.
- All students will have access to physical education and health education to ensure they are healthy and fit.
- The percentage of all students who are competent in more than one language will substantially increase.
- All students will be knowledgeable about the diverse cultural heritage of this Nation and about the world community.

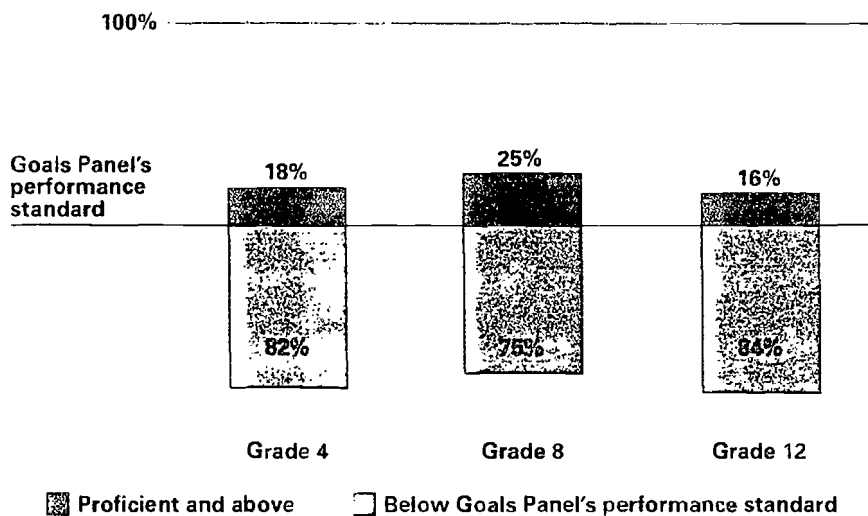
Achievement Level Data from the National Assessments of Educational Progress (NAEP) in Mathematics and Reading

The data shown in Exhibits 17 to 24 should be interpreted with caution. The line signifying the *Goals Panel's Performance Standard* classifies student performance according to achievement levels devised by the National Assessment Governing Board (NAGB). These achievement level data have been previously reported by the National Center for Education Statistics (NCES). Students with NAEP scores falling below the *Goals Panel's Performance Standard* have been classified by NAGB as "Basic" or below; those above have been classified as "Proficient" or "Advanced."

The NAGB achievement levels represent a reasonable way of categorizing overall performance on the NAEP. They are also consistent with the Panel's efforts to report such performance against a high-criterion standard. However, the methods used to derive the NAGB achievement "cut points" (i.e., the points distinguishing the percentage of students scoring at the different achievement levels) have been questioned and are still under review. The Panel will continue to monitor subsequent work in this area, and reserves the right to alter its reporting approaches based on new findings. For further information on the interpretation of these data, please consult Appendix A.

**Exhibit 17
Mathematics Achievement**

Percentages of 4th, 8th, and 12th graders who met the Goals Panel's performance standard¹ in mathematics, 1992



In 1992, fewer than one out of every five students in Grades 4 and 12 met the Goals Panel's performance standard in mathematics. One out of every four 8th graders met the standard.

¹ The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.

Change Since 1990¹

Percentages of 4th, 8th, and 12th graders who met the Goals Panel's performance standard² in mathematics:

	Proficient and above	
	1990	1992
Grade 4	13%	18% *
Grade 8	20%	25% *
Grade 12	13%	16%

Between 1990 and 1992, the percentages of students in Grades 4 and 8 who met the Goals Panel's performance standard in mathematics increased.

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

² The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.

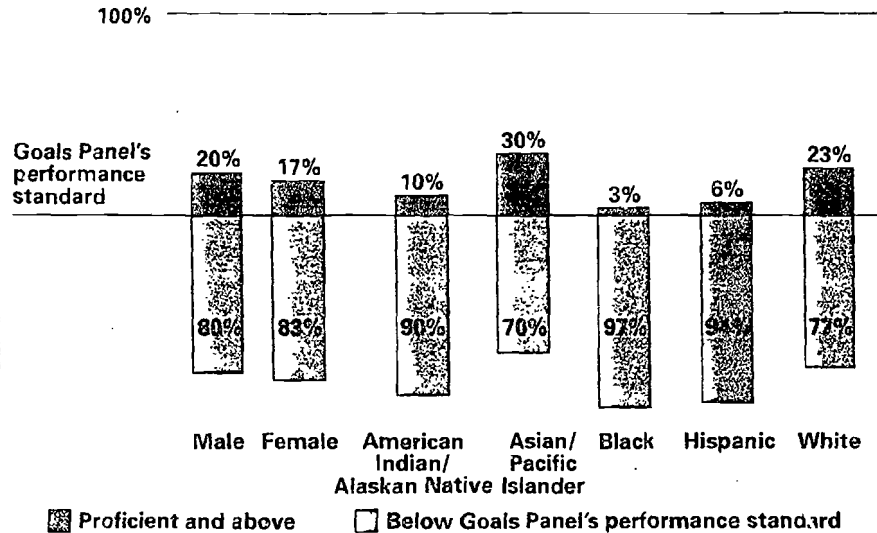
Source: National Center for Education Statistics, 1993
This exhibit repeats information presented in the 1993 Goals Report.

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Exhibit 18
Mathematics Achievement – Grade 4

Percentage of 4th graders who met the Goals Panel's performance standard¹ in mathematics, 1992

In 1992, the percentage of 4th graders who met the Goals Panel's performance standard in mathematics ranged from 3% for Blacks to 30% for Asians/Pacific Islanders.



¹ The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.

Between 1990 and 1992, the percentage of White and male 4th graders who met the Goals Panel's performance standard in mathematics increased.

Change Since 1990¹

Percentage of 4th graders who met the Goals Panel's performance standard² in mathematics:

	Proficient and above	
	1990	1992
Male	14%	20% *
Female	13%	17%
American Indian/Alaskan Native	5%	10%
Asian/Pacific Islander	24%	30%
Black	2%	3%
Hispanic	5%	6%
White	17%	23% *

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.
² The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.

Source: National Center for Education Statistics, 1993
This exhibit repeats information presented in the 1993 Goals Report.

Grade 4 Sample NAEP Mathematics Items

EASY

- Example of an easy item on the 4th grade assessment:

Divide 108 by 9.

Answer: 12

- Average percentage of easy items answered correctly by 4th graders at three achievement levels in 1992:¹

Basic = 71% Proficient = 88% Advanced = 94%

MODERATE

- Example of a moderate item on the 4th grade assessment:

POINTS EARNED FROM SCHOOL EVENTS

Class	Mathathon	Readathon
Mr. Lopez	425	411
Ms. Chen	328	456
Mrs. Green	447	342

What was the total number of points earned from the mathathon?

Answer: 1,200

- Average percentage of moderate items answered correctly by 4th graders at three achievement levels in 1992:¹

Basic = 45% Proficient = 72% Advanced = 88%

CHALLENGING

- Example of a challenging item on the 4th grade assessment:

How much would 217 be increased if the digit 1 were replaced with the digit 5?

- | | | | |
|----------|----|---|-----|
| A | 4 | C | 44 |
| B | 40 | D | 400 |

- Average percentage of challenging items answered correctly by 4th graders at three achievement levels in 1992:¹

Basic = 30% Proficient = 56% Advanced = 79%

VERY CHALLENGING

- Example of a very challenging item on the 4th grade assessment:

Think carefully about the following question. Write a complete answer. You may use drawings, words, and numbers to explain your answer. Be sure to show all of your work.

José ate $\frac{1}{2}$ of a pizza.
Ella ate $\frac{1}{3}$ of another pizza.

José said that he ate more pizza than Ella, but Ella said they both ate the same amount. Use words and pictures to show that José could be right.

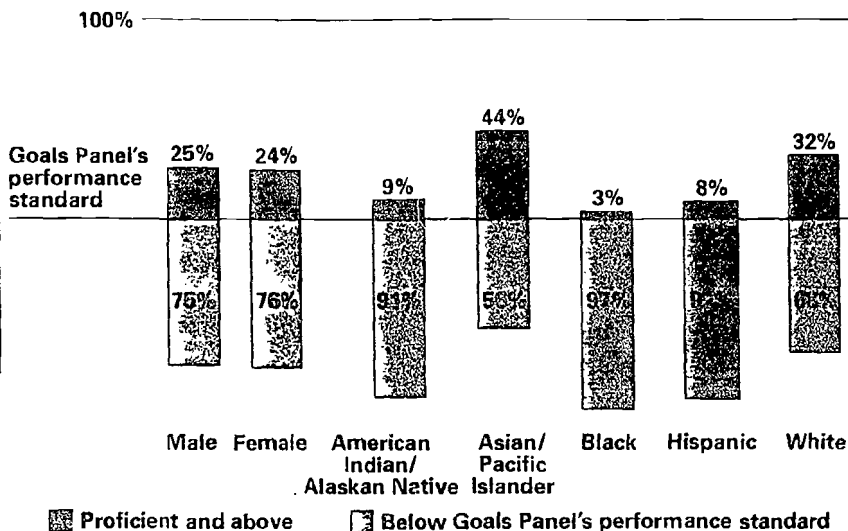
- Average percentage of very challenging items answered correctly by 4th graders at three achievement levels in 1992:¹

Basic = 13% Proficient = 31% Advanced = 60%

Note: In 1992, nearly four out of ten 4th graders (39%) were unable to reach the lowest achievement level in mathematics (Basic). Definitions of the achievement levels can be found in Appendix A.

Exhibit 19 Mathematics Achievement – Grade 8

Percentage of 8th graders who met the Goals Panel's performance standard¹ in mathematics, 1992



In 1992, the percentage of 8th graders who met the Goals Panel's performance standard in mathematics ranged from 3% for Blacks to 44% for Asians/Pacific Islanders.

¹ The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.

Between 1990 and 1992, the percentage of White and female 8th graders who met the Goals Panel's performance standard in mathematics increased.

Change Since 1990¹

Percentage of 8th graders who met the Goals Panel's performance standard² in mathematics:

	Proficient and above	
	1990	1992
Male	21%	25% *
Female	18%	24% *
American Indian/ Alaskan Native ³	9%	9%
Asian/Pacific Islander ³	38%	44%
Black	6%	3%
Hispanic	6%	8%
White	24%	32% *

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

² The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.

³ Should be interpreted with caution, since 1990 sample size does not allow accurate estimate of sample variability.

Source: National Center for Education Statistics, 1993
This exhibit repeats information presented in the 1993 Goals Report

Grade 8 Sample NAEP Mathematics Items

EASY

- Example of an easy item on the 8th grade assessment:

What number is four hundred five and three-tenths?

- | | | | |
|----------|-------|---|---------|
| A | 45.3 | C | 453 |
| B | 405.3 | D | 4,005.3 |

- Average percentage of easy items answered correctly by 8th graders at three achievement levels in 1992:¹

Basic = 84% Proficient = 94% Advanced = 98%

MODERATE

- Example of a moderate item on the 8th grade assessment:

Jill needs to earn \$45.00 for a class trip. She earns \$2.00 each day on Mondays, Tuesdays, and Wednesdays, and \$3.00 each day on Thursdays, Fridays, and Saturdays. She does not work on Sundays. How many weeks will it take her to earn \$45.00?

Answer: 3 weeks

- Average percentage of moderate items answered correctly by 8th graders at three achievement levels in 1992:¹

Basic = 58% Proficient = 83% Advanced = 94%

CHALLENGING

- Example of a challenging item on the 8th grade assessment:

Ken bought a used car for \$5,375. He had to pay an additional 15 percent of the purchase price to cover both sales tax and extra fees. Of the following, which is closest to the *total* amount Ken paid?

- | | | | | | |
|---|---------|---|---------|----------|---------|
| A | \$806 | C | \$5,760 | E | \$6,180 |
| B | \$5,510 | D | \$5,940 | | |

- Average percentage of challenging items answered correctly by 8th graders at three achievement levels in 1992:¹

Basic = 36% Proficient = 64% Advanced = 85%

VERY CHALLENGING

- Example of a very challenging item on the 8th grade assessment:

This question requires you to show your work and explain your reasoning. You may use drawings, words, and numbers in your explanation.

Treena won a 7-day scholarship worth \$1,000 to the Pro Shot Basketball Camp. Round-trip travel expenses to the camp are \$335 by air or \$125 by train. At the camp she must choose between a week of individual instruction at \$60 per day or a week of group instruction at \$40 per day. Treena's food and other expenses are fixed at \$45 per day. If she does not plan to spend any money other than the scholarship, what are *all* choices of travel and instruction plans that she could afford to make? Explain your reasoning.

- Average percentage of very challenging items answered correctly by 8th graders at three achievement levels in 1992:¹

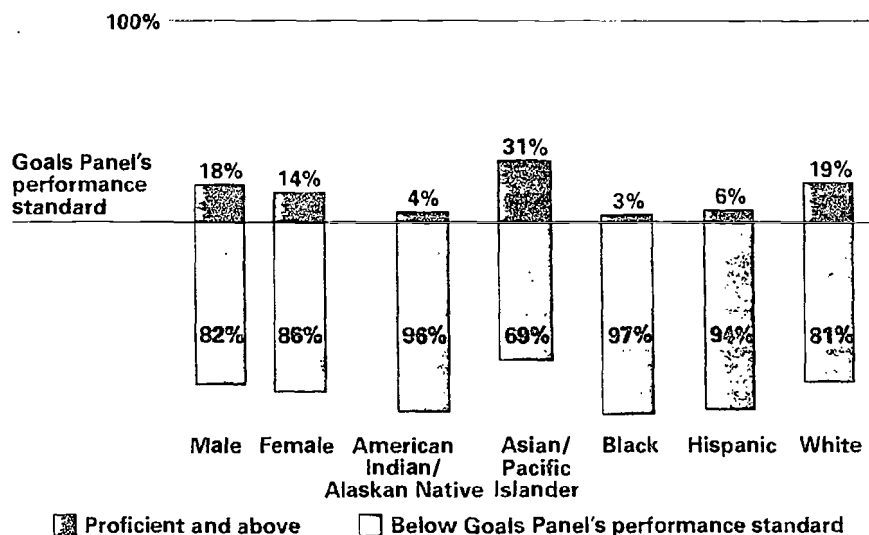
Basic = 15% Proficient = 29% Advanced = 56%

¹ Note: In 1992, over one-third of all 8th graders (37%) were unable to reach the lowest achievement level in mathematics (Basic). Definitions of the achievement levels can be found in Appendix A.

Exhibit 20
Mathematics Achievement – Grade 12

Percentage of 12th graders who met the Goals Panel's performance standard¹ in mathematics, 1992

In 1992, the percentage of 12th graders who met the Goals Panel's performance standard in mathematics ranged from 3% for Blacks to 31% for Asians/Pacific Islanders.



¹ The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.

Change Since 1990¹

Percentage of 12th graders who met the Goals Panel's performance standard² in mathematics:

	Proficient and above	
	1990	1992
Male	16%	18%
Female	10%	14%
American Indian/ Alaskan Native ³	4%	4%
Asian/Pacific Islander	25%	31%
Black	2%	3%
Hispanic	4%	6%
White	16%	19%

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.
² The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.
³ Should be interpreted with caution, since 1990 sample size does not allow accurate estimate of sample variability.

Source: National Center for Education Statistics, 1993
 This exhibit repeats information presented in the 1993 Goals Report

Grade 12 Sample NAEP Mathematics Items

EASY

- Example of an easy item on the 12th grade assessment:
If k can be replaced by any number, how many different values can the expression $k + 6$ have?
A None D Seven
B One E Infinitely many
C Six
- Average percentage of easy items answered correctly by 12th graders at three achievement levels in 1992:¹
Basic = 82% Proficient = 94% Advanced = 97%

MODERATE

- Example of a moderate item on the 12th grade assessment:
Raymond must buy enough paper to print 28 copies of a report that contains 64 sheets of paper. Paper is only available in packages of 500 sheets. How many whole packages of paper will he need to buy to do the printing?
Answer: 4
- Average percentage of moderate items answered correctly by 12th graders at three achievement levels in 1992:¹
Basic = 56% Proficient = 84% Advanced = 93%

CHALLENGING

- Example of a challenging item on the 12th grade assessment:
If $f(x) = 4x^2 - 7x + 5.7$, what is the value of $f(3.5)$?
Answer: 30.2
- Average percentage of challenging items answered correctly by 12th graders at three achievement levels in 1992:¹
Basic = 30% Proficient = 62% Advanced = 83%

VERY CHALLENGING

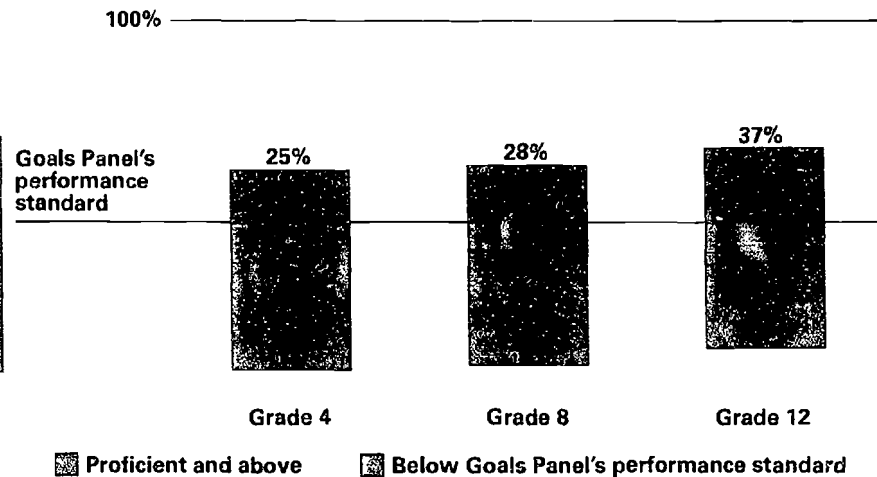
- Example of a very challenging item on the 12th grade assessment:
This question requires you to show your work and explain your reasoning. You may use drawings, words, and numbers in your explanation.
One plan for state income tax requires those persons with income of \$10,000 or less to pay no tax and those persons with income greater than \$10,000 to pay a tax of 6 percent only on the part of their income that exceeds \$10,000. A person's *effective* tax rate is defined as the percent of total income that is paid in tax. Based on this definition, could any person's effective tax rate be 5 percent? Could it be 6 percent? Explain your answer. Include examples if necessary to justify your conclusions.
- Average percentage of very challenging items answered correctly by 12th graders at three achievement levels in 1992:¹
Basic = 9% Proficient = 31% Advanced = 62%

¹ Note: In 1992, over one-third of all 12th graders (36%) were unable to reach the lowest achievement level in mathematics (Basic). Definitions of the achievement levels can be found in Appendix A.

Exhibit 21 Reading Achievement

Percentages of 4th, 8th, and 12th graders who met the Goals Panel's performance standard¹ in reading, 1992

In 1992, approximately one out of every four students in Grades 4 and 8 met the Goals Panel's performance standard in reading. More than one-third of all 12th graders met the standard.



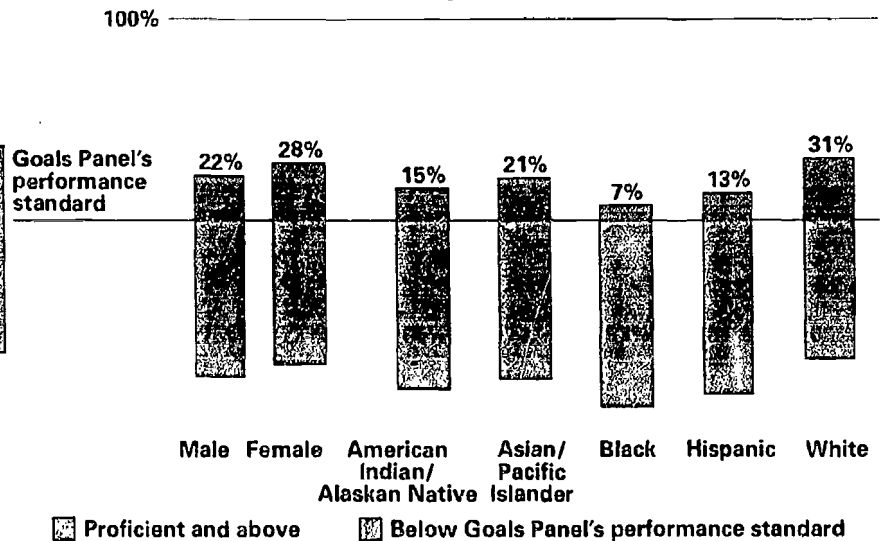
¹ The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.

Source: National Center for Education Statistics, 1993
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 22 Reading Achievement - Grade 4

Percentage of 4th graders who met the Goals Panel's performance standard¹ in reading, 1992

In 1992, the percentage of 4th graders who met the Goals Panel's performance standard in reading ranged from 7% for Blacks to 31% for Whites.



¹ The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.

Source: National Center for Education Statistics, 1993
This exhibit repeats information presented in the 1993 Goals Report.

Grade 4 Sample NAEP Reading Items

The passage is an informative article about how Amanda Clement became the first paid woman umpire on record.

EASY

- Example of an easy item on the 4th grade assessment:

What obstacle did Mandy overcome in her baseball career?

- A The players did not respect her.
- B Baseball was not popular in Iowa.
- C Girls did not typically take part in sports.
- D She did not have very much experience at baseball.

- Average percentage of easy items answered correctly by 4th graders at three achievement levels in 1992:¹

Basic = 80%

Proficient = 91%

Advanced = 95%

MODERATE

- Example of a moderate item on the 4th grade assessment:

Write a paragraph explaining how Mandy got her first chance to be an umpire at a public game.

- Average percentage of moderate items answered correctly by 4th graders at three achievement levels in 1992:¹

Basic = 61%

Proficient = 81%

Advanced = 92%

CHALLENGING

- Example of a challenging item on the 4th grade assessment:

Give three examples showing that Mandy was not a quitter.

- Average percentage of challenging items answered correctly by 4th graders at three achievement levels in 1992:¹

Basic = 40%

Proficient = 62%

Advanced = 81%

VERY CHALLENGING

- Example of a very challenging item on the 4th grade assessment:

If she were alive today, what question would you like to ask Mandy about her career? Explain why the answer to your question would be important to know.

- Average percentage of very challenging items answered correctly by 4th graders at three achievement levels in 1992:¹

Basic = 19%

Proficient = 35%

Advanced = 57%

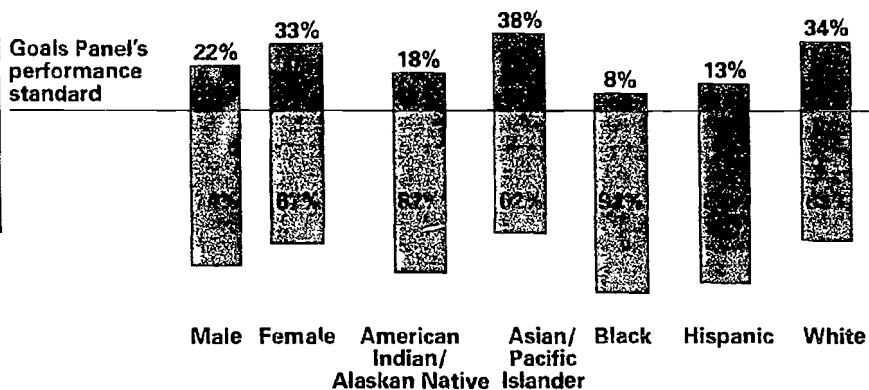
¹ Note: In 1992, approximately four out of ten 4th graders (41%) were unable to reach the lowest achievement level in reading (Basic). Definitions of the achievement levels can be found in Appendix A.

Exhibit 23
Reading Achievement – Grade 8

Percentage of 8th graders who met the Goals Panel's performance standard¹ in reading, 1992

100%

In 1992, the percentage of 8th graders who met the Goals Panel's performance standard in reading ranged from 8% for Blacks to 38% for Asians/Pacific Islanders.



■ Proficient and above ■ Below Goals Panel's performance standard

¹ The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.

Source: National Center for Education Statistics, 1993
This exhibit repeats information presented in the 1993 Goals Report.

Grade 8 Sample NAEP Reading Items

This task required students to read and use an actual bus schedule that included tables, maps, and text.

EASY

- Example of an easy item on the 8th grade assessment:

Lois wants to use the wheelchair lift. What telephone number should she call to arrange this?

- A 1-201-935-2500 C 1-800-772-2287
B 1-800-772-3606 (D) 1-800-582-5946

- Average percentage of easy items answered correctly by 8th graders at three achievement levels in 1992:¹

Basic = 75% Proficient = 92% Advanced = 97%

MODERATE

- Example of a moderate item on the 8th grade assessment:

How long does it take to ride from the intersection of Hanover and Broad to the intersection of Mulberry and Enterprise?

- A 5 minutes (C) 13 minutes
B 8 minutes D 23 minutes

- Average percentage of moderate items answered correctly by 8th graders at three achievement levels in 1992:¹

Basic = 57% Proficient = 81% Advanced = 94%

CHALLENGING

- Example of a challenging item on the 8th grade assessment:

As described in the explanation of how to use the schedule, which of the following schedule entries is an example of a "check point"?

- A Presidents' Day C Northern New Jersey
(B) Hanover and Broad D W 6.25

- Average percentage of challenging items answered correctly by 8th graders at three achievement levels in 1992:¹

Basic = 39% Proficient = 64% Advanced = 85%

VERY CHALLENGING

- Example of a very challenging item on the 8th grade assessment:

Now that you have looked carefully at the bus schedule, *use your notes* and make suggestions to help New Jersey Transit improve this schedule.

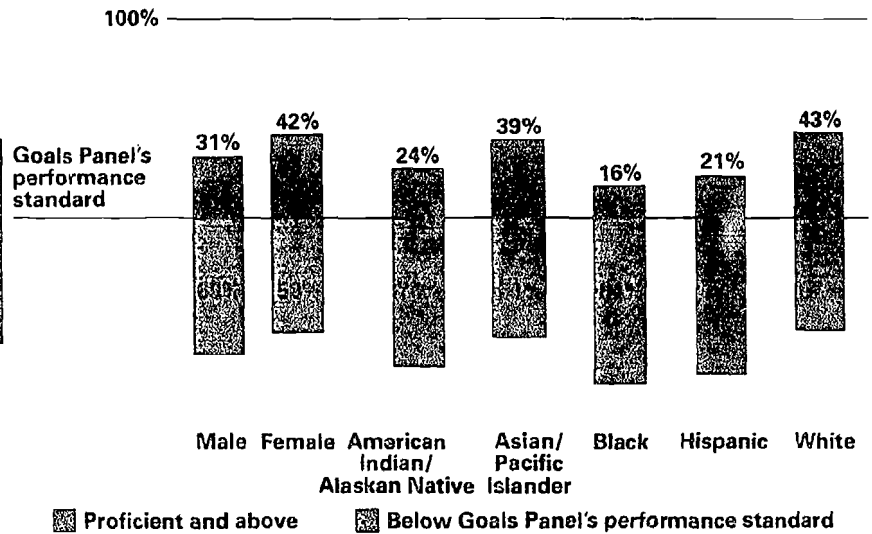
- Average percentage of very challenging items answered correctly by 8th graders at three achievement levels in 1992:¹

Basic = 15% Proficient = 33% Advanced = 61%

¹ Note: In 1992, nearly one-third of all 8th graders (31%) were unable to reach the lowest achievement level in reading (Basic). Definitions of the achievement levels can be found in Appendix A.

Exhibit 24
Reading Achievement – Grade 12

Percentage of 12th graders who met the Goals Panel's performance standard¹ in reading, 1992



In 1992, the percentage of 12th graders who met the Goals Panel's performance standard in reading ranged from 16% for Blacks to 43% for Whites.

¹ The Goals Panel's performance standard is "mastery over challenging subject matter" as indicated by performance at the Proficient or Advanced levels on the National Assessment of Educational Progress (NAEP). These levels were established by the National Assessment Governing Board (NAGB) and reported by the National Center for Education Statistics (NCES) in NAEP publications. A more complete description of the performance standard can be found in Appendix A.

Source: National Center for Education Statistics, 1993
This exhibit repeats information presented in the 1993 Goals Report.

Grade 12 Sample NAEP Reading Items

Two passages related to the battle of Shiloh were combined. One passage was an encyclopedia entry about the battle and the other passage was a narrative account of the battle from one soldier's perspective.

EASY

- Example of an easy item on the 12th grade assessment:

The night before the battle, Union and Confederate forces unknowingly camped a short distance from each other

- A near Manassas, Virginia
- B in "The Hornets' Nest"
- C near the Tennessee River
- D near Owl Creek

- Average percentage of easy items answered correctly by 12th graders at three achievement levels in 1992:¹

Basic = 78%

Proficient = 91%

Advanced = 97%

MODERATE

- Example of a moderate item on the 12th grade assessment:

How could reading these two sources help a student learn about the battle of Shiloh?

- Average percentage of moderate items answered correctly by 12th graders at three achievement levels in 1992:¹

Basic = 61%

Proficient = 80%

Advanced = 93%

CHALLENGING

- Example of a challenging item on the 12th grade assessment:

Identify two conflicting emotions displayed by the Union officer in his journal entry. Explain why you think the battle of Shiloh caused him to have these conflicting feelings.

- Average percentage of challenging items answered correctly by 12th graders at three achievement levels in 1992:¹

Basic = 42%

Proficient = 64%

Advanced = 84%

VERY CHALLENGING

- Example of a very challenging item on the 12th grade assessment:

On the basis of information contained in the two passages, decide whether or not you think the United States should ever again engage in a civil war. Explain your answer using examples from what you have learned and read about war.

- Average percentage of very challenging items answered correctly by 12th graders at three achievement levels in 1992:¹

Basic = 22%

Proficient = 40%

Advanced = 65%

¹ Note: In 1992, one-fourth of all 12th graders (25%) were unable to reach the lowest achievement level in reading (Basic). Definitions of the achievement levels can be found in Appendix A.

Exhibit 25
Writing Achievement – Grade 4

Percentage of 4th graders who provided a developed¹ or better response to the following writing tasks, 1992

PERSUASIVE

Watch TV: Write a letter to your teacher expressing an opinion on a proposed law that would prevent children from watching television, and give reasons for your opinion. **7%**

Space Travelers: Decide whether creatures from another planet should be allowed to return home or be detained for scientific study, and convince the director of the space center of this point of view. **15%**

Lengthen the School Year: Take a stand on whether school vacations should be shortened and write a letter to your principal arguing for your opinion. **8%**

NARRATIVE

Pet Dinosaur: Pretend that you have raised a pet dinosaur and write about one of your experiences together. **24%**

Magical Balloon: Imagine that you own a magical balloon and write about one of your adventures with it. **29%**

Another Planet: Write a story about an adventure as a space traveler on another planet. **20%**

INFORMATIVE WRITING

School Lunchtime: Describe a typical lunchtime at your school in such a way that someone who has never had lunch there can understand what it is like. **39%**

Favorite Story: Tell about a favorite story you have read, heard, or seen on television or at the movies. Include interesting details about characters, places, events, or ideas. **33%**

Favorite Object: Describe a favorite object and explain why it is valued. **32%**

In 1992, about one in ten 4th graders were able to provide a developed or better response to persuasive writing tasks. Approximately one in four were able to provide a developed or better response to narrative writing tasks, and approximately one in three were able to provide a developed or better response to informative writing tasks. In general, 4th graders provided more thorough responses to informative tasks than to persuasive or narrative tasks.

¹ A complete description of the scoring system can be found in Appendix A.

Source: National Center for Education Statistics, 1994

Grade 4 Sample Responses to NAEP Writing Tasks

A DEVELOPED¹ RESPONSE BY 4TH GRADERS² TO:

A Persuasive Writing Task, "Space Travelers"

Dear Space Center,

I think you should let the space creatures go back to their own planet because they probeley need to live on their planet. They probeley have different food then us and they probeley have different water and different houses and other things like that. They could maybe even die if they don't get the food that they need and the water that they also need. So I don't think that you should keep them and run the testes that you want to. That is my pick.

A Narrative Writing Task, "Magical Balloon"

I was strolling about in my neighborhood. It was a hot, sunny day. As I was strolling something suddenly happened. There was a magic balloon parked right in front of my house. I started walking toward the balloon slowly. When I was close enough I saw that the red, magical balloon was empty, so I started crawling in it. All of a sudden the balloon started floating. I was afraid at first, but then I started getting used to it. The magic balloon took me to another world, with colorful butterflies and hopping toads. It had a pond with water lilies. This place was beautiful. It was an adventure. Then the magical balloon returned me home. This was a wonderful and super day.

An Informative Writing Task, "Favorite Story"

It all began in the 1863. There were a boy named Tim how was a wood cuter he loved to cut woods that was it's job back in 1863. One day Tim went out to cut some woods. He cut the frist one and went to the other one. When he was done with all the cutting, he was very tierd so he said I'll go home and rest and then I'll come back. When He went back home & he saw that his house was himd, so he said that's ok I'll just get all those woods that I cut down and make a new house for me. He was all done making the house, so he went in and lived happily ever after.

¹ A complete description of the scoring system can be found in Appendix A.

² Student responses, including spelling and grammatical errors, are presented exactly as they were written.

Exhibit 26
Writing Achievement – Grades 8 and 12

Percentages of 8th and 12th graders who provided a developed¹ or better response to the following writing tasks, 1992

PERSUASIVE

Although 12th grade students were able to provide better responses to writing tasks than were 8th grade students, both groups were able to provide more complete answers to informative and narrative writing tasks than to persuasive tasks.

	Grade 8	Grade 12
Lengthen the School Year: Take a stand on whether school vacations should be shortened and write a letter to your principal arguing for your opinion.	22%	
Drug Search: Write an essay for the school board expressing your views about their proposed policy of random drug searches in school. Consider how the proposal affects individual rights and whether it would help control the potential drug problems in schools.	8%	12%
Rating Labels: Take a stand on whether negative rating labels should be used to restrict teenagers from buying certain music, and write a letter to the local committee supporting your opinion with reasons.	7%	14%
Community Service: Write an essay on whether high school students should be required to perform community service before graduation.		12%
No Pass/No Drive: ² Should the state legislature pass a law that students who receive failing grades will lose their drivers' licenses? Write a letter convincing your congressperson of your point of view.		25%

NARRATIVE

	Grade 8	Grade 12
Another Planet: Write a story about an adventure as a space traveler on another planet.	45%	
Dream Car: ² Create a dream car and write about an adventure with your imaginary car.	48%	
Embarrassing Incident: Think about an embarrassing situation you have been in and describe what happened.	30%	59%
Grandchildren: Imagine that you are a 70-year-old grandparent. Write a story about something from your youth that you would tell to your grandchildren in the 21st century.	33%	43%

¹ A complete description of the scoring system can be found in Appendix A.
² Students were given 50 minutes to respond to this task; 25 minutes for all others.

Grades 8 and 12 Sample Responses to NAEP Writing Tasks

A DEVELOPED¹ RESPONSE BY 8TH AND 12TH GRADERS² TO:

A Persuasive Writing Task, "Drug Search"

I would support a proposal, by the school administrators, to have drug-related crime prevention. Drug related crime in inner city schools has become ridiculous. Someone needs to take action on these teen delinquents.

Drug-related crimes do not usually occur in a small school. Moreover I think steps should be taken to secure the little schools too.

I think all school administrators should consider such a proposal. Administrators, dogs and police are infringing on the rights of students, but what other way is there to stop illegal drug use.

This proposal would most definitely help the drug problems in schools. This would cause teens to be scared to transact drugs on school property or even bring them to school. No teen wants to be embarrassed by the police or administrators in front of his friends. Not only would he or she be embarrassed, but word would get through the school like wildfire. The student should be suspended and unallowed to return to that school indefinitely.

This proposal would surely make teens think before bringing and selling drugs at school. All school administrators should have an open mind and be willing to accept the challenge of ensuring his high school's (teens) future.

A Narrative Writing Task, "Embarrassing Incident"

I caught the ball and slowly started dribbling towards one basket. Each bounce of the basketball echoed in the gym, and with each bounce I gained speed. I glanced over my right shoulder and saw that I had a clean breakaway. My teammates yelled out "Katherine! Katherine!" and I took their excited voices as encouragement. The sweat droplets rolled down my face as I neared the basket. I went up into my lay-up like I had always practiced. One step, two steps, shoot! The ball went through the hoop and I exploded with excitement.

As I turned around with a proud smile on my face, I noticed all of my teammates bent over in anxiety. The crowd was laughing, my coach was yelling, and the other team was cheering. I had shot at the wrong basket!

¹ A complete description of the scoring system can be found in Appendix A.

² Student responses, including spelling and grammatical errors, are presented exactly as they were written.

Exhibit 26 (continued)

Writing Achievement – Grades 8 and 12

Percentages of 8th and 12th graders who provided a developed¹ or better response to the following writing tasks, 1992

NARRATIVE (continued)

	Grade 8	Grade 12
Package: Pretend that someone hands you a package that will change your life and write a story about it.		47%
History Person: ² Choose any person from history and imagine that you spend a day together. Write a story about what happens.		37%

NONFICTIVE WRITING

	Grade 8	Grade 12
Favorite Object: Describe a favorite object and explain why it is valued.	52%	
Invention: Think of something to invent. Write a letter to the United States Patent Office describing both the object and the need it is designed to fulfill.	26%	27%
Performance Review: Write an article for the school newspaper that reviews a program or performance. Be sure to describe what you liked or disliked, why other people might or might not enjoy it, and what people should know before they go to see it.	34%	42%
Time Capsule: Choose an object to place in a time capsule which will be opened in 50 years. Describe how the object tells something especially interesting or important about people living today.		55%
School Problem: ² Write to the director of a news program and identify a problem that exists in school. Consider both the causes and effects of the problem.	68%	86%

¹ A complete description of the scoring system can be found in Appendix A.

² Students were given 50 minutes to respond to this task; 25 minutes for all others.

Source: National Center for Education Statistics, 1994

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Grades 8 and 12 Sample Responses to NAEP Writing Tasks

A DEVELOPED¹ RESPONSE BY 8TH AND 12TH GRADERS² TO:

An Informative Writing Task, "Invention"

Dear United States Patent Office,

I have a perfect invention. It is a car than runs on water. All it takes is one tank. It can keep on reusing water then once it has turned into vapor the car can create more water. But you have to fill it up once. This would decrease pollution. It will help our environment. It would even help people save money on gas. This car will be able to go pretty fast too. The car would look like any other car. Then you could help get food to other places and it won't take any money. All you have to pay for is the food. This is an idea I had in my dream.

Your friend

¹ A complete description of the scoring system can be found in Appendix A.

² Student responses, including spelling and grammatical errors, are presented exactly as they were written.

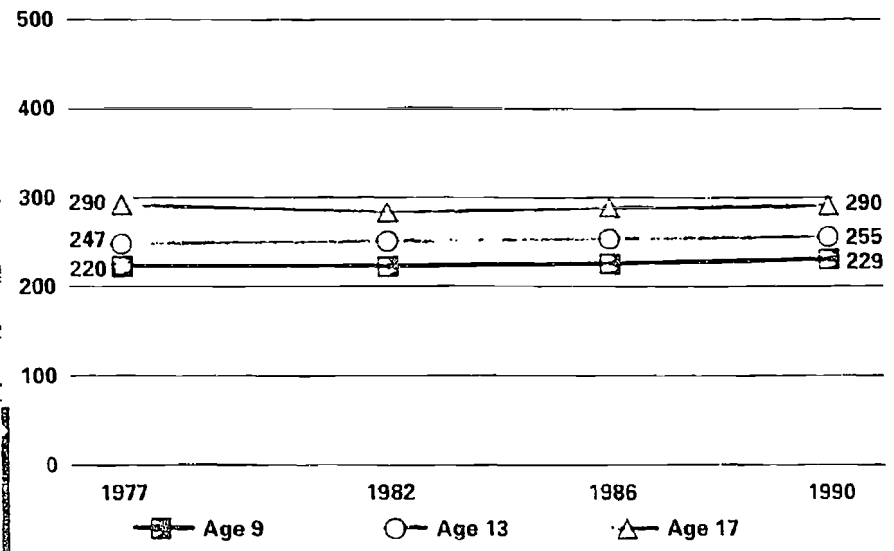
Average Science Score			
	1977	1990	Change ¹
Age 9			
All students	220	229	+
Black	175	198	+
Hispanic	192	208	+
White	230	238	+
Age 13			
All students	247	255	+
Black	208	228	+
Hispanic	213	232	+
White	256	264	+
Age 17			
All students	290	290	NS
Black	240	253	+
Hispanic	262	262	NS
White	298	301	NS

¹ + means statistically significant increase.
- means statistically significant decrease.
NS means no statistically significant change.

Average science scores for 9- and 13-year-olds increased between 1977 and 1990. The average score for 17-year-olds remained the same.

Exhibit 27 Trends in Science Proficiency

Average science score¹ on a scale of 0 to 500 for students 9, 13, and 17 years old, 1977 to 1990

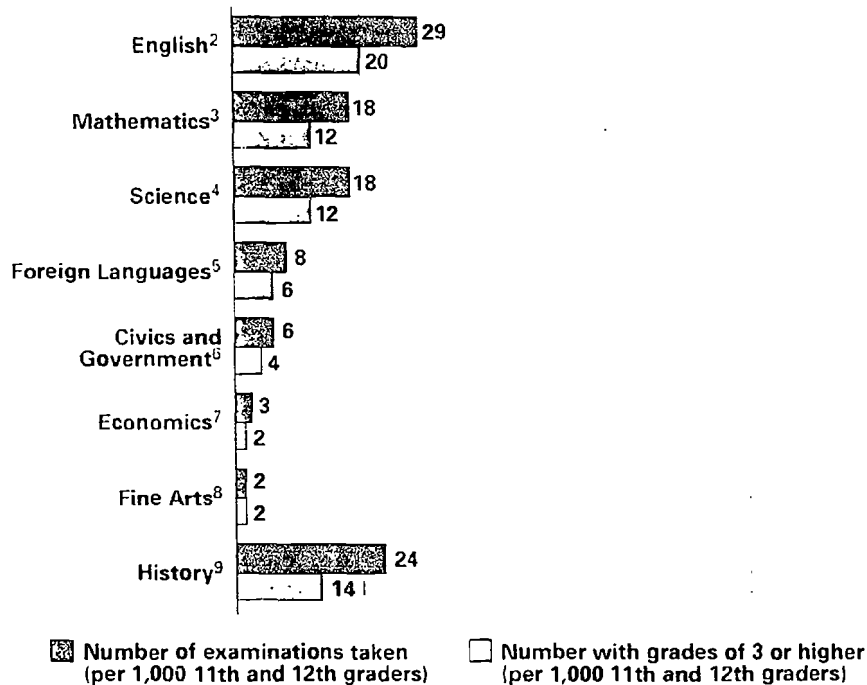


¹ Complete descriptions of each level can be found in Appendix A.

Source: National Center for Education Statistics, 1991
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 28
Advanced Placement Results – English, Mathematics, Science, Foreign Languages, Civics and Government, Economics, Fine Arts, and History

Number of examinations taken (per 1,000 11th and 12th graders), and number receiving grades of 3 or higher,¹ 1994



For every 1,000 11th and 12th graders enrolled in 1994, more Advanced Placement examinations were taken in English, mathematics, science, and history than in foreign languages, civics and government, economics, and fine arts.

- ¹ A grade of 3 or higher is generally high enough to make students eligible for college credit.
² Includes Language & Composition and Literature & Composition.
³ Includes Calculus AB and Calculus BC.
⁴ Includes Biology, Chemistry, Physics B, Physics C (Mechanics), and Physics C (Electricity and Magnetism)
⁵ Includes French Language, French Literature, Spanish Language, Spanish Literature, and German.
⁶ Includes Government & Politics—U.S., and Government & Politics—Comparative.
⁷ Includes Microeconomics and Macroeconomics
⁸ Includes Art History, Studio Art (Drawing and General), and Music Theory.
⁹ Includes U.S. History and European History.

Change Since 1991

Number of Advanced Placement examinations taken (per 1,000 11th and 12th graders), and number receiving grades of 3 or higher:

	Total number taken		Number with grades of 3 or higher	
	1991	1994	1991	1994
English	23	29	16	20
Mathematics	15	18	10	12
Science	13	18	9	12
Foreign Languages	7	8	5	6
Civics and Government	4	6	3	4
Economics	2	3	1	2
Fine Arts	2	2	1	2
History	20	24	11	14

Between 1991 and 1994, the number of Advanced Placement examinations taken (per 1,000 11th and 12th graders) increased in almost all subject areas.

Source: The College Board, 1991 and 1994
 This exhibit updates information presented in the 1993 Goals Report, and includes new information on Civics & Government and Economics.

Exhibit 29
Community Service

Percentage of 12th graders reporting that they performed community service during the past two years, 1992

In 1992, 44% of 12th graders reported that they performed community service during the past two years.

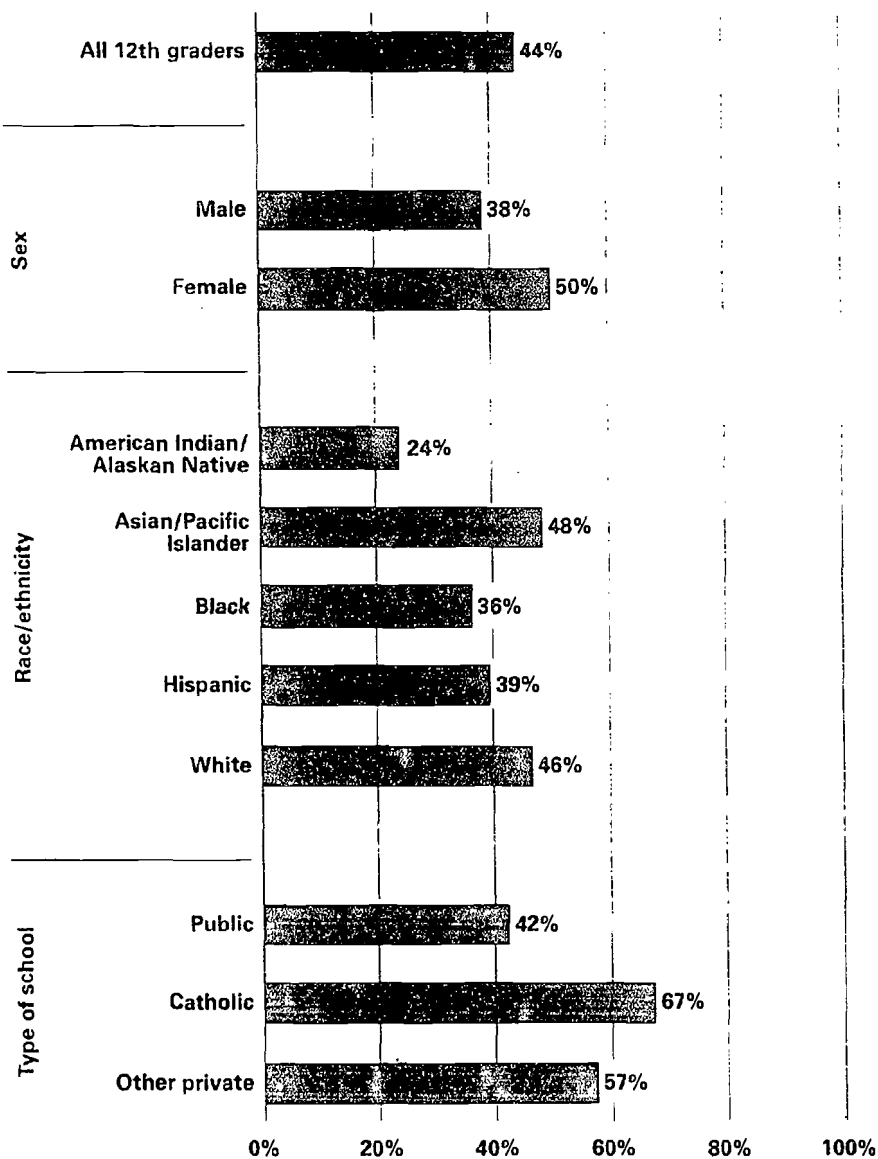
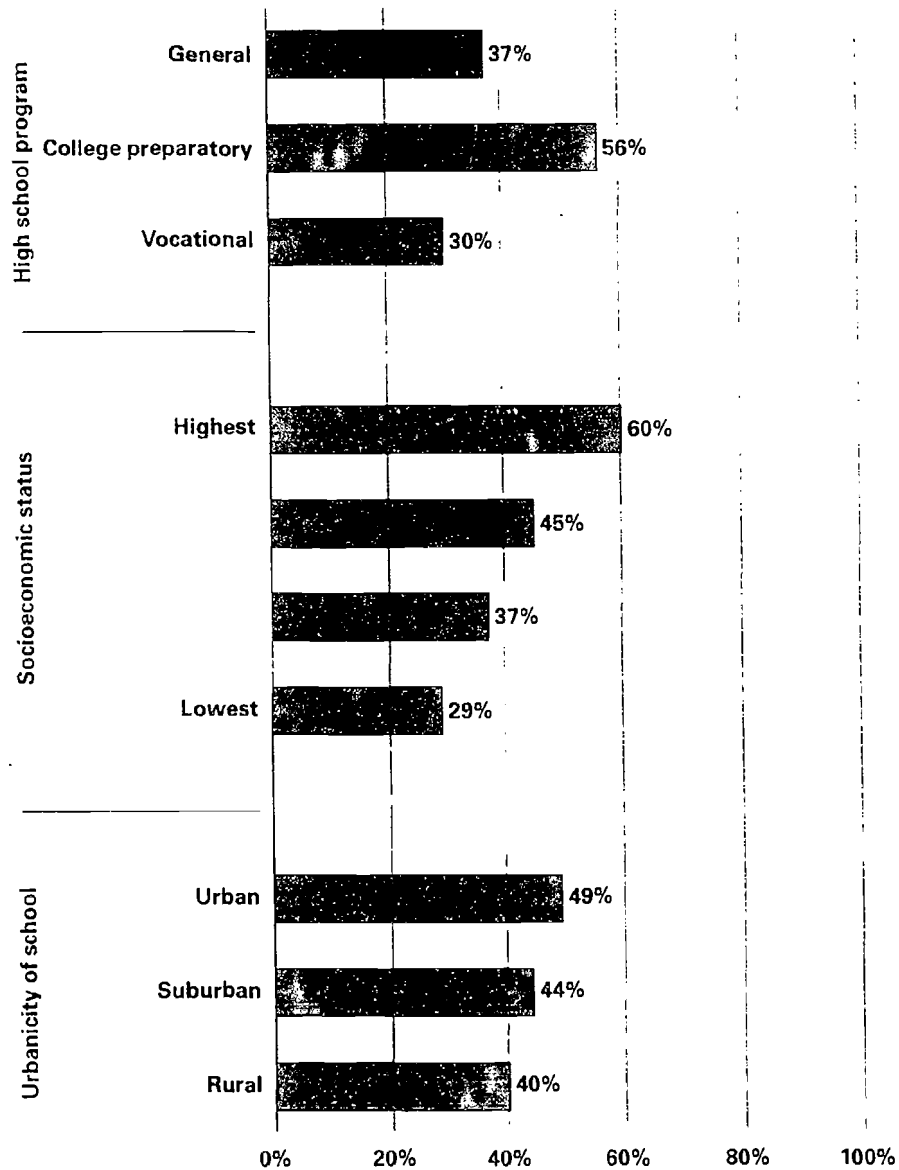


Exhibit 29 (continued)
Community Service

Percentage of 12th graders reporting that they performed community service during the past two years, 1992



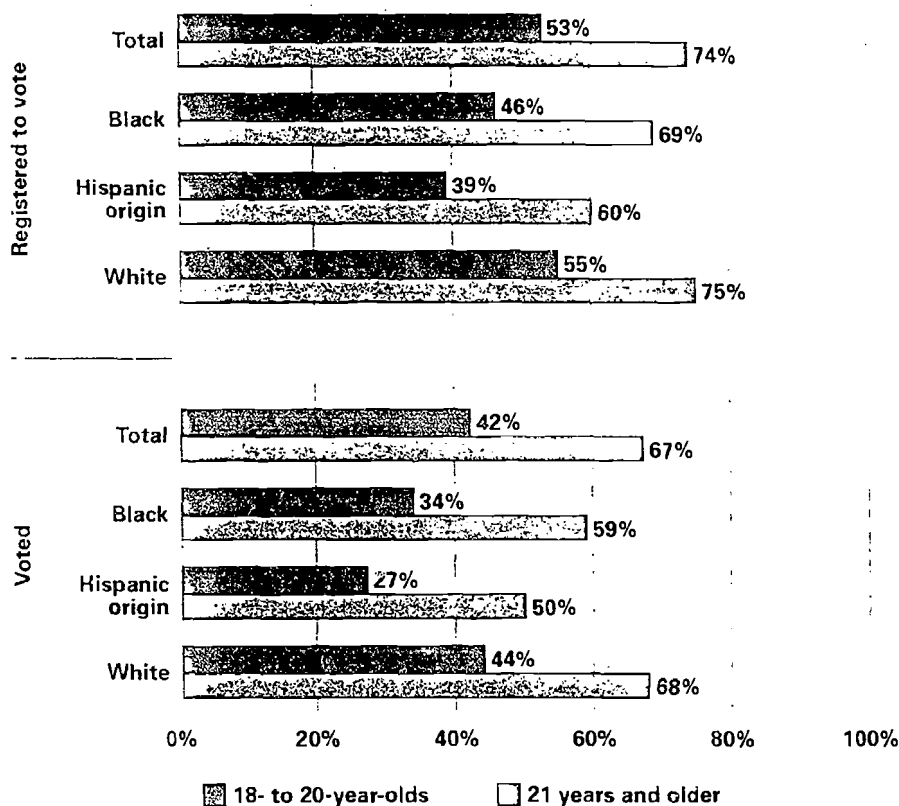
Source: National Center for Education Statistics, 1993
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 30

Young Adult Voter Registration and Voting

Percentage of all U.S. citizens 18 to 20 years old and 21 years and older who reported that they registered to vote and who reported that they voted, 1992

Voter registration and voting are more common practices among older populations than among younger ones. In 1992, 53% of all U.S. citizens 18 to 20 years old reported that they registered to vote, compared to nearly three-fourths of those 21 years and older. Forty-two percent of 18- to 20-year-olds reported that they voted, while 67% of those 21 and older reported that they voted.



Between 1988 and 1992, reported rates of voter registration and voting increased among 18- to 20-year-olds as well as among adults aged 21 and older.

Change Since 1988¹

Percentage of all U.S. citizens 18 to 20 years old and 21 years and older who reported that they registered to vote and who reported that they voted:

	18- to 20-year-olds				21 and older			
	Registered to vote		Voted		Registered to vote		Voted	
	1988	1992	1988	1992	1988	1992	1988	1992
All	48%	53% *	35%	42% *	72%	74% *	62%	67% *
Black	45%	46%	29%	34%	69%	69%	56%	59% *
Hispanic	36%	39%	23%	27%	59%	60%	48%	50%
White	48%	55% *	36%	44% *	73%	75% *	63%	68% *

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

Source: Bureau of the Census, 1989 and 1993
This exhibit repeats information presented in the 1993 Goals Report.

GOAL 4

**Teacher Education and
Professional Development**

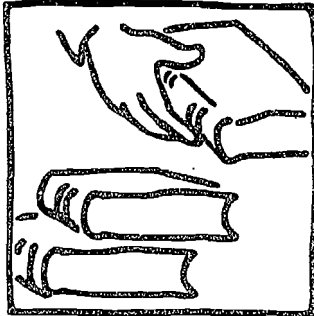


2000



1994

GOAL 4



Teacher Education and Professional Development

Teacher Education and Professional Development is one of the two new National Education Goals added to the original six by Congress this year. During the coming months, the Goals Panel plans to convene an advisory group of teachers and other experts to develop national and state indicators so that future reports can measure progress towards this important Goal.

The next five years could very well be the most demanding, yet rewarding, period of professional development that teachers in the United States will experience in the course of their careers. Higher standards for student achievement, which challenge conventional wisdom about what is taught and how it is taught, are under development in every academic discipline. Schools are piloting new, innovative forms of assessment and revising curricula to ensure that they produce highly trained, technologically adept graduates that colleges want and employers need. Changing demographics require teachers to provide effective instruction to increasingly diverse student populations. And greater emphasis placed on school-to-work transition requires that teachers be better trained to teach applied skills. Clearly, these changing responsibilities require unprecedented levels of teacher accountability and renewed commitment to teaching excellence.

As parents, policymakers, and taxpayers raise their expectations for student performance, they simultaneously raise their expectations for teachers. More than 100,000 new teachers enter American classrooms every year, joining a profession of about three million, which absorbs a larger proportion of college-educated adults than any other occupation. Projected increases in school enrollments over the next ten years will further swell the demand for highly qualified teachers and school administrators.

But are colleges and universities prepared to train new teachers and retrain experienced ones so that they can meet these escalating expectations? Are states and local school districts involving teachers in ongoing education reforms, so that standards-setting and the development of new assessments and curriculum frameworks become opportunities for professional development? Are schools providing the necessary support and resources to enable teachers to keep pace with the changes in their profession and to apply new technology in their classrooms? And are parents and communities actively working with schools to eliminate violence and disciplinary problems which prevent teachers from doing their jobs?

Until we can answer each of these questions affirmatively, few teachers will be adequately prepared to teach at the level needed to meet the National Education Goals. Strong partnerships between higher education, teachers, parents, communities, and schools will be necessary to ensure that teacher education and professional development receive the attention and support needed to transform classroom instruction.

GOAL 4

Teacher Education and Professional Development

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

Objectives

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

GOAL 5

Mathematics and Science



2000

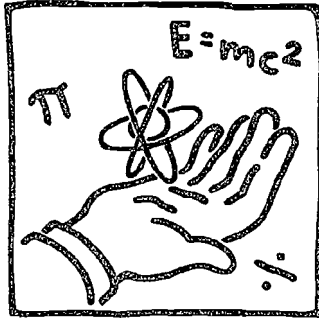


1994

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GOAL 5

Mathematics and Science



Nearly every day the front page of a newspaper or the evening television news describes an event that requires clear, informed thinking about science or mathematics. While it is important for us to be knowledgeable in a broad range of subjects, science and mathematics are particularly vital in the decisions we make in jobs, use of resources, health, and everyday consumer activities. Our nation's ability to compete globally rests upon strong science and mathematics skills and our ability to apply this knowledge to emerging technologies. That is why Goal 5 is unequivocal—it sets the very highest standard possible.

Yet positive student attitudes about science and mathematics decline precipitously as students grow older. International and national assessments reflect this loss. Our 9-year-olds perform relatively well in science and mathematics, but by age 13 their knowledge of mathematics and science is well behind that of students from countries in both Europe and Asia.

Contributing to this attitude is a long-term tendency of American schools to minimize the importance of science and mathematics instruction, especially in the early grades. Only 15 percent of all 4th graders, for example, receive instruction from a teacher who has been specially trained to teach mathematics. Less than one-fourth of elementary teachers feel qualified to teach specific sciences. Even at the high school level, about 20 percent of science teachers and 30 percent of mathematics teachers have degrees outside the fields in which they are teaching.

Outmoded instruction may also play a part in why students gradually lose interest in science and mathematics. Four years ago the National Council of Teachers of Mathematics recommended that all students should use computers and calculators in classes. According to data in this Volume, computers are becoming more available in the early grades and calculator use has become more widespread in the middle grades. Even so, only 56% of 8th graders regularly use calculators and only 20% have computers in their classrooms. And despite the fact that Algebra is the gateway subject to more advanced mathematics, less than half of all 8th graders (48%) currently attend classes that heavily emphasize this topic.

For our students to be well-informed and competent, science and mathematics knowledge must become "basic" in this country. It is as important for individuals as it is for the nation as a whole if we are to prosper. This is why so much effort is going into developing higher curriculum standards for all students in science and mathematics, ones that foster critical thinking, application of knowledge, and integration of technology. The goal is to be more than just adequate. It is to be excellent, to be the best.

GOAL 5

Mathematics and Science

By the year 2000, United States students will be first in the world in mathematics and science achievement.

Objectives

- ❑ Mathematics and science education, including the metric system of measurement, will be strengthened throughout the system, especially in the early grades.
- ❑ The number of teachers with a substantive background in mathematics and science, including the metric system of measurement, will increase by 50 percent.
- ❑ The number of United States undergraduate and graduate students, especially women and minorities, who complete degrees in mathematics, science, and engineering will increase significantly.

Exhibit 31
International Science and Mathematics
Achievement Comparisons

Performance of 13-year-olds from five countries¹ in relation to U.S., 1991

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

Science Achievement

Areas	Countries which scored lower than U.S.	Countries in which students' scores were similar to those of the U.S.	Countries which scored higher than U.S.
Life science		France, Hungary	Korea, Switzerland, Taiwan
Physical science			Korea, Switzerland, Taiwan
Earth science		France	Korea, Switzerland, Taiwan
Nature of science		France, Hungary	Korea, Switzerland, Taiwan

Mathematics Achievement

Areas	Countries which scored lower than U.S.	Countries in which students' scores were similar to those of the U.S.	Countries which scored higher than U.S.
Numbers and Operations		France	Korea, Switzerland, Taiwan
Measurement			Korea, Switzerland, Taiwan
Geometry			Korea, Switzerland, Taiwan
Data Analysis, Probability, and Statistics		France, Hungary	Korea, Switzerland, Taiwan
Algebra and Functions			Korea, Switzerland, Taiwan

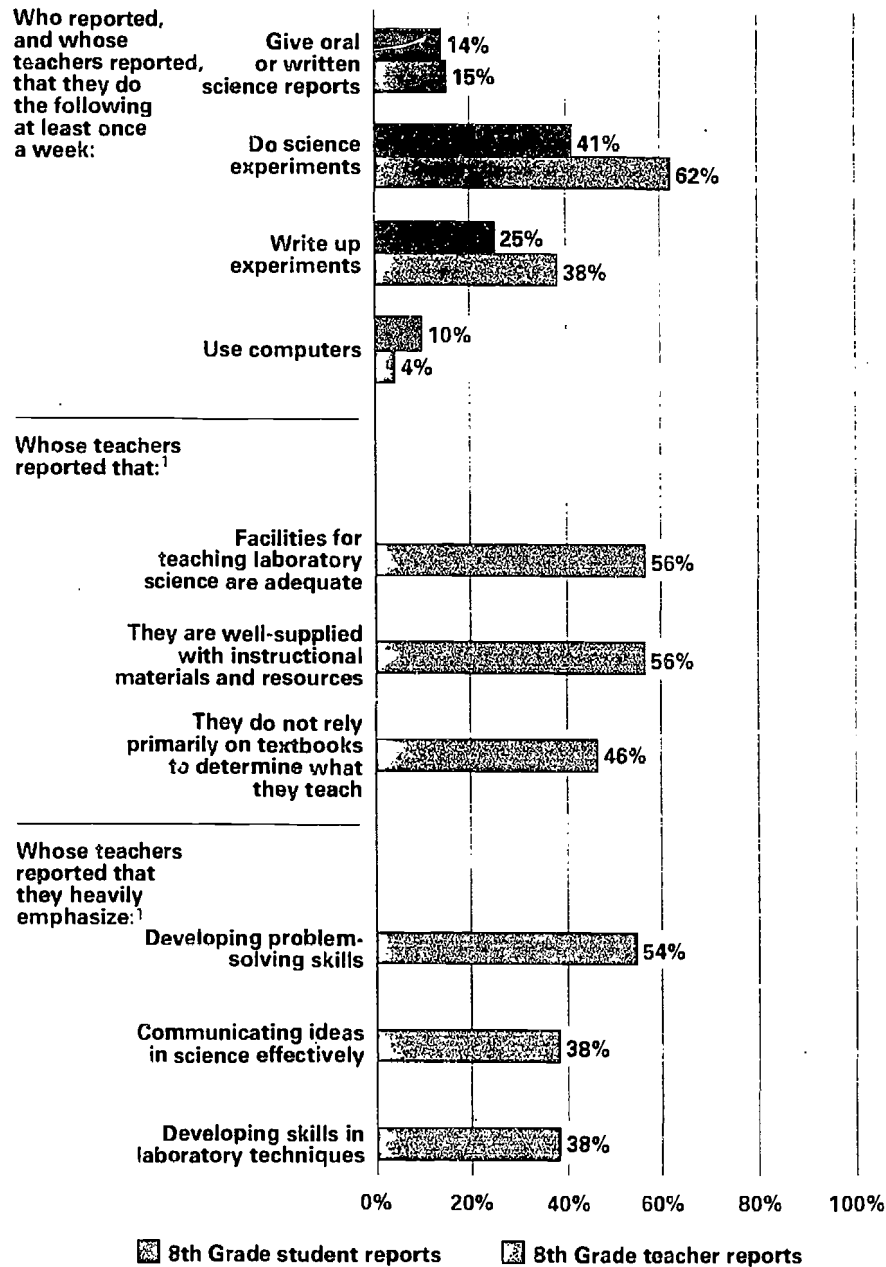
 France
  Hungary
  Korea
  Switzerland
  Taiwan

¹ Students from Brazil, Canada, China, England, Ireland, Israel, Italy, Jordan, Mozambique, Portugal, Scotland, Slovenia, the former Soviet Union, and Spain also participated in this assessment.

Source: Educational Testing Service, 1992
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 32 Science Instructional Practices

Percentage of 8th graders, 1990



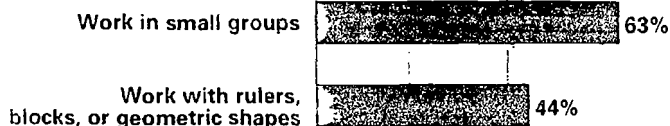
In 1990, most students were not receiving the kinds of instruction needed to apply science ideas outside of the classroom, and many teachers did not have adequate facilities or supplies to pursue these types of instruction.

¹ This information was not collected from 8th grade students.

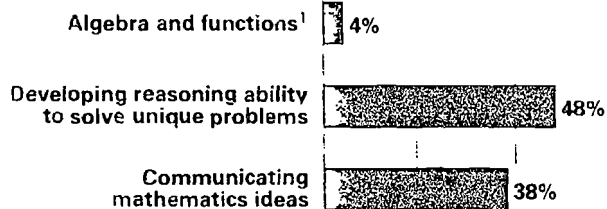
Source: National Center for Education Statistics and Westat, Inc., 1992
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 33
Mathematics Instructional Practices – Grade 4
Percentage of 4th graders, 1992

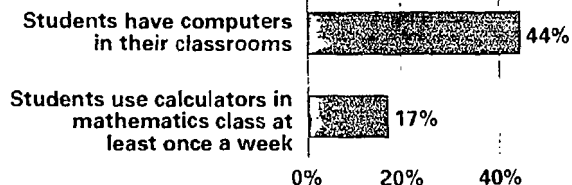
Whose teachers reported that they do the following at least once a week:



Whose teachers reported that they heavily emphasize:



Whose teachers reported that:



0% 20% 40% 60% 80% 100%

¹ Informal introduction of concepts at Grade 4.

In 1992, teachers reported that substantial numbers of 4th grade students were not receiving the kinds of instruction recommended by mathematics education experts, such as working with mathematics tools and equipment, developing reasoning and problem-solving skills, and learning to communicate mathematics ideas.

The percentage of 4th graders whose teachers reported that they have computers in their classroom increased between 1990 and 1992.

Change Since 1990¹

Percentage of 4th graders whose teachers reported that:

	1990	1992
Students work in small groups at least once a week	62%	63%
Students work with rulers, blocks, or geometric shapes at least once a week	51%	44%
They heavily emphasize Algebra and functions ²	2%	4%
They heavily emphasize developing reasoning ability to solve unique problems	44%	48%
They heavily emphasize communicating mathematics ideas	40%	38%
Students have computers in their classroom	31%	44% *
Students use calculators in mathematics class at least once a week	18%	17%

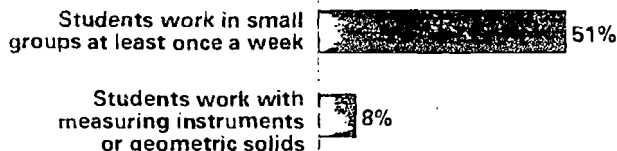
¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

² Informal introduction of concepts at Grade 4.

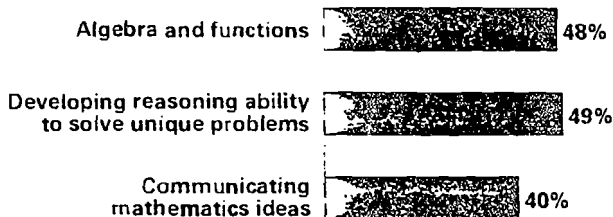
Source: National Center for Education Statistics, 1993
This exhibit repeats information presented in the 1993 Goals Report

Exhibit 34
Mathematics Instructional Practices – Grade 8
Percentage of 8th graders, 1992

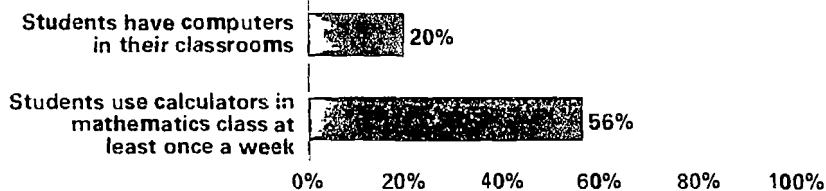
Whose teachers reported that:



Whose teachers reported that they heavily emphasize:



Whose teachers reported that:



In 1992, teachers reported that substantial numbers of 8th graders were not receiving the kind of instruction recommended by mathematics education experts, such as developing reasoning and problem-solving abilities and communicating mathematics ideas. Only one in five 8th graders had computers in their classrooms, and only one in twelve worked with mathematics tools such as measuring instruments or geometric solids.

Change Since 1990¹

Percentage of 8th graders whose teachers reported that:²

	1990	1992
Students work in small groups at least once a week	50%	51%
They heavily emphasize Algebra and functions	48%	48%
They heavily emphasize developing reasoning ability to solve unique problems	46%	49%
They heavily emphasize communicating mathematics ideas	38%	40%
Students have computers in their classroom	22%	20%
Students use calculators in mathematics class at least once a week	42%	56% *

The percentage of 8th graders whose teachers reported that they used calculators in mathematics class at least once a week increased 14 percentage points between 1990 and 1992.

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

² Data on working with measuring instruments or geometric solids were not collected for 8th graders prior to 1992.

Source: National Center for Education Statistics, 1993
This exhibit repeats information presented in the 1993 Goals Report.

American students earned over half a million science degrees in 1992. The combined number of undergraduate and graduate degrees earned by females increased 27% in science (versus a 5% decrease for males) between 1979 and 1992.

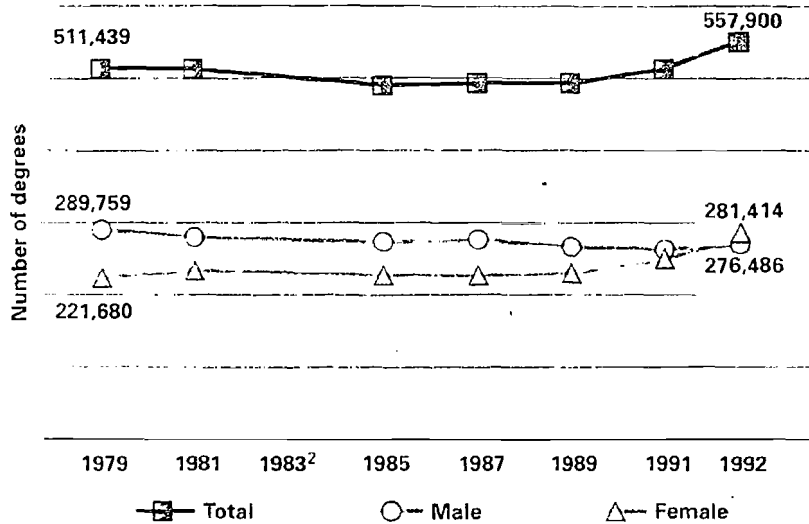
Undergraduate			
	1979	1992	% Change
Total	413,979	444,963	7%
Male	230,704	221,754	-4%
Female	183,275	223,209	22%

Graduate			
	1979	1992	% Change
Total	97,460	112,937	16%
Male	59,055	54,732	-7%
Female	38,405	58,205	52%

Undergraduate and Graduate Combined			
	1979	1992	% Change
Total	511,439	557,900	9%
Male	289,759	276,486	-5%
Female	221,680	281,414	27%

Exhibit 35 Trends in Science Degrees Earned, by Sex

Number¹ earned by U.S. citizens, 1979 to 1992



¹ Includes bachelor's, master's, and doctoral degrees in engineering, physical science, computer science, biological science, agricultural science, social science, psychology, and health fields.
² No data available.

Source: National Science Foundation, various years, and National Research Council, 1993. This exhibit modifies and updates information presented in the 1993 Goals Report.

American students earned over 17,500 mathematics degrees in 1992. The combined number of undergraduate and graduate degrees earned increased 10% for males and 35% for females between 1979 and 1992.

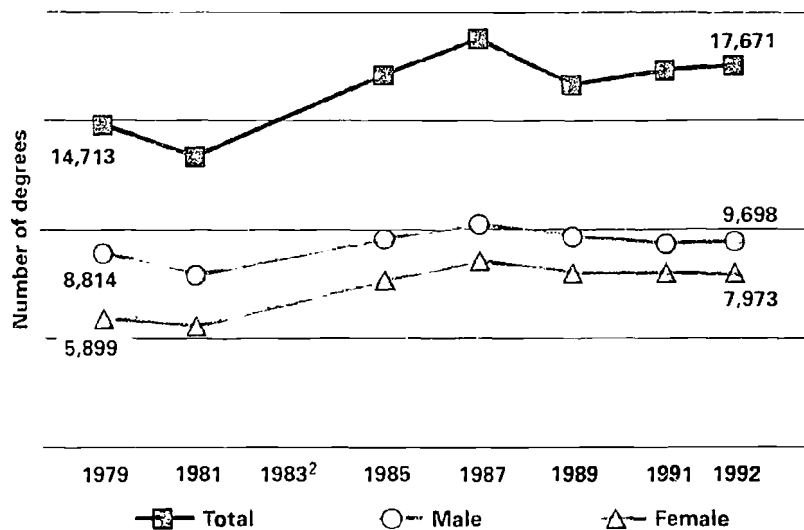
Undergraduate			
	1979	1992	% Change
Total	11,536	14,259	24%
Male	6,698	7,565	13%
Female	4,838	6,694	38%

Graduate			
	1979	1992	% Change
Total	3,177	3,412	7%
Male	2,116	2,133	1%
Female	1,061	1,279	21%

Undergraduate and Graduate Combined			
	1979	1992	% Change
Total	14,713	17,671	20%
Male	8,814	9,698	10%
Female	5,899	7,973	35%

Exhibit 36 Trends in Mathematics Degrees Earned, by Sex

Number¹ earned by U.S. citizens, 1979 to 1992

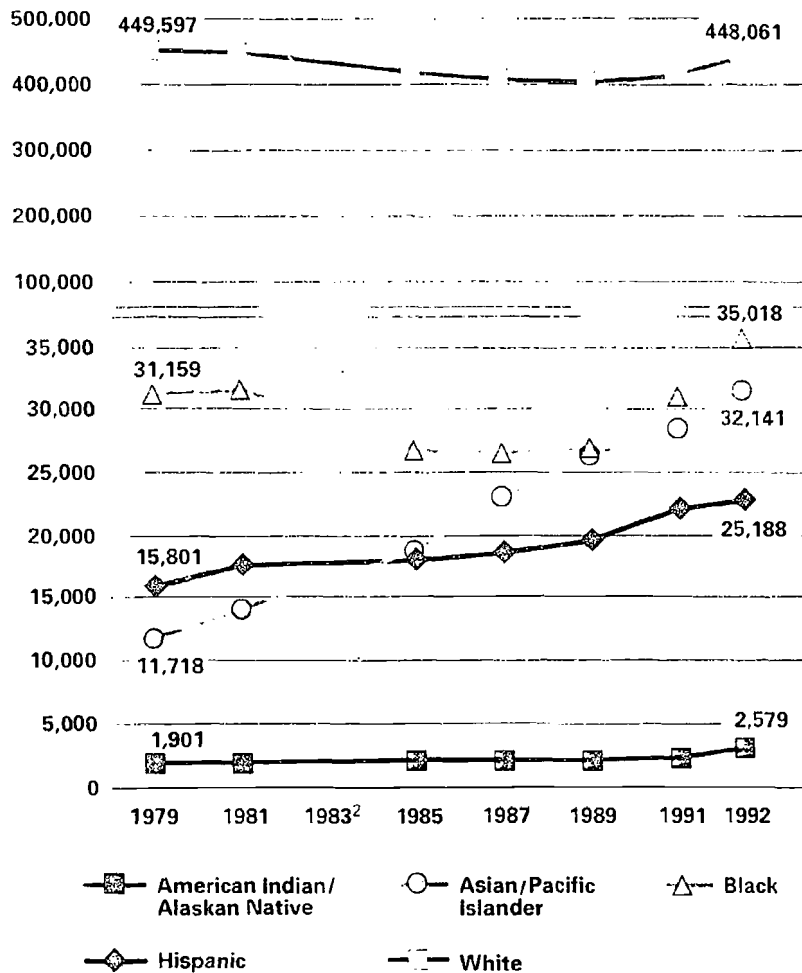


¹ Includes bachelor's, master's, and doctoral degrees.
² No data available.

Source: National Science Foundation, various years, and National Research Council, 1993. This exhibit updates information presented in the 1993 Goals Report.

Exhibit 37 Trends in Science Degrees Earned, by Race/Ethnicity

Number¹ earned by U.S. citizens, 1979 to 1992



¹ Includes bachelor's, master's, and doctoral degrees in engineering, physical science, computer science, biological science, agricultural science, social science, psychology, and health fields.
² No data available.

Between 1979 and 1992, the combined numbers of undergraduate and graduate degrees earned in science increased for American Indian/Alaskan Native, Asian/Pacific Islander, Black, and Hispanic students, but decreased slightly for White students.

	Undergraduate		
	1979	1992	% Change
Total	413,979	444,963	7%
American Indian/Alaskan Native	1,576	2,099	33%
Asian/Pacific Islander	8,354	25,087	200%
Black	26,052	29,228	12%
Hispanic	13,574	21,321	57%
White	364,341	357,378	-2%
Race Unknown	82	9,850	11,912%

	Graduate		
	1979	1992	% Change
Total	97,460	112,937	16%
American Indian/Alaskan Native	325	480	48%
Asian/Pacific Islander	3,364	7,054	110%
Black	5,107	5,790	13%
Hispanic	2,227	3,867	74%
White	85,256	90,683	6%
Race Unknown	1,181	5,063	329%

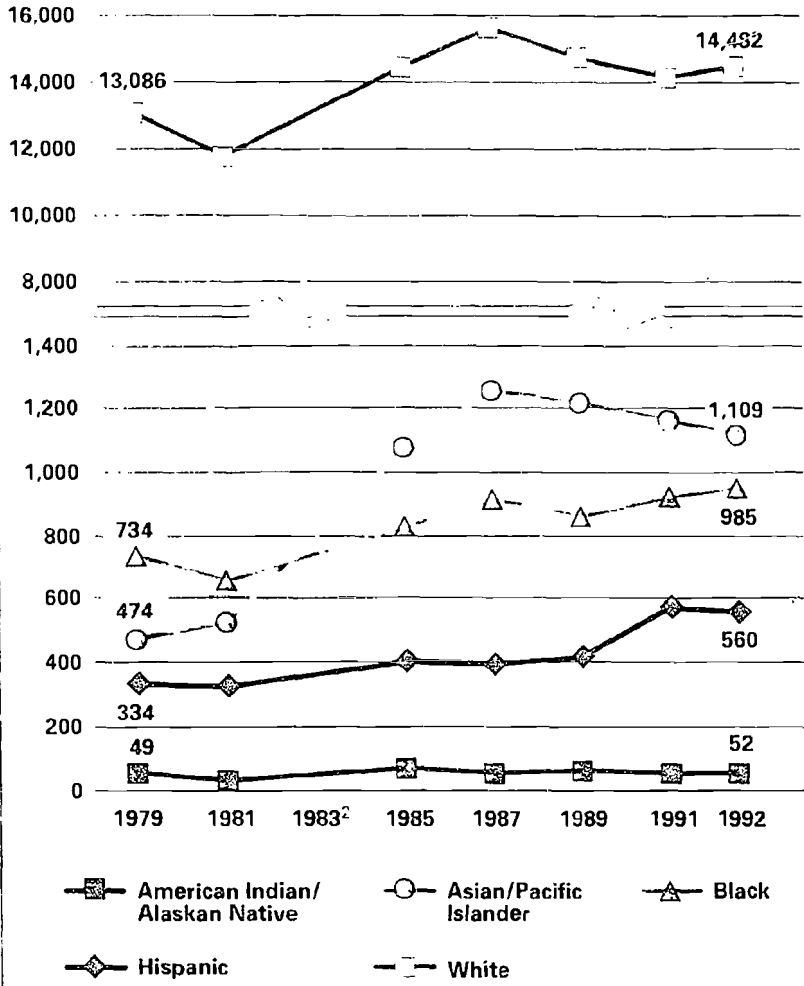
	Undergraduate and Graduate Combined		
	1979	1992	% Change
Total	511,439	557,900	9%
American Indian/Alaskan Native	1,901	2,579	36%
Asian/Pacific Islander	11,718	32,141	174%
Black	31,159	35,018	12%
Hispanic	15,801	25,188	59%
White	449,597	448,061	0%
Race Unknown	1,263	14,913	1,081%

Source: National Science Foundation, various years, and National Research Council, 1993
This exhibit modifies and updates information presented in the 1993 Goals Report

Between 1979 and 1992, the combined numbers of undergraduate and graduate degrees earned in mathematics increased for students in every racial/ethnic group.

Exhibit 38
Trends in Mathematics Degrees Earned, by Race/Ethnicity
Number¹ earned by U.S. citizens, 1979 to 1992

Undergraduate			
	1979	1992	% Change
Total	11,536	14,259	24%
American Indian/ Alaskan Native	41	46	12%
Asian/Pacific Islander	324	857	165%
Black	652	904	39%
Hispanic	288	482	67%
White	10,229	11,723	15%
Race Unknown	2	247	12,250%
Graduate			
	1979	1992	% Change
Total	3,177	3,412	7%
American Indian/ Alaskan Native	8	6	-25%
Asian/Pacific Islander	150	252	68%
Black	82	81	-1%
Hispanic	46	78	70%
White	2,857	2,759	-3%
Race Unknown	34	236	594%
Undergraduate and Graduate Combined			
	1979	1992	% Change
Total	14,713	17,671	20%
American Indian/ Alaskan Native	49	52	6%
Asian/Pacific Islander	474	1,109	134%
Black	734	985	34%
Hispanic	334	560	68%
White	13,086	14,482	11%
Race Unknown	36	483	1,242%



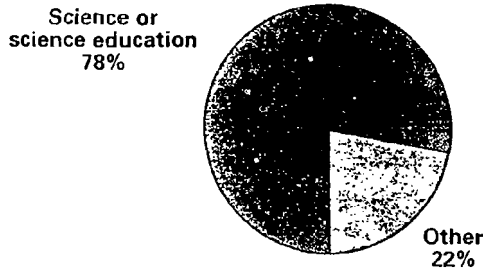
¹ Includes bachelor's, master's, and doctoral degrees.
² No data available

Source: National Science Foundation, various years, and National Research Council, 1993. This exhibit updates information presented in the 1993 Goals Report.

Exhibit 39
Science and Mathematics Teacher Preparation

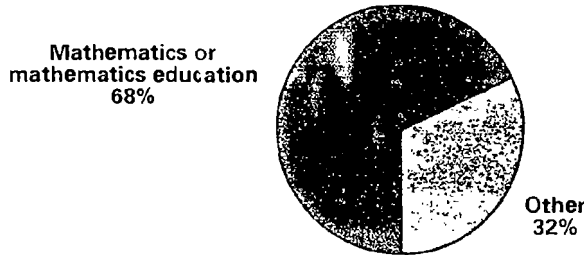
Percentage of all high school science and mathematics teachers¹ who have a degree² in the field in which they teach, 1991

All high school science teachers



In 1991, nearly eight out of ten high school science teachers held a degree in science or science education. Nearly seven out of ten high school mathematics teachers held a degree in mathematics or mathematics education.

All high school mathematics teachers



¹ Primary teaching assignment is science or mathematics.

² Academic or education majors. Does not include minors or second majors in science, science education, mathematics, or mathematics education.

Change Since 1988¹

Percentage of all high school science and mathematics teachers² who have a degree³ in the field in which they teach:

	1988	1991
Science teachers ⁴	77%	78%
Mathematics teachers ⁵	70%	68%

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

² Primary teaching assignment is science or mathematics.

³ Academic or education majors. Does not include minors or second majors in science, science education, mathematics, or mathematics education.

⁴ Includes teachers who have science and science education degrees.

⁵ Includes teachers who have mathematics and mathematics education degrees.

Source: National Center for Education Statistics, 1992
This exhibit repeats information presented in the 1993 Goals Report.

GOAL 6

Adult Literacy and Lifelong Learning

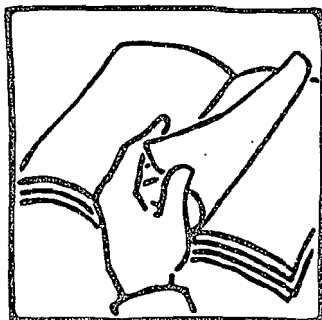


2000



1994

GOAL 6



Adult Literacy and Lifelong Learning

Lifelong learning has never been more important. With the speed and scope of change taking place in technology and around the world, the skills needed to be an effective worker and citizen are rapidly increasing in complexity. To survive and prosper, Americans must choose to value and invest in continued learning. Any other choice has serious consequences for individuals and for society.

Most Americans today can write and compute on a simple level. Most also believe that they read and write well. This year's Volume presents information showing that Americans actually do not read and write well, despite their self-perceptions. Even college graduates, on the average, have only middle-level literacy skills. More alarming is a finding presented in last year's Volume: the average literacy skills of young adults are lower than they were seven years ago.

These data do not bode well for American businesses. Overseas competitors are showing us that greater productivity depends upon higher worker skills and the creation of a high-performance work environment. Still, the American public is not sure how higher literacy relates to their own standard of living. They are worried about the economy and our competitiveness, but often they fail to see the link between further adult learning and either their own security or that of the country. Information contained in last year's Volume showed how direct those links are. In 1992, adults scoring at the highest levels of literacy were much more likely to have been employed than those scoring at the lowest levels; their weekly wages were double those of adults at the lowest literacy levels.

Data presented in last year's Volume reflected some positive response on the part of our post-secondary education system toward the need for continued learning. As young people's interest in careers demanding high skills has increased over the last two decades, so have college enrollment rates. Still, only about one-third of young adult high school graduates possessed a two- or four-year post-secondary degree in 1993.

Furthermore, just as we are not sure of what K-12 students are learning because of inadequate standards and measurements, we also are not sure of the standards underpinning higher education. We need to know more than just how many students complete college. We need a clearer understanding of the knowledge and skills these graduates attain and how they relate to the demands of a world marketplace and the rights and responsibilities of citizenship. Last year, the Goals Panel endorsed the development of a national sample-based collegiate assessment system to provide such understandings.

To believe in the value of lifelong learning is to believe in being a literate adult, possessing internationally competitive knowledge and skills in the workplace, and being an informed and engaged citizen. That is a choice with excellent consequences for all.

GOAL 6

Adult Literacy and Lifelong Learning

By the year 2000, 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.

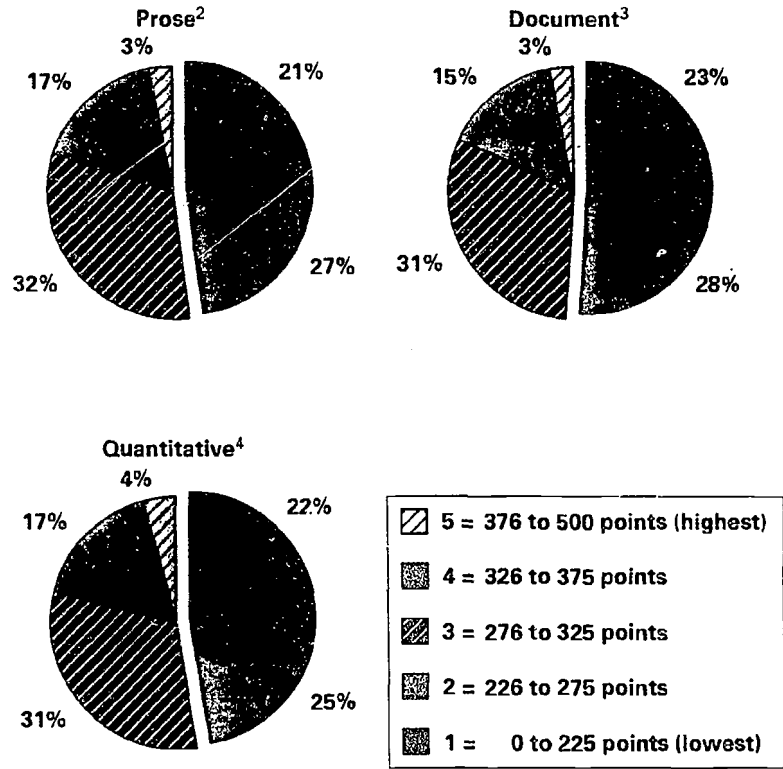
Objectives

- ❑ Every major American business will be involved in strengthening the connection between education and work.
- ❑ All workers will have the opportunity to acquire the knowledge and skills, from basic to highly technical, needed to adapt to emerging new technologies, work methods, and markets through public and private educational, vocational, technical, workplace, or other programs.
- ❑ The number of quality programs, including those at libraries, that are designed to serve more effectively the needs of the growing number of part-time and midcareer students will increase substantially.
- ❑ The proportion of the qualified students, especially minorities, who enter college, who complete at least two years, and who complete their degree programs will increase substantially.
- ❑ The proportion of college graduates who demonstrate an advanced ability to think critically, communicate effectively, and solve problems will increase substantially.
- ❑ Schools, in implementing comprehensive parent involvement programs, will offer more adult literacy, parent training and lifelong learning opportunities to improve the ties between home and school, and enhance parents' work and home lives.

**Exhibit 40
Adult Literacy**

Percentage of adults aged 16 and older who scored at five literacy levels¹ on prose, document, and quantitative literacy scales, 1992

Nearly half of all American adults read and write at the two lowest levels of prose, document, and quantitative literacy in English. While these adults do have some limited literacy skills, they are not likely to be able to perform the range of complex literacy tasks that the National Education Goals Panel considers important for competing successfully in a global economy and exercising fully the rights and responsibilities of citizenship.



¹ Test results are reported on scales of 0 to 500 points. Scores are grouped into five levels, with Level 5 being most proficient and Level 1 being least proficient. Complete descriptions of each level can be found in Appendix A.
² Prose literacy tasks require readers to understand and use information contained in texts such as newspapers and pamphlets.
³ Document literacy tasks require readers to locate and use information contained in materials such as tables, charts, and maps.
⁴ Quantitative literacy tasks require readers to perform arithmetic computations using numbers found in printed materials.

Source: National Center for Education Statistics, 1993
 This exhibit repeats information presented in the 1993 Goals Report.

Examples of Literacy Tasks at Different Levels of Difficulty on
the National Adult Literacy Survey

LEVEL 1 (least difficult)

- Read a newspaper article about a marathon swimmer and underline the sentence in the article that tells what she ate during the swim.
- Complete a portion of a job application.
- Add two numbers on a bank deposit slip.

LEVEL 2

- Read a manufacturer's instructions for returning appliances for service, then select the customer's note that best followed the company's instructions.
- Use a table in a catalogue to determine shipping charges for office supplies. Then complete an order form by filling in the amounts and calculating the total charges.
- Review a pay stub and write down the year-to-date gross pay.

LEVEL 3

- Write a letter about an error that appears on a credit card bill.
- Interpret a graph which estimates power consumption for four different years by energy source.
- Calculate the difference in population growth between two groups from information presented in a graph.

LEVEL 4

- Read a newspaper article about technologies used to produce more fuel-efficient cars and then contrast the two opposing views presented.
- Use a bus schedule to determine how long a passenger who misses a bus would have to wait for another bus if traveling between two given locations on a weekend.
- Estimate the cost per ounce of peanut butter, using information from two different types of price labels.

LEVEL 5 (most difficult)

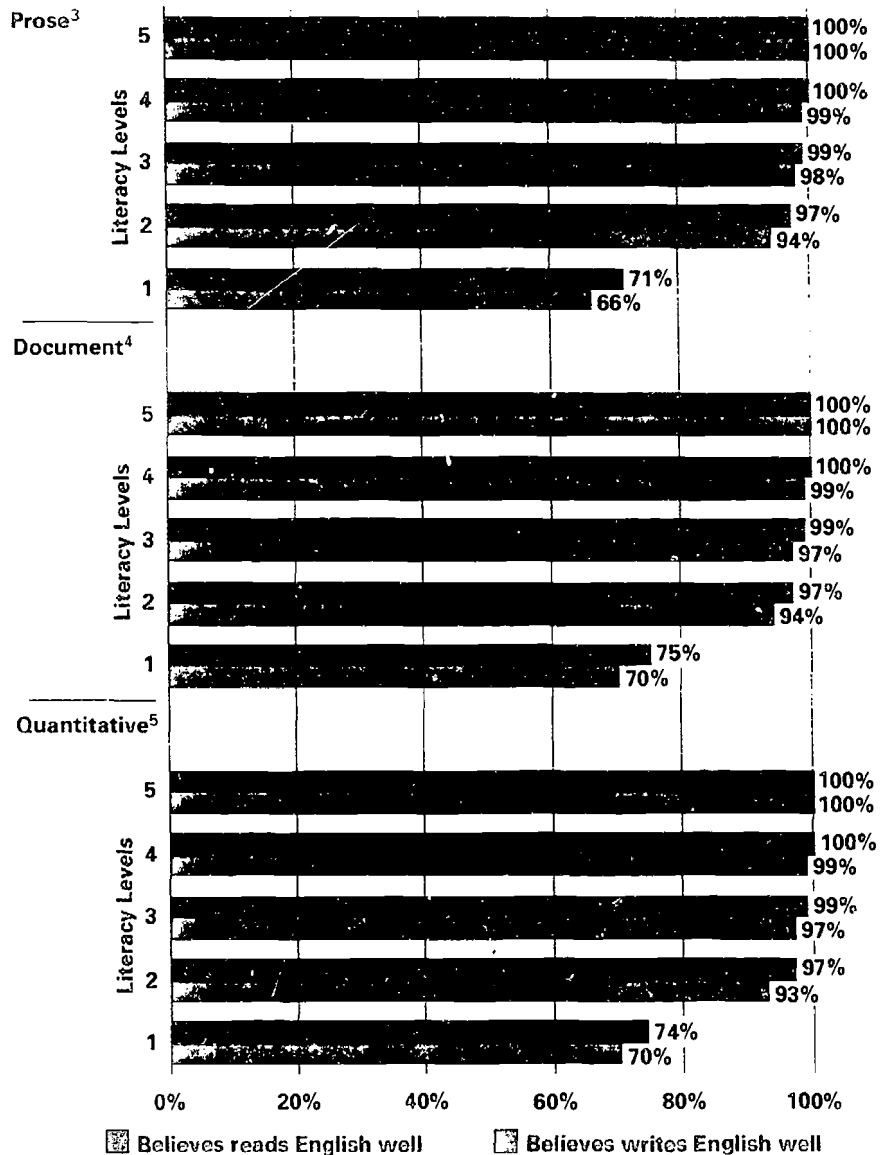
- Read a page of information about jury selection and service, then identify and summarize two kinds of challenges attorneys use when selecting potential jurors.
- Use information in a table to analyze the results of a parent-teacher survey and write a paragraph summarizing the results.
- Read an advertisement for home equity loans and explain how to calculate total interest charges for the loan.

Exhibit 41 Adults' Perceptions of Own Literacy Abilities, by Literacy Level

Percentage of adults aged 16 and older who reported that they read and write English well,¹ by literacy level,² 1992

Despite the fact that nearly half of all American adults read and write at the two lowest levels of proficiency, nearly all American adults believe that they read and write English well. Even among those at the very lowest proficiency level, roughly three-fourths reported that they read English well, and slightly more than two-thirds reported that they write English well.

Level 5 =	376 to 500 points
Level 4 =	326 to 375 points
Level 3 =	276 to 325 points
Level 2 =	226 to 275 points
Level 1 =	0 to 225 points



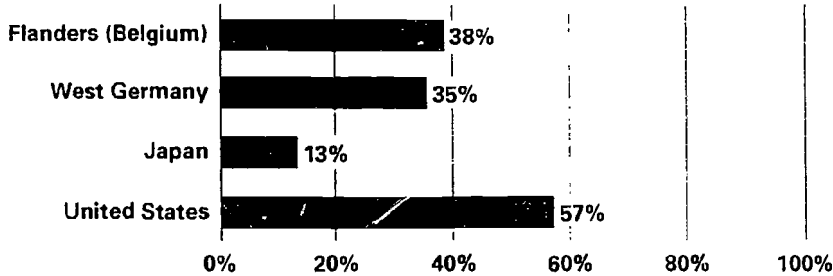
¹ Responses of "well" and "very well" combined.
² Test results are reported on scales of 0 to 500 points. Scores are grouped into five levels, with Level 5 being most proficient and Level 1 being least proficient. Complete descriptions of each level can be found in Appendix A.
³ Prose literacy tasks require readers to understand and use information contained in texts such as newspapers and pamphlets.
⁴ Document literacy tasks require readers to locate and use information contained in materials such as tables, charts, and maps.
⁵ Quantitative literacy tasks require readers to perform arithmetic computations using numbers found in printed materials.

Source: National Center for Education Statistics, 1993
 This exhibit repeats information presented in the 1993 Goals Report

Exhibit 42
Perceived Usefulness of Skills in the Future

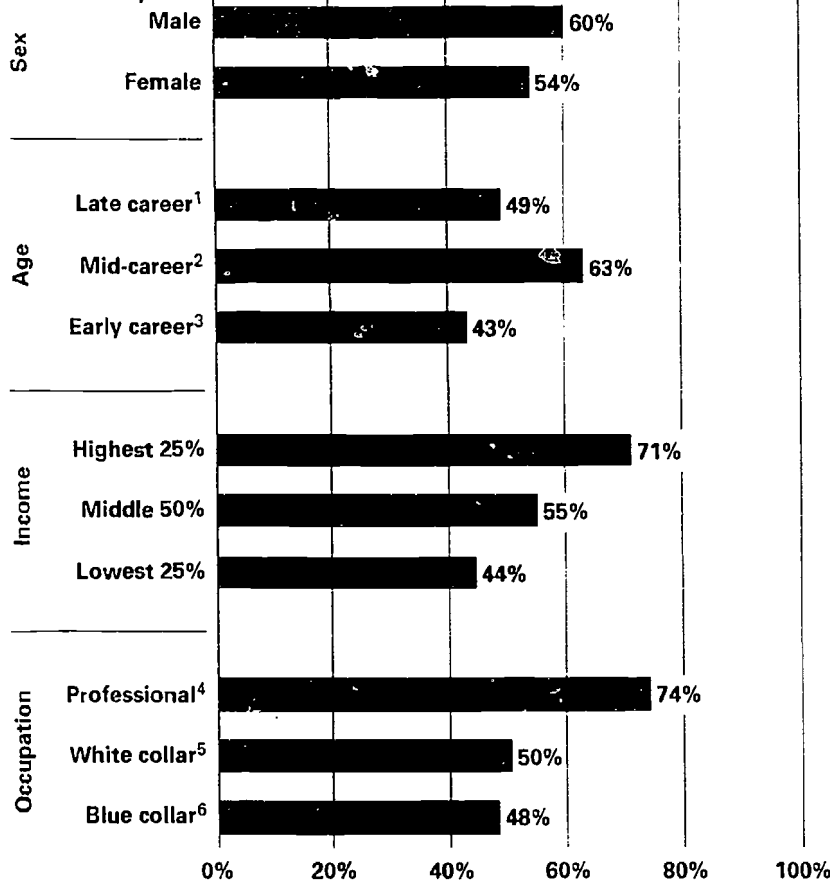
Percentage of adult workers who reported that their present job skills will be very useful in five years, 1989-91

International comparisons:



U.S. workers were far more likely than Belgian, German, or Japanese workers to predict that their present job skills will be very useful in five years. U.S. satisfaction with current levels of job skills contrasts most sharply with Japan, where fewer than one in five workers predict that their skills will be sufficient to meet job demands in the future.

U.S. workers only:



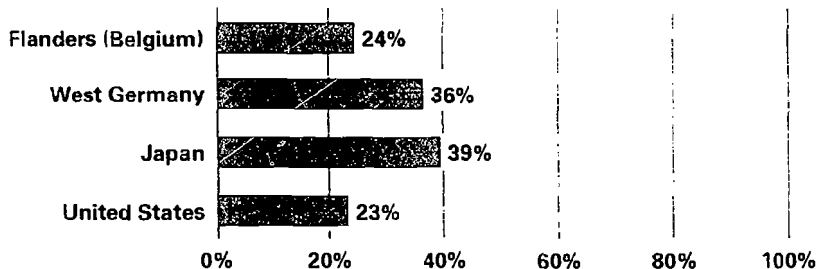
¹ Includes 51+-year-olds.
² Includes 26- to 50-year olds.
³ Includes 25-year-olds and younger.
⁴ Includes owner-manager, professional, and managerial occupational categories.
⁵ Includes supervisor-white collar, and white collar occupational categories.
⁶ Includes supervisor-blue collar, and blue collar occupational categories.

Source: Cornell University, 1992
 This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 43
Perceived Responsibility for Improving
Job Performance

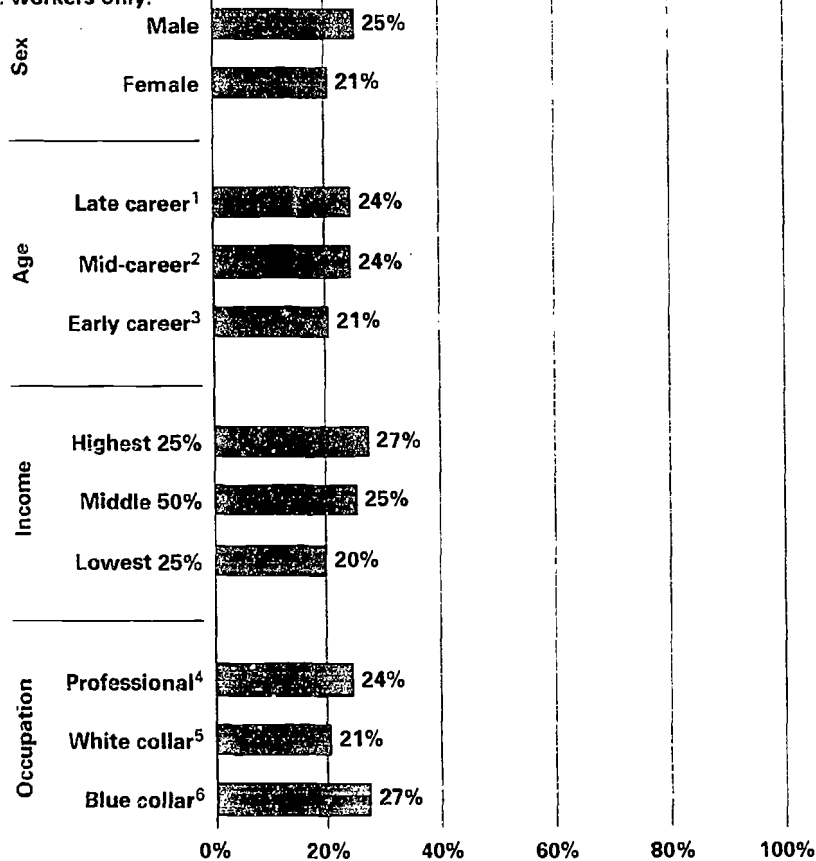
Percentage of adult workers who strongly agreed that workers should be expected to think up better ways to do their jobs, 1989-91

International comparisons:



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 should be expected to think up better ways to do their jobs.

U.S. workers only:



¹ Includes 51+-year-olds.

² Includes 26- to 50-year olds.

³ Includes 25-year-olds and younger.

⁴ Includes owner-manager, professional, and managerial occupational categories.

⁵ Includes supervisor-white collar, and white collar occupational categories.

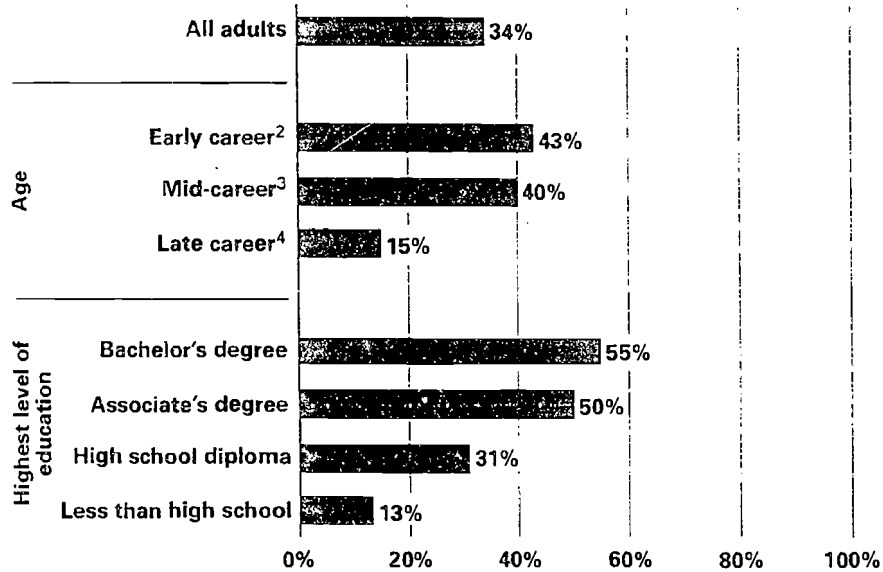
⁶ Includes supervisor-blue collar, and blue collar occupational categories.

Source: Cornell University, 1992

This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 44 Participation in Adult Education

Percentage of all adults¹ 17 years and older who took adult education courses during the previous 12 months, 1991



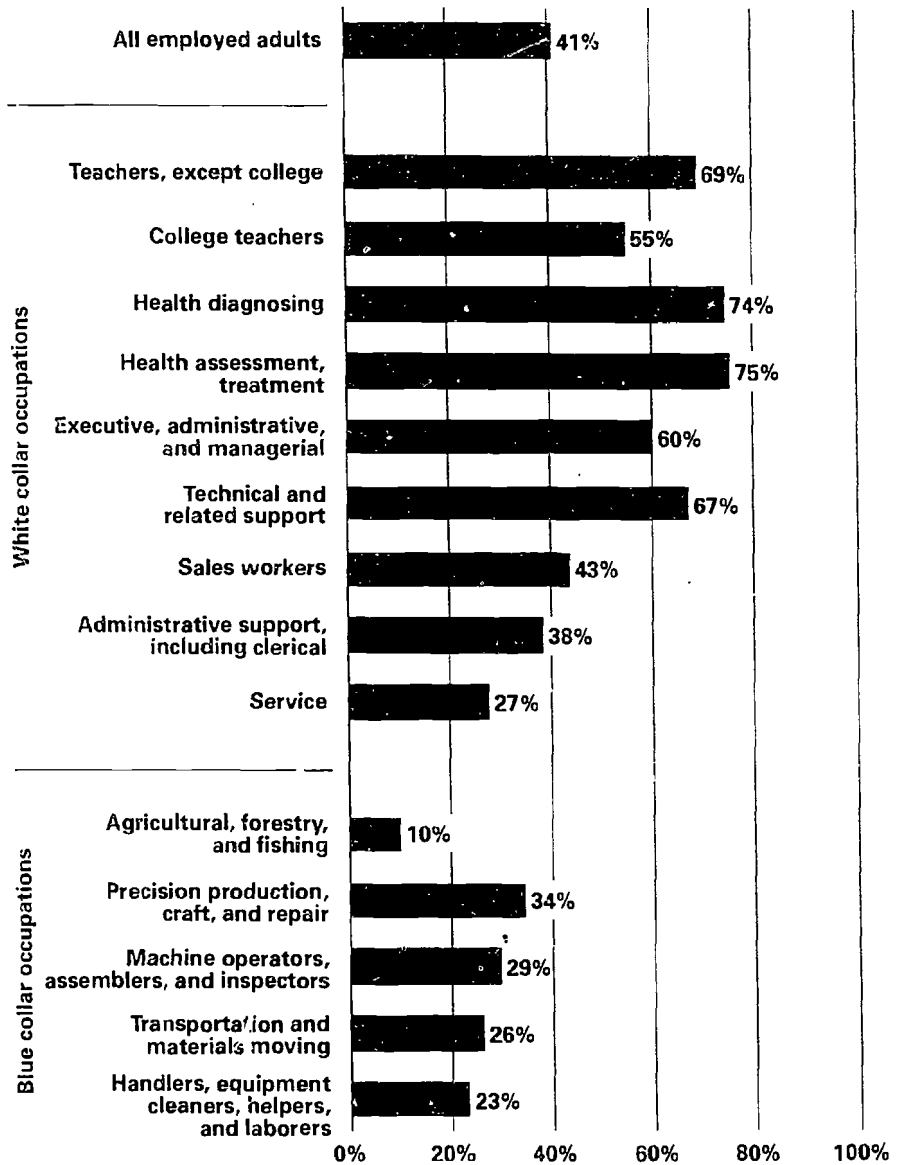
About one-third of all adults took adult education courses during 1990-91.

¹ Excluding those participating in full-time educational programs exclusively.
² Includes 17- to 34-year-olds.
³ Includes 35- to 54-year-olds.
⁴ Includes 55+-year-olds.

Source: National Center for Education Statistics and Westat, Inc., 1991
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 45
Participation in Adult Education, by Occupation
Percentage of employed adults¹ 17 years and older who took one or more adult education courses during the previous 12 months, 1991

About four out of ten employed adults took adult education courses during 1990-91. In general, white collar workers were more likely than blue collar workers to participate in this type of training.

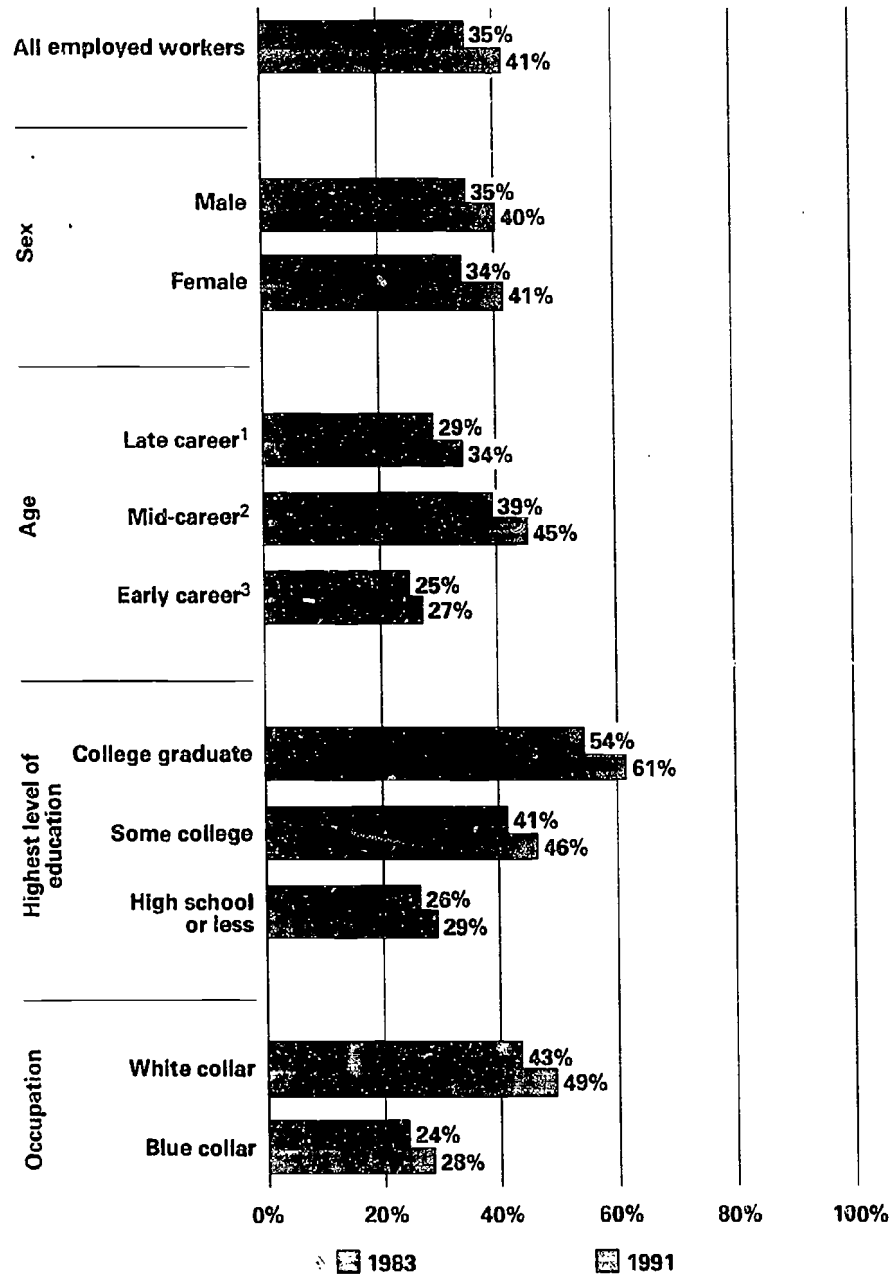


¹ Excluding unemployed persons and persons not in the labor force, such as retirees, homemakers, etc. Excluding those participating in full-time educational programs exclusively.

Source: National Center for Education Statistics and Westat, Inc., 1993
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 46 Worker Training

Percentage of U.S. workers who took training to improve their current job skills, 1983 and 1991



Between 1983 and 1991, the percentage of U.S. workers who took training to improve their current job skills rose from 35% to 41%. White collar workers, college graduates, and workers in mid-career were most likely to pursue further training.

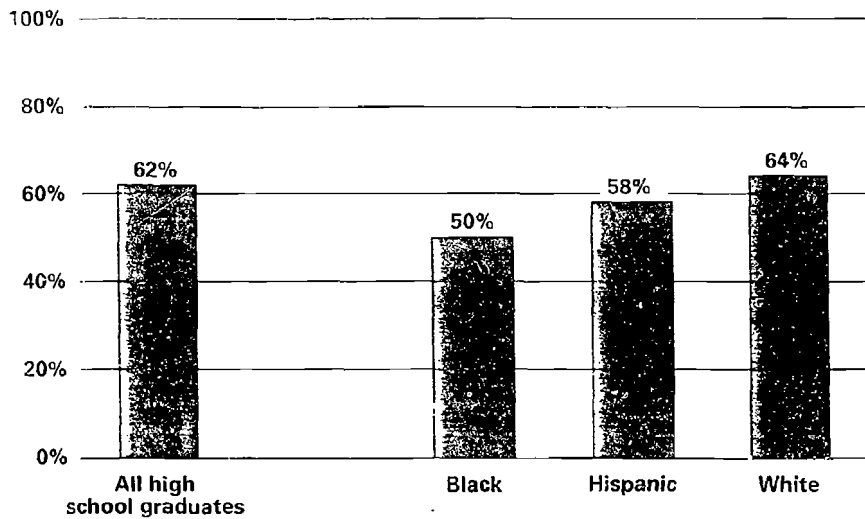
¹ Includes 55+-year-olds.
² Includes 25- to 54-year-olds.
³ Includes 24-year-olds and younger.

Source: Bureau of Labor Statistics, 1992
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 47
College Enrollment

Percentage¹ of high school graduates who enrolled in two- or four-year colleges² immediately after graduation, 1992

About six out of ten 1992 high school graduates enrolled in either two- or four-year colleges immediately after graduation.



¹ Three-year averages (1991-1993).

² Includes junior colleges, community colleges, and universities.

Change Since 1990¹

Percentage of high school graduates who enrolled in two- or four-year colleges⁴ immediately after graduation:

	1990 ²	1992 ³
All high school graduates	61%	62%
Black	49%	50%
Hispanic	52%	58%
White	63%	64%

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

² Three-year averages (1989-1991).

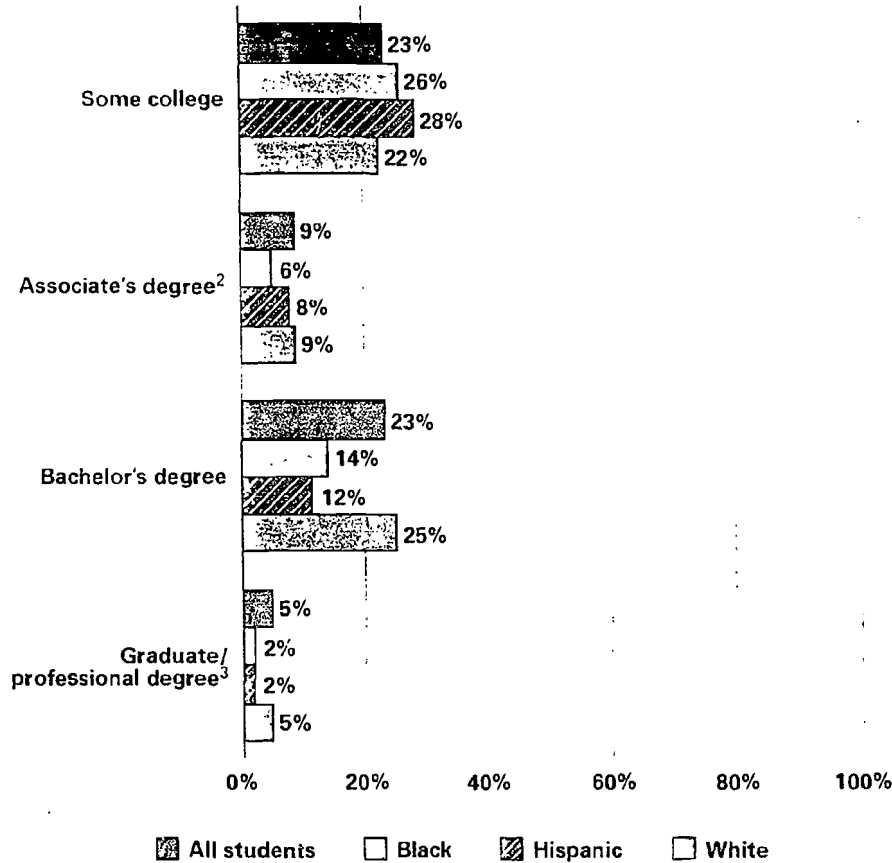
³ Three-year averages (1991-1993).

⁴ Includes junior colleges, community colleges, and universities.

Source: Bureau of the Census, National Center for Education Statistics, and Pinkerton Computer Consultants, 1994. This exhibit updates information presented in the 1993 Goals Report.

**Exhibit 48
College Completion**

Percentage of high school graduates aged 25-29 who have completed the following levels of education,¹ 1993



In 1993, three out of ten high school graduates aged 25-29 possessed an associate's or bachelor's degree. An additional 5% had a postgraduate degree.

¹ Percentages represent highest level of education completed.
² Combines occupational/vocational and academic degrees
³ Combines master's, doctoral, and professional degrees.

Change Since 1992¹

Percentage of high school graduates aged 25-29 who have completed the following levels of education:²

	Some college		Associate's degree ³		Bachelor's degree		Graduate/professional degree ⁴	
	1992	1993	1992	1993	1992	1993	1992	1993
All high school graduates	21%	23% *	8%	9% *	22%	23%	5%	5%
Black	23%	26%	8%	6%	11%	14%	3%	2%
Hispanic	24%	28%	7%	8%	15%	12%	3%	2%
White	20%	22%	8%	9% *	24%	25%	5%	5%

The percentage of high school graduates aged 25-29 completing some college or receiving an associate's degree increased between 1992 and 1993.

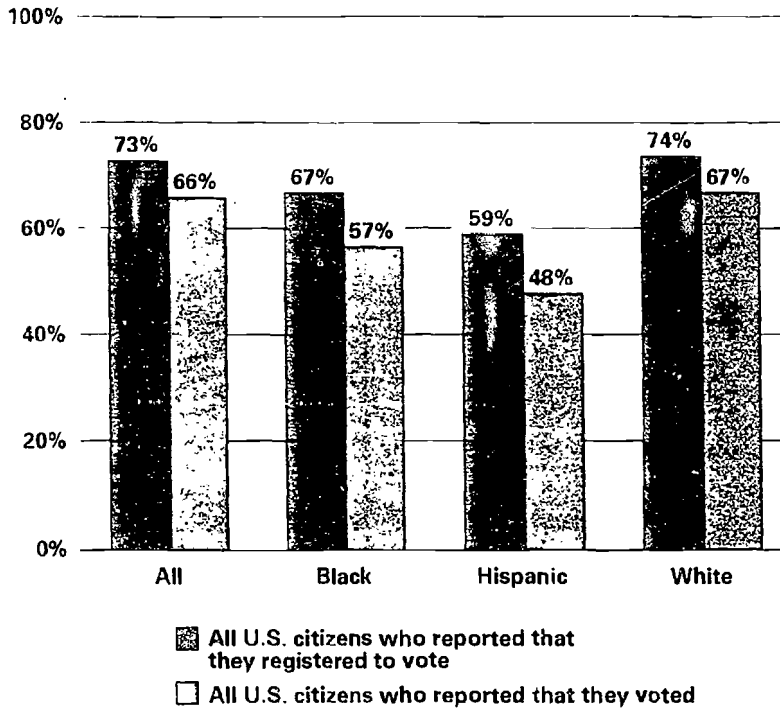
¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.
² Percentages represent highest level of education completed.
³ Combines occupational/vocational and academic degrees.
⁴ Combines master's, doctoral, and professional degrees.

Source: Bureau of the Census, National Center for Education Statistics, and Pinkerton Computer Consultants, 1994
 This exhibit updates information presented in the 1993 Goals Report

**Exhibit 49
Voter Registration and Voting**

Percentage of all U.S. citizens who reported that they registered to vote and who reported that they voted, 1992

In 1992, 73% of all U.S. citizens reported that they were registered to vote, while only two-thirds reported that they actually voted.



Between 1988 and 1992, the percentage of U.S. citizens who reported registering to vote and who reported voting increased.

Change Since 1988¹

Percentage of all U.S. citizens who reported that they registered to vote and who reported that they voted:

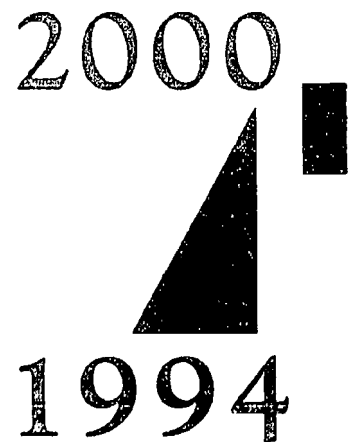
	Registered to vote		Voted	
	1988	1992	1988	1992
All	70%	73% *	61%	66% *
Black	67%	67%	53%	57% *
Hispanic	57%	59%	46%	48%
White	71%	74% *	62%	67% *

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

Source: Bureau of the Census, 1989 and 1993
 This exhibit repeats information presented in the 1993 Goals Report.

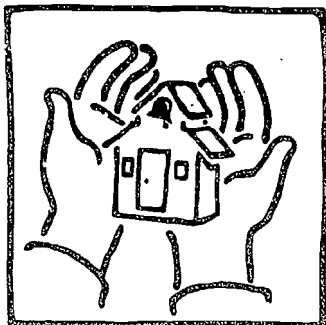
GOAL 7

Safe, Disciplined, and Alcohol- and Drug-free Schools



GOAL 7

Safe, Disciplined, and Alcohol- and Drug-free Schools



No child or youth should be fearful on the way to school, afraid while there, forced to deal with frequent disruptions in the classroom, or pressured to use unhealthy or illegal substances. Students in such environments are much less likely to meet the Goals we set for them—to stay in school, perform at higher academic levels, and excel in mathematics and science. Yet more and more of them must cope with the theft and vandalism of their property. Increasingly, they must deal with in-school assaults by other students with weapons. And, as data in this Volume reveal, many are approached—inside their schools—by those wanting to give or sell them an illegal drug, and most report that the misbehavior of others interferes with their own learning.

Certainly, Goal 7 cannot be attained by the schools alone. In order for schools to be safe, disciplined, and drug-free, families must foster healthy habits and communities must surround children and youth with positive experiences. Even so, schools have an important role to play in creating healthy learning environments for students.

If teaching and learning are to occur in an environment free of fear of violence, then any percentage of students who report they bring weapons to school is intolerable (the percentages reporting carrying a weapon to school at least once during the previous four weeks were 11% of 8th graders, 10% of 10th graders, and 8% of 12th graders). The data also tell us that students are aware of considerable gang activity among their peers and that an alarming percentage in secondary schools feel unsafe at school or getting to or coming from school. Many students also report that their teachers have to interrupt class to deal with problems of student misbehavior. And despite a widespread decline in alcohol use by 12th grade students, the use of marijuana by 8th and 10th graders is steadily increasing.

Young people have an obligation to be serious about school. But schools, helped by their surrounding communities, also have an obligation to create the conditions necessary for teaching and learning to take place. Only then can students be expected to take responsibility for learning.

GOAL 7

Safe, Disciplined, and Alcohol- and Drug-free Schools

By the year 2000, 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.

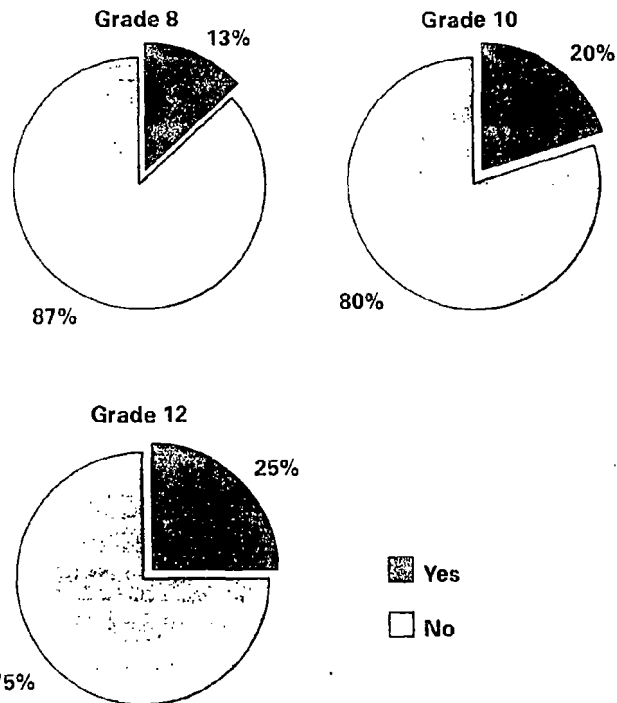
Objectives

- ❑ Every school will implement a firm and fair policy on use, possession, and distribution of drugs and alcohol.
- ❑ Parents, businesses, governmental and community organizations will work together to ensure the rights of students to study in a safe and secure environment that is free of drugs and crime, and that schools provide a healthy environment and are a safe haven for all children.
- ❑ Every local educational agency will develop and implement a policy to ensure that all schools are free of violence and the unauthorized presence of weapons.
- ❑ Every local educational agency will develop a sequential, comprehensive kindergarten through twelfth grade drug and alcohol prevention education program.
- ❑ Drug and alcohol curriculum should be taught as an integral part of sequential, comprehensive health education.
- ❑ Community-based teams should be organized to provide students and teachers with needed support.
- ❑ Every school should work to eliminate sexual harassment.

Exhibit 50
Sale of Drugs at School

Percentage of students who reported that someone had offered to sell or give them an illegal drug at school¹ during the previous year, 1993

In 1993, more than one in eight 8th graders, one in five 10th graders, and one in four 12th graders reported that they had been approached at school by someone trying to sell or give them drugs during the previous year.



¹ Or someone had actually sold or given them an illegal drug at school.

Between 1992 and 1993, the percentage of 8th graders who reported that someone had offered to sell or give them an illegal drug at school increased.

Change Since 1992¹

Percentage of students who reported that someone had offered to sell or give them an illegal drug at school² during the previous year:

	1992	1993
8th graders	10%	13% *
10th graders	18%	20%
12th graders	23%	25%

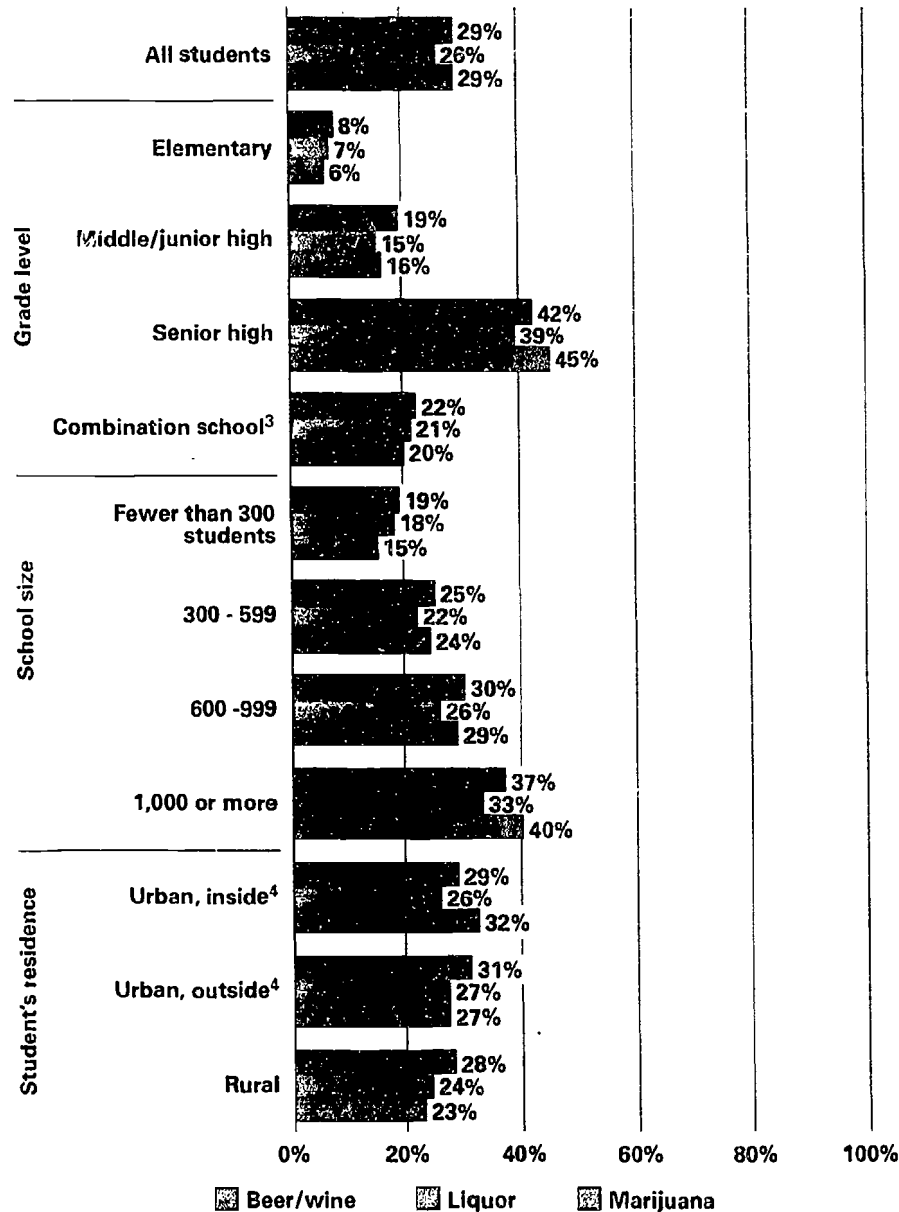
¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

² Or someone had actually sold or given them an illegal drug at school.

Source: University of Michigan, 1994
This exhibit updates information presented in the 1993 Goals Report.

Exhibit 51 Obtaining Illegal Drugs at School

Percentage of students¹ who reported that it was easy² to obtain alcohol or marijuana at school or on school grounds, 1993



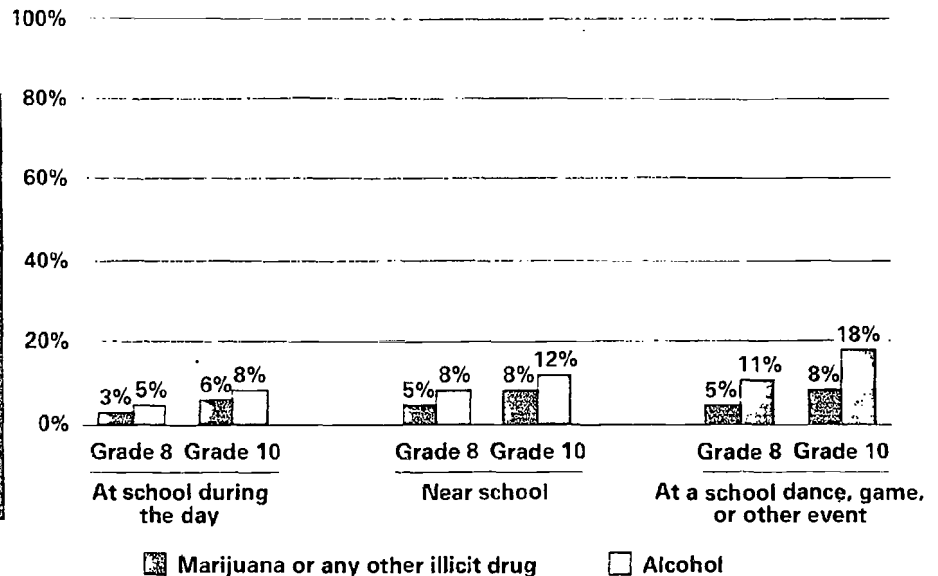
In 1993, more than one-fourth of all students reported that beer or wine, liquor, and marijuana were easy to obtain at school or on school grounds.

¹ Includes 6th through 12th graders.
² Responses of "easy" and "fairly easy" combined.
³ Students were assigned to a school category on the basis of their grade level. School categories were as follows: Schools in which the lowest grade was 3 or less and the highest grade was 8 or less were classified as elementary. Schools in which the lowest grade was 4 through 9 and the highest grade was 4 through 9 were classified as middle/junior high. Schools in which the lowest grade was 7 through 12 and the highest grade was 10 through 12 were classified as senior high. Schools that did not meet these qualifications were classified as "combination schools."
⁴ See Appendix A for a complete description.

Exhibit 52
Use of Drugs at School by 8th and 10th Graders

Percentages of 8th and 10th graders who reported that they used alcohol or other drugs at or near school during the previous year, 1993

Although alcohol, marijuana, and other illicit drugs are rarely used by students at school during the day, higher levels of use occur near school and at school events, according to student reports. Use of alcohol or other drugs is more prevalent among older students, and alcohol is more commonly used than marijuana or any other illicit drug.



Between 1991 and 1993, the percentage of 8th graders who reported using alcohol and marijuana or other illicit drugs at school during the day or near school increased. In addition, the percentage of 10th graders who reported using marijuana or other illicit drugs at or near school, and at a school dance, game, or other event also increased.

Change Since 1991¹

Percentage of students who reported that they used alcohol or other drugs at or near school during the previous year:

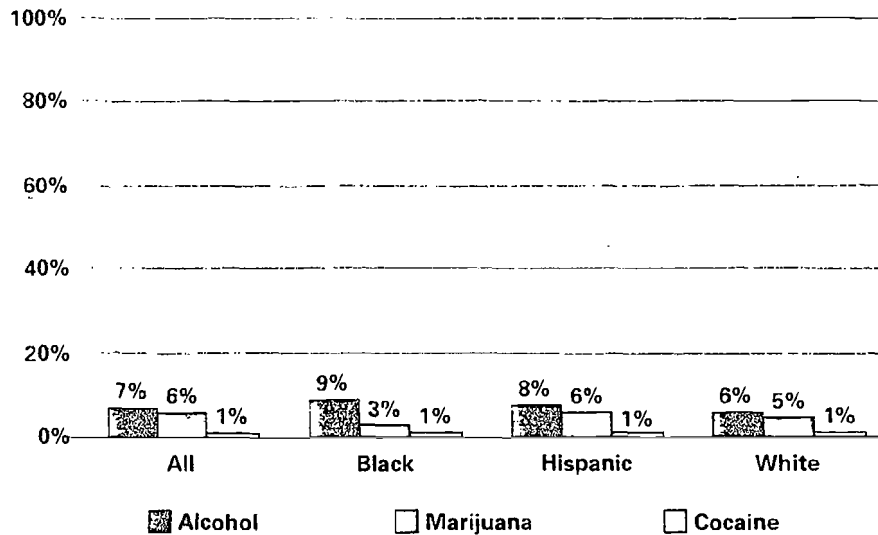
	8th graders		10th graders	
	1991	1993	1991	1993
At school during the day				
Marijuana or any other illicit drug	2%	3% *	5%	6% *
Alcohol	4%	5% *	7%	8%
Near school				
Marijuana or any other illicit drug	3%	5% *	7%	8% *
Alcohol	6%	8% *	12%	12%
At a school dance, game, or other event				
Marijuana or any other illicit drug	4%	5%	6%	8% *
Alcohol	11%	11%	19%	18%

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

Source: University of Michigan, 1994
This exhibit updates information presented in the 1993 Goals Report.

Exhibit 53
Use of Drugs at School by 12th Graders

Percentage¹ of 12th graders who reported that they used the following substances at school during the previous year, 1993



Use of alcohol and other drugs by 12th graders at school is not widespread. In 1993, 7% of 12th graders reported using alcohol at school during the previous year, 6% reported using marijuana, and 1% reported using cocaine.

¹ Three-year averages (1991-1993) reported for racial/ethnic groups.

Change Since 1990¹

Percentage² of 12th graders who reported that they used the following substances at school during the previous year:

	Alcohol		Marijuana		Cocaine	
	1990	1993	1990	1993	1990	1993
All	7%	7%	6%	6%	1%	1%
Black	8%	9%	4%	3%	<1%	1%
Hispanic	8%	8%	6%	6%	1%	1%
White ³	8%	6% *	8%	5% *	1%	1% *

Between 1990 and 1993, the percentage of White 12th grade students who reported using alcohol, marijuana, and cocaine at school decreased.

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

² Three-year averages (1988-1990, 1991-1993) reported for racial/ethnic groups.

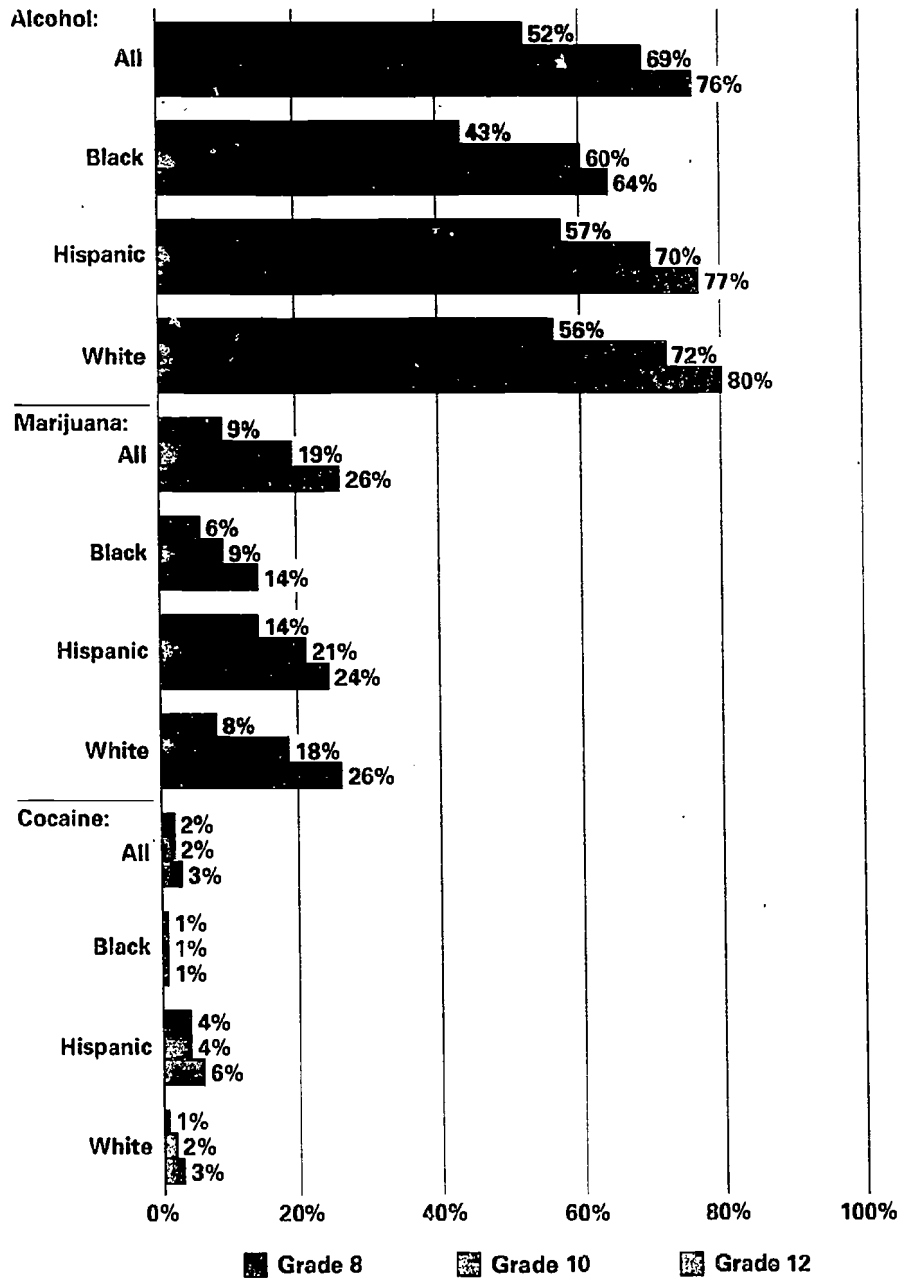
³ The non-rounded values for White 12th graders in 1990 and 1993 for cocaine were 1.4 and 0.6, respectively.

Source: University of Michigan, 1994
This exhibit updates information presented in the 1993 Goals Report.

Exhibit 54
Overall Student Drug Use

Percentage¹ of students who reported that they used the following substances during the previous year, 1993

Although alcohol and other drugs are rarely used at school, overall use is much higher. Alcohol is used by more than three-fourths of all 12th graders and is by far the most commonly used drug, according to student reports. Alcohol and marijuana use are more prevalent among older students, although cocaine use is relatively uncommon across age groups. Black students report the lowest rates of use at all grade levels.



¹ Two-year averages (1992-1993) reported for racial/ethnic groups.

Exhibit 54 (continued)
Overall Student Drug Use

Change Since 1990¹

Percentage² of 12th graders who reported that they used the following substances during the previous year:

	Alcohol		Any illicit drug ³		Marijuana		Cocaine	
	1990	1993	1990	1993	1990	1993	1990	1993
All	81%	76% *	33%	31%	27%	26%	5%	3% *
Black	64%	64%	17%	17%	14%	14%	2%	1% *
Hispanic	74%	77%	26%	29%	22%	24%	7%	6%
White	86%	80% *	38%	31% *	32%	26% *	6%	3% *

Between 1990 and 1993, the percentage of high school seniors who reported using alcohol and cocaine decreased.

Change Since 1991¹

Percentage⁴ of 10th graders who reported that they used the following substances during the previous year:

	Alcohol		Marijuana		Cocaine	
	1991	1993	1991	1993	1991	1993
All	72%	69% *	17%	19% *	2%	2%
Black	61%	60%	8%	9%	1%	1%
Hispanic	72%	70%	19%	21%	4%	4%
White	74%	72%	17%	18%	2%	2%

Between 1991 and 1993, the percentage of 10th graders who reported using alcohol decreased. However, the percentages of 8th and 10th graders who reported using marijuana increased, as did the percentage of 8th graders who reported using cocaine.

Change Since 1991¹

Percentage⁴ of 8th graders who reported that they used the following substances during the previous year:

	Alcohol		Marijuana		Cocaine	
	1991	1993	1991	1993	1991	1993
All	54%	52%	6%	9% *	1%	2% *
Black	43%	43%	4%	6%	1%	1%
Hispanic	58%	57%	12%	14%	3%	4%
White	56%	56%	6%	8% *	1%	1%

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

² Two-year averages (1989-1990, 1992-1993) reported for racial/ethnic groups.

³ See Appendix A for complete description.

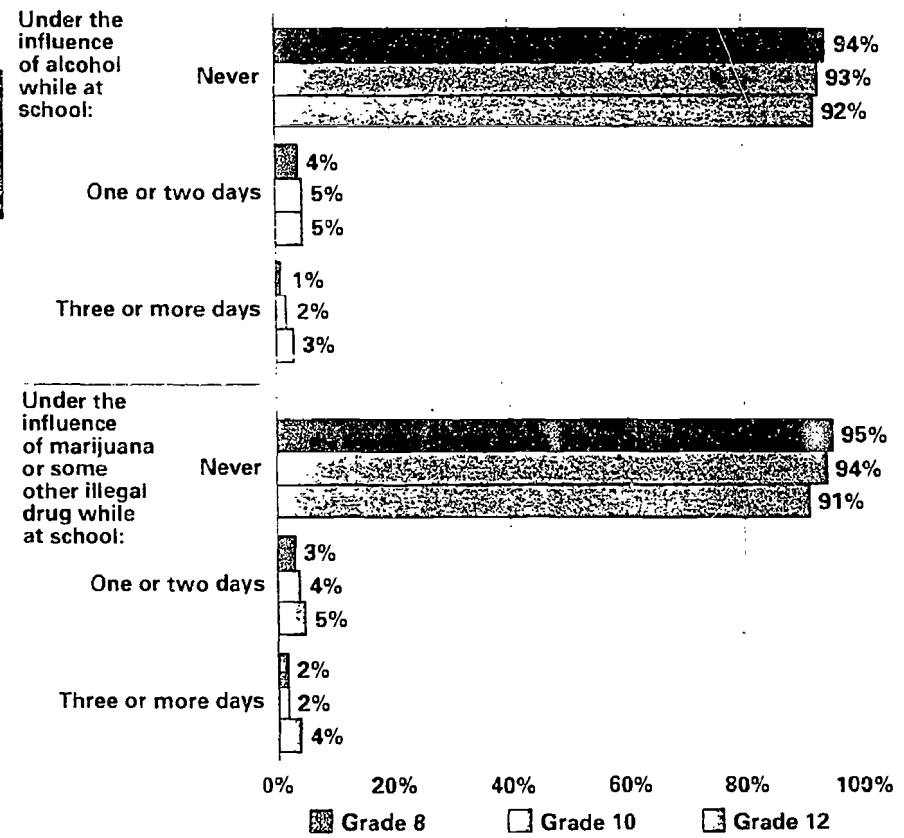
⁴ Two-year averages (1991-1992, 1992-1993) reported for racial/ethnic groups.

Source: University of Michigan, 1994.
This exhibit updates information presented in the 1993 Goals Report.

Exhibit 55
Being Under the Influence of Alcohol or Other Drugs While at School

Percentage¹ of students who reported being under the influence of alcohol or other drugs while at school during the previous four weeks, 1993

The vast majority of students reported never being under the influence of alcohol or other drugs while at school.



¹ Percentages may not add to 100% because of rounding.

Between 1992 and 1993, the percentages of 8th and 10th graders who reported never being under the influence of alcohol while at school decreased. Similarly, the percentages of 8th, 10th, and 12th graders who reported never being under the influence of marijuana or some other illegal drug while at school decreased.

Change Since 1992¹

Percentage² of students who reported being under the influence of alcohol or other drugs while at school during the previous four weeks:

	8th graders		10th graders		12th graders	
	1992	1993	1992	1993	1992	1993
Under the influence of alcohol while at school						
Never	96%	94% *	95%	93% *	92%	92%
One or two days	4%	4%	4%	5% *	6%	5%
Three or more days	1%	1%	1%	2% *	2%	3%
Under the influence of marijuana or some other illegal drug while at school						
Never	97%	95% *	95%	94% *	93%	91% *
One or two days	2%	3% *	3%	4% *	4%	5%
Three or more days	1%	2% *	2%	2%	3%	4%

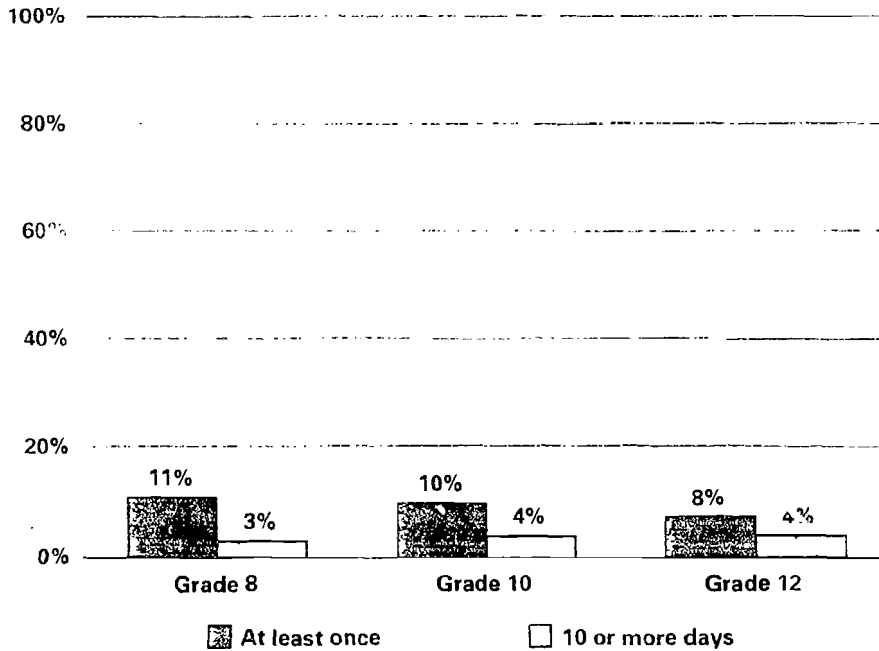
¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

² Percentages may not add to 100% because of rounding.

Exhibit 56

Carrying Weapons to School

Percentage of students who reported carrying a weapon¹ to school during the previous four weeks, 1993



¹ Includes a gun, knife, or club.

In 1993, 11% of 8th graders, 10% of 10th graders, and 8% of 12th graders reported that they had brought a weapon to school at least once during the previous month. The percentage of students who habitually carried a weapon to school (10 or more days in the previous month) were 3%, 4%, and 4%, respectively.

Change Since 1992¹

Percentage of students who reported carrying a weapon² to school during the previous four weeks:

	8th graders		10th graders		12th graders	
	1992	1993	1992	1993	1992	1993
At least once	9%	11% *	10%	10%	6%	8% *
10 or more days	2%	3%	4%	4%	3%	4%

The percentages of 8th and 12th graders who reported that they brought a weapon to school at least once during the previous month increased between 1992 and 1993.

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

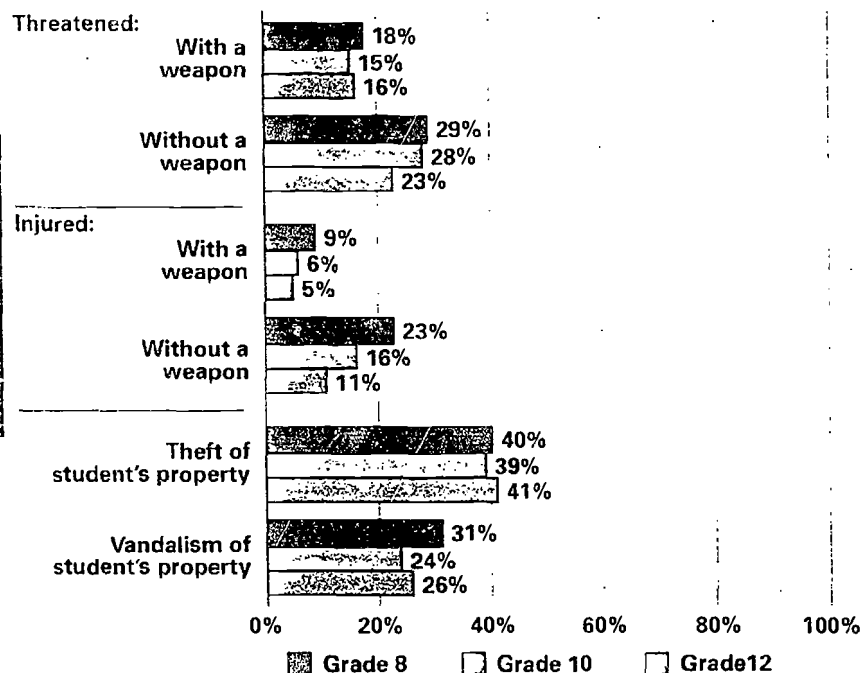
² Includes a gun, knife, or club.

Source: University of Michigan, 1994

This exhibit updates information presented in the 1993 Goals Report.

Exhibit 57 Student Victimization

Percentage of students who reported that they were victimized in the following ways at school during the previous year, 1993



Substantial numbers of 8th, 10th, and 12th graders were victims of violent acts, theft, and vandalism at school, according to student reports. Threats and injuries were higher among younger students than among students in upper grades.

Between 1990 and 1993, fewer 12th graders reported that their property had been vandalized at school.

Between 1991 and 1993, fewer 8th and 10th graders reported being threatened without a weapon, injured without a weapon, and having their property vandalized. In addition, fewer 10th graders reported being injured with a weapon and having their property stolen.

Change Since 1990¹

Percentage of 12th graders who reported that they were victimized in the following ways at school during the previous year:

	1990	1993
Threatened:		
With a weapon	13%	16%
Without a weapon	25%	23%
Injured:		
With a weapon	6%	5%
Without a weapon	14%	11%
Theft of student's property	42%	41%
Vandalism of student's property	29%	26% *

Change Since 1991¹

Percentage of 8th and 10th graders who reported that they were victimized in the following ways at school during the previous year:

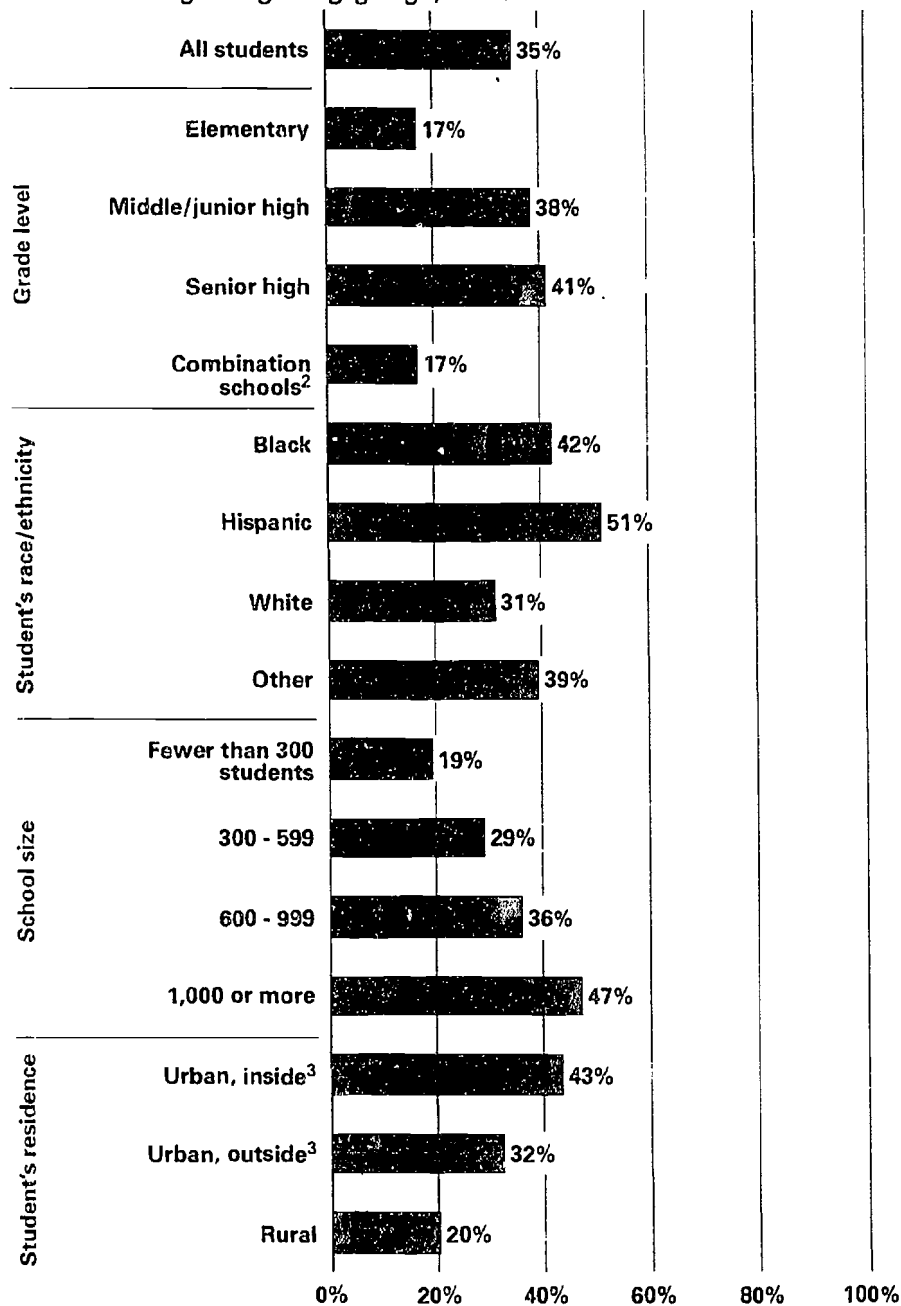
	8th graders		10th graders	
	1991	1993	1991	1993
Threatened:				
With a weapon	19%	18%	17%	15%
Without a weapon	31%	29% *	30%	28% *
Injured:				
With a weapon	9%	9%	8%	6% *
Without a weapon	25%	23% *	26%	16% *
Theft of student's property	42%	40%	44%	39% *
Vandalism of student's property	34%	31% *	28%	24% *

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

Exhibit 58

Student Membership in Gangs

Percentage of students¹ who reported that other students in their school belong to fighting gangs, 1993



In 1993, over one-third of all students reported that other students at their school belong to fighting gangs.

¹ Includes 6th through 12th graders.

² Students were assigned to a school category on the basis of their grade level. School categories were as follows: Schools in which the lowest grade was 3 or less and the highest grade was 8 or less were classified as elementary. Schools in which the lowest grade was between 4 and 9 and the highest grade was between 4 and 9 were classified as middle/junior high. Schools in which the lowest grade was between 7 and 12 and the highest grade was between 10 and 12 were classified as senior high. Schools that did not meet these qualifications were classified as "combination schools."

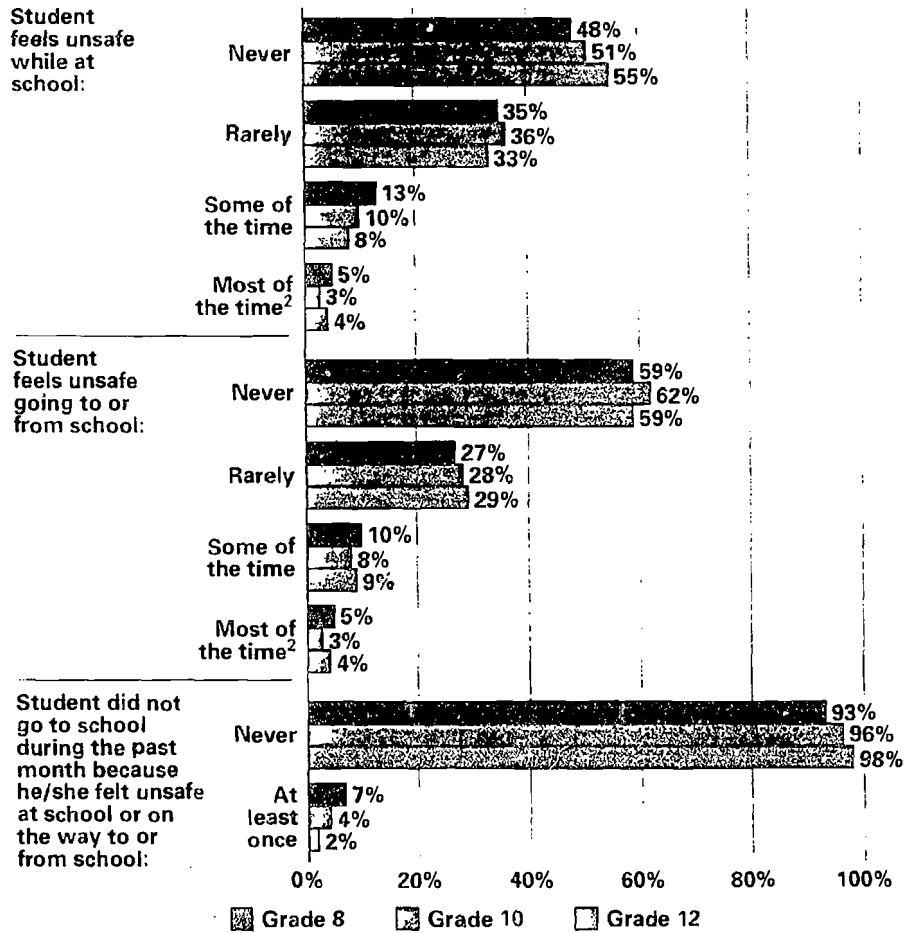
³ See Appendix A for a complete description.

Source: National Center for Education Statistics and Westat, Inc., 1993
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 59 Student Safety

Percentage¹ of students who reported feeling unsafe at school or on the way to or from school, 1993

While most students felt safe in or around their schools, substantial numbers reported feeling unsafe some or most of the time. In 1993, 7% of 8th graders reported staying home from school at least once during the previous month because of concerns for their physical safety.



¹ Percentages may not add to 100% because of rounding.

² Responses of "most days" and "every day" combined.

Exhibit 59 (continued)
Student Safety

Change Since 1992¹

Percentage² of students who reported feeling unsafe at school or on the way to or from school:

	8th graders		10th graders		12th graders	
	1992	1993	1992	1993	1992	1993
Student feels unsafe at school						
Never	48%	48%	50%	51%	57%	55%
Rarely	36%	35%	36%	36%	30%	33%
Some of the time	12%	13%	11%	10%	9%	8%
Most of the time ³	4%	5%	3%	3%	3%	4%
Student feels unsafe going to or from school						
Never	57%	59%	60%	62%	59%	59%
Rarely	29%	27%	29%	28%	30%	29%
Some of the time	10%	10%	8%	8%	8%	9%
Most of the time ³	4%	5%	3%	3%	4%	4%
Student did not go to school during the past month because he/she felt unsafe at school or on the way to or from school						
Never	93%	93%	96%	96%	97%	98%
At least once	7%	7%	4%	4%	3%	2%

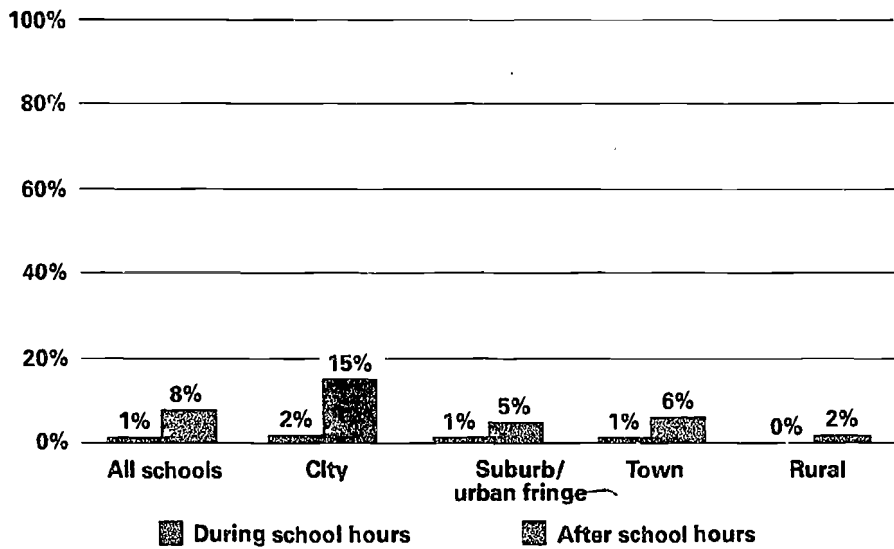
¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.
² Percentages may not add to 100% because of rounding.
³ Responses of 'most days' and 'every day' combined.

Source: University of Michigan, 1994
 This exhibit updates information presented in the 1993 Goals Report

Exhibit 60 Teacher Safety

Percentage of public school teachers who reported that they felt unsafe¹ in their school buildings, 1991

In 1991, most teachers reported feeling safe in their schools during the day. Teachers in cities were more likely than teachers in other areas to report feeling unsafe in their buildings after school hours.

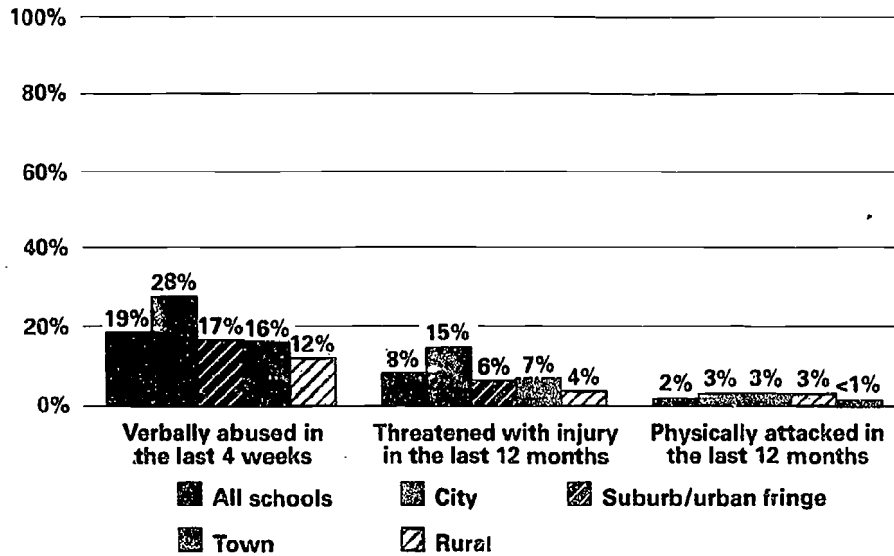


¹ Responses of 'unsafe' and 'moderately unsafe' combined.

Source: National Center for Education Statistics, 1991
This exhibit repeats information presented in the 1993 Goals Report.

**Exhibit 61
Teacher Victimization**

Percentage of public school teachers who reported that they were victimized by a student from their school in the following ways, 1991



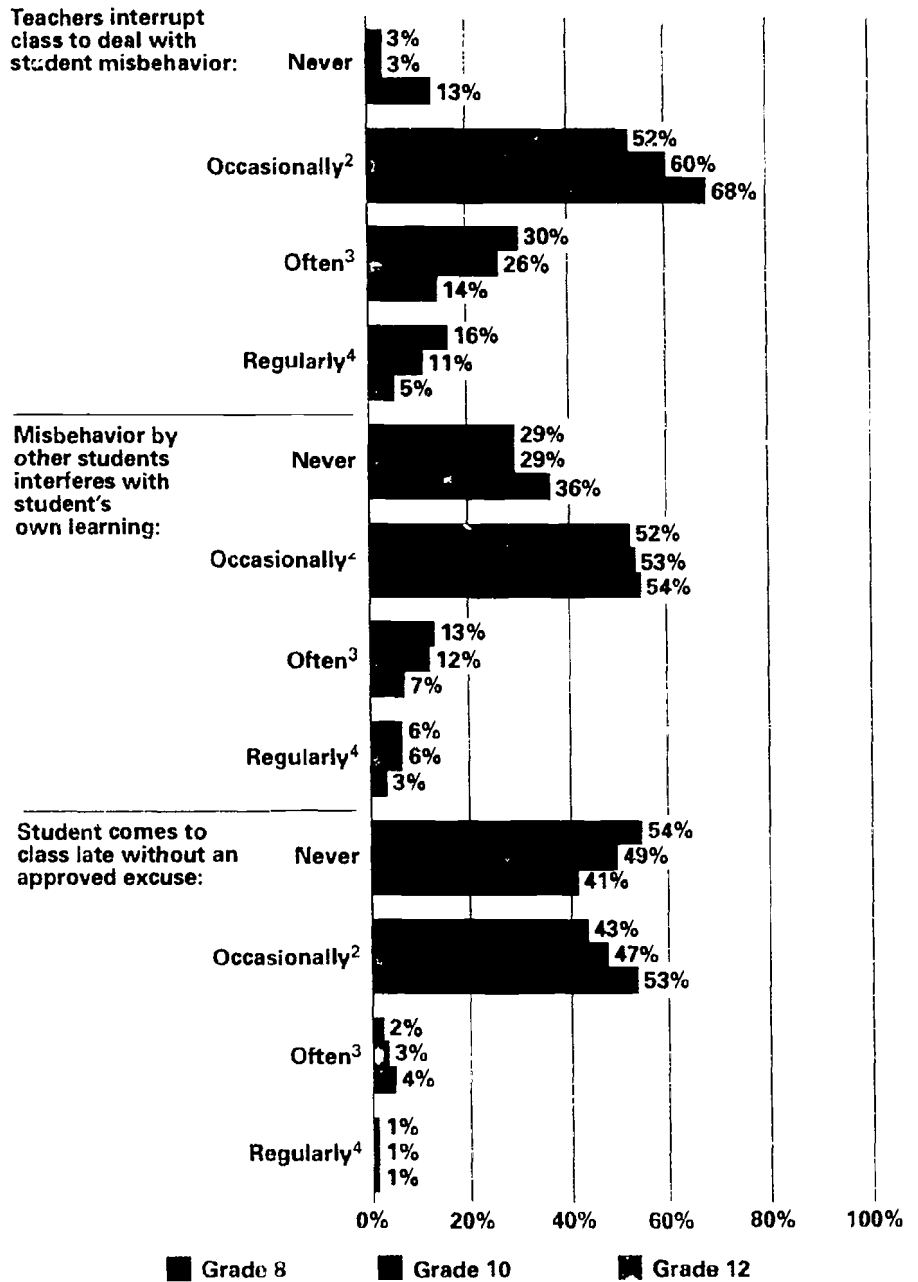
During 1991, teachers in cities were more likely than teachers in other areas to report being victims of verbal abuse and threats.

Source: National Center for Education Statistics, 1991
This exhibit repeats information presented in the 1993 Goals Report.

Exhibit 62
Disruptions in Class by Students

Percentage¹ of students who reported that during an average week disruptions occurred in their classes, 1993

In 1993, the majority of students in Grades 8, 10, and 12 reported that student disruptions were fairly common occurrences in their classes. About half of the students estimated that misbehavior by other students interfered with their own learning only occasionally (five times a week or less). However, 16% of 8th graders and 11% of 10th graders reported that teachers interrupted class twenty times a week or more to deal with student misbehavior.



¹ Percentages may not add to 100% because of rounding.
² Occasionally=5 times a week or less; does not include never.
³ Often - 6-19 times a week.
⁴ Regularly=20 times a week or more.

Exhibit 62 (continued)
Disruptions in Class by Students

Change Since 1992¹

Percentages² of 8th and 10th graders³ who reported that during an average week disruptions occurred in their classes:

	8th graders		10th graders	
	1992	1993	1992	1993
Teachers interrupt class to deal with student misbehavior				
Never	3%	3%	3%	3%
Occasionally ⁴	52%	52%	61%	60%
Often ⁵	30%	30%	25%	26%
Regularly ⁶	15%	16%	11%	11%
Misbehavior by other students interferes with student's own learning				
Never	29%	29%	31%	29%
Occasionally ⁴	53%	52%	53%	53%
Often ⁵	12%	13%	12%	12%
Regularly ⁶	6%	6%	5%	6%
Student comes to class late without an approved excuse				
Never	54%	54%	49%	49%
Occasionally ⁴	43%	43%	47%	47%
Often ⁵	2%	2%	3%	3%
Regularly ⁶	1%	1%	1%	1%

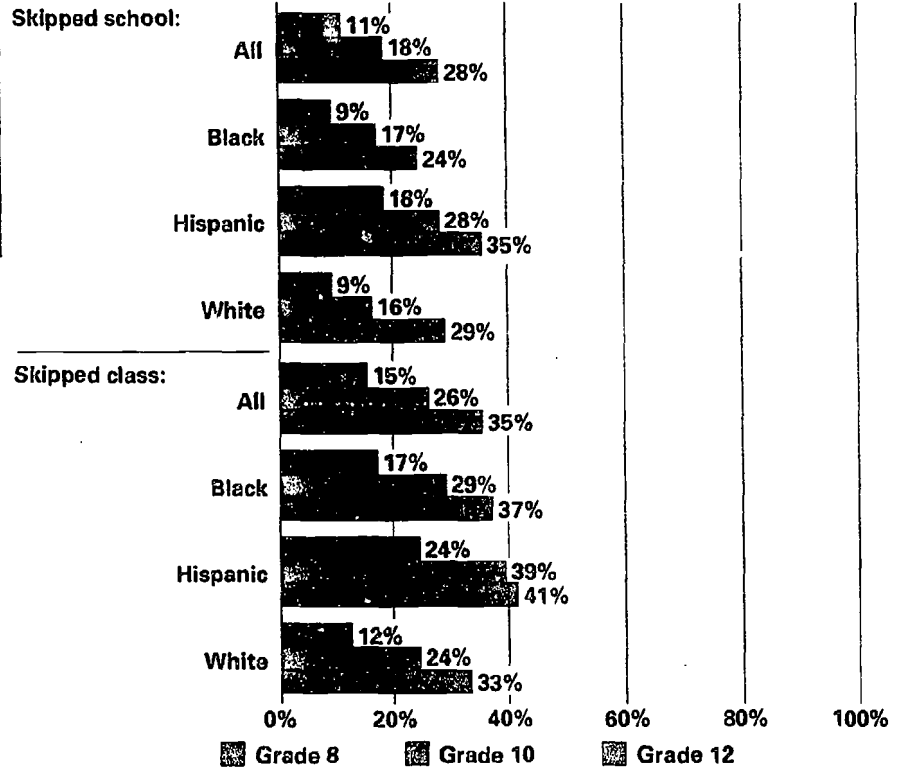
- ¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.
² Percentages may not add to 100% because of rounding.
³ Data for 12th graders were not collected prior to 1993.
⁴ Occasionally=5 times a week or less; does not include never.
⁵ Often= 6-19 times a week.
⁶ Regularly=20 times a week or more.

Source: University of Michigan, 1994
This exhibit updates information presented in the 1993 Goals Report.

Exhibit 63
Skipping School and Classes

Percentage¹ of students who reported that they did the following during the last four weeks, 1993

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



¹ Two-year averages (1992-1993) reported for racial/ethnic groups.

Exhibit 63 (continued)
Skipping School and Classes

Change Since 1990¹

Percentage² of 12th graders who reported that they did the following during the last four weeks:

	Skipped school		Skipped class	
	1990	1993	1990	1993
All	30%	28% *	33%	35%
Black	22%	24%	31%	37% *
Hispanic	37%	35%	42%	41%
White	30%	29%	33%	33%

Change Since 1991¹

Percentage³ of 10th graders who reported that they did the following during the last four weeks:

	Skipped school		Skipped class	
	1991	1993	1991	1993
All	19%	18%	25%	26%
Black	16%	17%	26%	29%
Hispanic	27%	28%	37%	39%
White	17%	16%	24%	24%

Between 1990 and 1993, the percentage of 12th graders who reported skipping school decreased. Between 1991 and 1993, the percentage of 8th graders who reported skipping class increased.

Change Since 1991¹

Percentage³ of 8th graders who reported that they did the following during the last four weeks:

	Skipped school		Skipped class	
	1991	1993	1991	1993
All	10%	11%	13%	15% *
Black	9%	9%	17%	17%
Hispanic	18%	18%	23%	24%
White	9%	9%	11%	12%

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

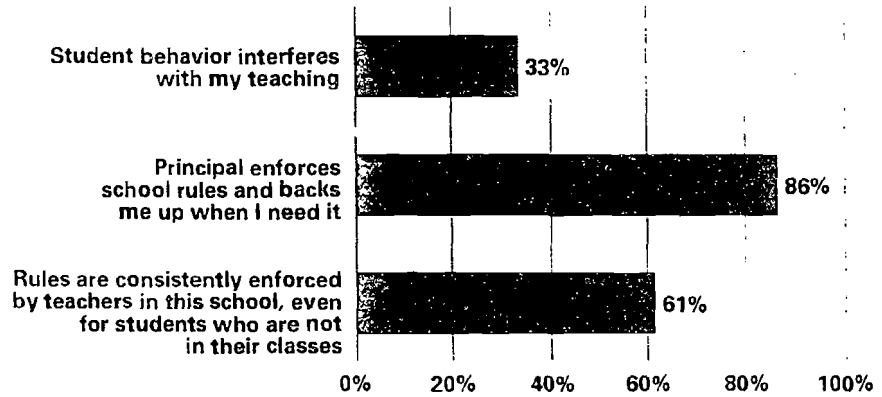
² Two-year averages (1989-1990, 1992-1993) reported for racial/ethnic groups.

³ Two-year averages (1991-1992, 1992-1993) reported for racial/ethnic groups.

Source: University of Michigan, 1994.
This exhibit updates information presented in the 1993 Goals Report.

Exhibit 64
Teacher Beliefs About the School Environment
Percentage of all high school teachers who reported,¹ 1991

In 1991, more than 30% of all high school teachers felt that student misbehavior interfered with their teaching. Nearly nine out of ten teachers felt that their principal consistently enforced school rules, but only six out of ten felt that other teachers did so.



¹ Responses of "agree" and "strongly agree" combined.

Between 1988 and 1991, fewer high school teachers felt that student misbehavior interfered with their teaching, and more felt that principals and other teachers consistently enforced school rules.

Change Since 1988¹

Percentage of all high school teachers who reported:²

	1988	1991
Student misbehavior interferes with my teaching	41%	33% *
Principal enforces school rules and backs me up when I need it	82%	86% *
Rules are consistently enforced by teachers in this school, even for students who are not in their classes	50%	61% *

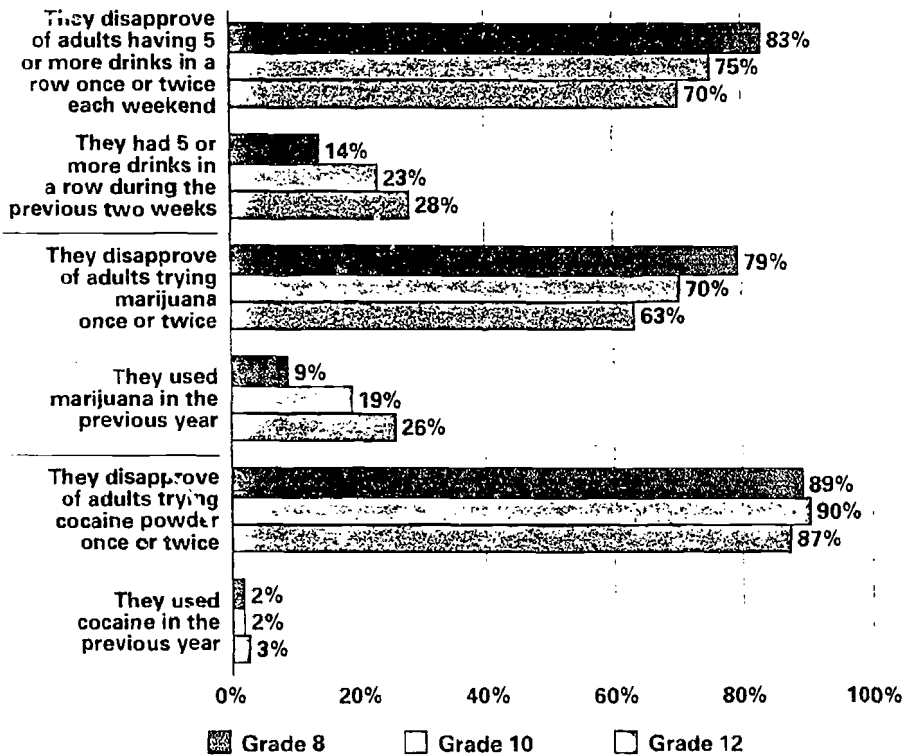
¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.
² Responses of "agree" and "strongly agree" combined.

Source: National Center for Education Statistics, 1992
This exhibit repeats information presented in the 1993 Goals Report.

**Additional Important Information:
Student Attitudes Toward Drug Use**

**Exhibit 65
Student Attitudes Toward Drug Use**

Percentage of students who reported the following, 1993



In 1993, students in progressively higher grades were less likely to report that they disapproved of adults drinking large quantities of alcohol or trying marijuana, and were more likely to report engaging 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.

Change Since 1991¹

Percentage of students who reported the following:

	8th graders		10th graders		12th graders	
	1991	1993	1991	1993	1991	1993
They disapprove of adults having 5 or more drinks in a row once or twice each weekend	85%	83% *	77%	75%	67%	70%
They had 5 or more drinks in a row during the previous two weeks	13%	14%	23%	23%	30%	28% *
They disapprove of adults trying marijuana once or twice	85%	79% *	75%	70% *	69%	63% *
They used marijuana in the previous year	6%	9% *	17%	19% *	24%	26% *
They disapprove of adults trying cocaine powder once or twice	91%	89% *	91%	90%	88%	87%
They used cocaine in the previous year	1%	2% *	2%	2%	4%	3%

Between 1991 and 1993, the percentages of 8th, 10th, and 12th graders who reported that they disapproved of adults trying marijuana once or twice decreased. In addition, decreases occurred in the percentage of 8th graders who reported that they disapproved of adults having five or more drinks in a row once or twice each weekend, and adults trying cocaine powder once or twice.

¹ Interpret with caution. Data are from a representative national survey. The changes shown could be attributable to sampling error. In cases noted with an asterisk, we are confident that change has occurred.

Source: University of Michigan, 1994
This exhibit updates information presented in the 1993 Goals Report.

GOAL 8

Parental Participation

2000

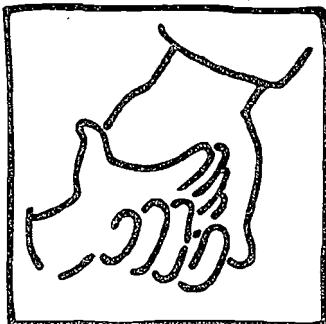
1994



120

GOAL 8

Parental Participation



Parental Participation is one of the two new National Education Goals added to the original six by Congress this year. During the coming months, the Goals Panel plans to convene an advisory group of parent representatives and other experts to help develop national and state indicators so that progress toward this Goal can be addressed more fully in future reports.

Parents play a critical role in helping to achieve the National Education Goals. No classroom teacher will ever have a greater influence on children's learning than their first teachers, their parents. In addition to meeting children's basic physical needs, raising children requires that parents devote substantial time and energy to nurturing children's emotional needs, language development, knowledge and curiosity, self-concepts, and moral values. Early, regular reading and story-telling and other home activities in which parents spend time talking with, listening to, and involving children are important ways that parents support their children's growth and development.

Obviously, parental responsibility in these areas does not end when children enter school. In fact, decades of research indicate that strong, continuous links between home and school and the practices and attitudes that parents model at home have positive and long-lasting effects on student achievement. For example, student absenteeism, the amount of TV watched, and the amount of daily reading that students do outside of school were discovered to account heavily for differences among states in mathematics achievement. And in reading, students who regularly discussed their reading with family and friends, and regularly read for fun on their own time consistently outperformed students who rarely or never did so.

Higher standards for student performance mean that teachers will require the support of parents more than ever to reinforce learning at home. But are school districts using opportunities such as the development of *Goals 2000* plans to involve parents and teachers in shared decisionmaking? Are schools and teachers clearly communicating to parents ways that they can help their children succeed in school? Are parents assuming responsibility for holding schools and teachers more accountable for results? And are workplaces actively supporting parent-school partnerships by developing family-friendly policies, such as flexible work schedules, job-sharing, and "parent days," that allow parents to attend teacher conferences or volunteer at their children's schools?

Schools should be places that reinforce parents' role as their children's first teacher, and that work with parents to create successful, supportive learning environments. In order to foster exceptional learning by students, schools must see their role as serving the education needs of today's families, not just students.

GOAL 8

Parental Participation

By the year 2000, every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children.

Objectives

- Every State will develop policies to assist local schools and local educational agencies to establish programs for increasing partnerships that respond to the varying needs of parents and the home, including parents of children who are disadvantaged or bilingual, or parents of children with disabilities.
- Every school will actively engage parents and families in a partnership which supports the academic work of children at home and shared educational decisionmaking at school.
- Parents and families will help to ensure that schools are adequately supported and will hold schools and teachers to high standards of accountability.



Appendices

2000



1994

Appendix A: Technical Notes and Sources

General Information

Accuracy of Data

The accuracy of any statistic is determined by the joint effects of "sampling" and "nonsampling" errors. Estimates based on a sample will differ somewhat from the figures that would have been obtained if a complete census had been taken using the same survey instruments, instructions, and procedures. In addition to such sampling errors, all surveys, both universe and sample, are subject to design, reporting, and processing errors and errors due to nonresponse. To the extent possible, these nonsampling errors are kept to a minimum by methods built into the survey procedures. In general, however, the effects of nonsampling errors are more difficult to gauge than those produced by sampling variability.

Sampling Errors

The samples used in surveys are selected from a large number of possible samples of the same size that could have been selected using the same sample design. Estimates derived from the different samples would differ from each other. The difference between a sample estimate and the average of all possible samples is called the sampling deviation. The standard or sampling error of a survey estimate is a measure of the variation among the estimates from all possible samples and, thus, is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples.

The sample estimate and an estimate of its standard error permit us to construct interval estimates with prescribed confidence that the interval includes the average result of all possible samples. If all possible samples were selected under essentially the same conditions and

an estimate and its estimated standard error were calculated from each sample, then: 1) approximately 2/3 of the intervals from one standard error below the estimate to one standard error above the estimate would include the average value of the possible samples; and 2) approximately 19/20 of the intervals from two standard errors above the estimate to two standard errors below the estimate would include the average value of all possible samples. We call an interval from two standard errors below the estimate to two standard errors above the estimate a 95 percent confidence interval.

Analysis of standard errors can help assess how valid a comparison between two estimates might be. The standard error of a difference between two independent sample estimates is equal to the square root of the sum of the squared standard errors of the estimates. The standard error (se) of the difference between independent sample estimates "a" and "b" is:

$$se_{a,b} = \sqrt{se_a^2 + se_b^2}$$

Nonsampling Errors

Universe and sample surveys are subject to nonsampling errors. Nonsampling errors may arise when respondents or interviewers interpret questions differently; when respondents must estimate values; when coders, keyers, and other processors handle answers differently; when persons who should be included in the universe are not; or when persons fail to respond (completely or partially). Nonsampling errors usually, but not always, result in an understatement of total survey error and thus an overstatement of the precision of survey estimates. Since estimating the magnitude of nonsampling errors often would require special experiments or access to independent data, these magnitudes are seldom available.

Goal 1

Exhibit 1: Prenatal Care

Prenatal care refers to the first visit for health care services during pregnancy.

Race/ethnicity refers to the race of the mother. The data on Hispanic births were reported separately.

Source: U.S. Department of Health and Human Services, *Health, United States, 1993* (Hyattsville, MD: National Center for Health Statistics, 1994), 70.

Exhibit 2: Birthweight

Race/ethnicity refers to the race of the mother. The data on Hispanic births were reported separately.

Source: U.S. Department of Health and Human Services, *Health, United States, 1993* (Hyattsville, MD: National Center for Health Statistics, 1994), 69.

Exhibit 3: Children's Health Index

The percentages of infants at risk are based on the number of births used to calculate the health index, not the actual number of births. The percentage of complete and usable birth records used to calculate the health index varied from a high of 99.93 to a low of 73.18. Five states (California, Indiana, New York, Oklahoma, and South Dakota) did not collect information on all six risks in 1990; four states (California, Indiana, New York, and South Dakota) did not collect information on all six risks in 1991. These states and the Territories are not included in the U.S. total. New Hampshire was included in the U.S. total but not in the race/ethnicity totals because the state does not collect information on Hispanic origin. Minority populations may be under-represented due to the exclusion of the four states in 1991 (and five states in 1990), particularly California and New York; therefore, the risk factors by race/ethnicity should be interpreted with caution.

Source: Nicholas Zill and Christine Winquist Nord of Westat, Inc. developed the concept of the Children's Health Index. Stephanie Ventura and Sally Clarke of the National Center for Health Statistics provided the special tabulations of the 1990 and 1991 birth certificate data needed to produce the index.

Exhibit 4: Immunizations

Source: Data from the 1992 National Health Interview Survey of Child Health, National Center for Health

Statistics and National Immunization Programs, Centers for Disease Control and Prevention, 1993.

Exhibit 5: Medical and Dental Care

The population estimates for the National Household Education Survey (NHES) data on preschool participation and family activities cover 3- to 5-year-old children who are not yet enrolled in kindergarten. Preschool participation includes children enrolled in any center-based program. Age from the NHES:91 was established as of January 1, 1991, and age from the NHES:93 was established as of January 1, 1993.

Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey: 1993 School Readiness Interview, unpublished tabulations prepared by Westat, Inc., August 1993.

Exhibit 6: Child Nutrition

Source: U.S. Department of Agriculture, Human Nutrition Information Service, "Women 19-50 Years and their Children 1-5 Years, 4 Days, 1986," Nationwide Food Consumption Survey, Continuing Survey of Food Intakes by Individuals, Report No. 86-3 (Hyattsville, MD: Human Nutrition Information Service, 1988), 70-77.

Exhibit 7: Family-Child Language and Literacy Activities

See technical note regarding NHES population estimates under Exhibit 5.

In the NHES:93, information on daily reading was collected using two approaches with split-half samples. The two approaches did not result in significantly different estimates for daily reading among 3- to 5-year-old preschoolers. A combined measure using both items is included in this Report.

Sources: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey: 1991 Early Childhood Component, unpublished tabulations prepared by Westat, Inc., August 1991, August 1992, and August 1993.

U.S. Department of Education, National Center for Education Statistics, National Household Education Survey: 1993 School Readiness Interview, unpublished tabulations prepared by Westat, Inc., August 1993.

Exhibit 8: Family-Child Arts Activities

See technical note regarding NHES population estimates under Exhibit 5.

Source: *Ibid.*

Exhibit 9: Family-Child Learning Opportunities

See technical note regarding NHES population estimates under Exhibit 5.

Source: *Ibid.*

Exhibit 10: Preschool Participation

See technical note regarding NHES population estimates under Exhibit 5.

Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey: 1993 School Readiness Interview, unpublished tabulations prepared by Westat, Inc., August 1993.

Exhibit 11: Preschool Programs for Children with Disabilities

See technical note regarding NHES population estimates under Exhibit 5.

Source: *Ibid.*

Exhibit 12: Quality of Preschool Centers

The term "preschool centers" includes all licensed center-based early education and care programs, as well as religious-sponsored, part-day, and school-based preschool programs that are exempt from licensing. Licensed before- and after-school programs are not included.

A Child Development Associate (CDA) credential is awarded by the Council for Early Childhood Professional Recognition, National Credentialing Program to individuals who have demonstrated competency in six established goal areas. Within a center-based setting, a person who demonstrates competence working with children aged three through five is a CDA with a Preschool Endorsement. The National Association for the Education of Young Children (NAEYC) recommends that staff in charge of a group of preschool children have at least a CDA credential or an

associate degree in Early Childhood Education/Child Development.

Source: Ellen Eliason Kisker, Sandra L. Hofferth, and Deborah A. Phillips, Profile of Child Care Settings Study: Early Education and Care in 1990, submitted to the U.S. Department of Education, Office of Planning, Budget and Evaluation (Princeton, NJ: Mathematica Policy Research, Inc., 1991), and unpublished tabulations, 1992.

Exhibit 13: Quality of Home-Based Preschool Settings

Regulated home-based programs include all family day care programs that are registered, certified, or licensed by state or county government agencies.

See technical note regarding the Child Development Associate (CDA) credential under Exhibit 12.

Source: *Ibid.*

Goal 2

Exhibit 14: High School Completion Status

There are two major paths to high school completion. Most students receive a regular high school diploma after completing the requisite secondary school coursework; other students, regardless of the number of high school courses they have completed, receive an alternative credential such as a General Educational Development (GED) certificate, Individual Education Plan (IEP) credential, or certificate of attendance. The high school completion rate for this Report was calculated by combining data for students receiving regular high school diplomas with data for students receiving alternative credentials.

For this Report, completion rates were calculated for 19- to 20-year-olds and for 23- to 24-year-olds. Persons still enrolled in high school were not included in the calculation.

Source: Marilyn M. McMillen, Phillip Kaufman, and Summer D. Whitener, *Dropout Rates in the United States: 1993* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1994), and unpublished tabulations from the October 1993 Current Population Survey, prepared by Management Planning Research Associates, Inc., 1994.

Exhibit 15: Dropouts Who Returned to High School

Source: Mary J. Frase, *Dropout Rates in the United States: 1988* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1989), 39.

Exhibit 16: High School Dropout Rates

There are a variety of ways to define and calculate dropout rates. Each type of dropout rate measures a different facet of dropping out. Three types of dropout rates are discussed below: event rates, status rates, and cohort rates.

- Event rates measure the proportion of students who drop out in a single year without completing high school. Event rates are important because they reveal how many students are leaving high school each year and how each year's rates compare with previous ones. The event dropout rate in 1992 was 4.5 percent.
- Status rates measure the proportion of the population who have not completed high school and are not enrolled at one point in time, regardless of when they dropped out. Status dropout rates are important because they reveal the extent of the dropout problem in the population and suggest the need for further training and education that will permit these individuals to participate more fully in the economy and the life of the nation. Status dropout rates are much higher than event dropout rates because they represent the cumulative impact of annual event dropout rates over a number of years. The status dropout rate for 16- to 24-year-olds in 1993, presented in Exhibit 16, was 11 percent.
- Cohort rates measure what happens to a single group (or cohort) of students over a period of time. Cohort rates are important because they reveal how many students in a single age group or grade drop out over time. Cohort rates also allow the calculation of how many dropouts from the cohort eventually complete high school with a diploma or an alternative credential. The cohort rate for 8th graders in 1988 who had dropped out by 10th grade was 7 percent (NELS:88 First Follow-up), while the cohort rate for 1990 sophomores who dropped out by the end of 12th grade was 6 percent (NELS:88 Second Follow-up).

Source: Marilyn M. McMillen, Phillip Kaufman, and Summer D. Whitener, *Dropout Rates in the United States: 1993* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1994).

Goal 3

General

National Assessment of Educational Progress (NAEP)

NAEP is a survey of the educational achievement of American students and changes in that achievement across time. Since 1969, NAEP has assessed the achievement of national samples of 9-, 13-, and 17-year-old students in public and private schools. In 1983, it expanded the samples so that grade-level results could be reported.

The assessments, conducted annually until the 1979-80 school year and biennially since then, have included periodic measures of student performance in reading, mathematics, science, writing, U.S. history, civics, geography, and other subject areas. NAEP also collects demographic, curricular, and instructional background information from students, teachers, and school administrators.

In 1988, Congress added a new dimension to NAEP by authorizing, on a trial basis, voluntary participation of public schools in state-level assessments in 1990 and 1992. Forty jurisdictions (states and territories) participated in the 1990 trial mathematics assessment. In 1992, 44 jurisdictions participated in the state mathematics assessments of 4th and 8th graders and 43 participated in the 4th grade reading assessments.

National Assessment Governing Board (NAGB) Achievement Levels

The NAEP data shown under Goal 3 should be interpreted with caution. The line signifying the Goals Panel's Performance Standard classifies student performance according to achievement levels devised by the National Assessment Governing Board. These achievement level data have been previously reported by the National Center for Education Statistics (NCES). Students with NAEP scores falling below the Goals Panel's Performance Standard have been classified by NAGB as "Basic" or below; those above have been classified as "Proficient" or "Advanced."

The NAGB achievement levels represent a reasonable way of categorizing overall performance on the NAEP. They are also consistent with the Panel's efforts to report such performance against a high-criterion standard. However, the methods used to derive the NAGB achievement "cut points" (i.e., the points distinguishing

the percentage of students scoring at the different achievement levels) have been questioned and are still under review.

NAGB has established standards for reporting the results of the National Assessment of Educational Progress. This effort has resulted in three achievement levels: basic, proficient, and advanced. The NAGB achievement levels are reasoned judgements of what students should know and be able to do. They are attempts to characterize overall student performance in particular subject matters. Readers should exercise caution, however, in making particular inferences about what students at each level actually know and can do. A NAEP assessment is a complex picture of student achievement and applying external standards for performance is a difficult task. Evaluation studies completed and under way have raised questions about the degree to which the standards in the NAGB achievement levels are actually reflected in an assessment and, hence, the degree to which inferences about actual performance can be made from these achievement levels. The Goals Panel acknowledges these limitations but believes that, used with caution, these levels convey important information about how American students are faring in reaching Goal 3.

Basic: *This level, below proficient, denotes partial mastery of knowledge and skills that are fundamental for proficient work at each grade — 4, 8, and 12. For twelfth grade, this is higher than minimum competency skills (which are normally taught in elementary and junior high school) and covers significant elements of standard high-school-level work.*

Proficient: *This central level represents solid academic performance for each grade tested — 4, 8, and 12. It reflects a consensus that students reaching this level have demonstrated competency over challenging subject matter and are well prepared for the next level of schooling. At grade 12, the proficient level encompasses a body of subject-matter knowledge and analytical skills, of cultural literacy and insight, that all high school graduates should have for democratic citizenship, responsible adulthood, and productive work.*

Advanced: *This higher level signifies superior performance beyond proficient grade-level mastery at grades 4, 8, and 12. For twelfth grade, the advanced level shows readiness for rigorous college courses, advanced training, or employment requiring advanced academic achievement.*

National Assessment Governing Board (NAGB) Item Difficulty Analysis

Items were first ranked by their p-values, i.e., by the proportion of all students taking the test who answered the item correctly. The higher the p-value, the larger the proportion of students who answered it correctly and, therefore, the easier the item. This array of items was then divided into equal quartiles and each quartile of items labeled either "easy," "moderate," "challenging," or "very challenging." The proportion of each of these item classes that were answered correctly by students reaching the Basic, Proficient, or Advanced levels on the NAEP was then calculated. Thus, for example, it is possible to report the average percentage of "easy" NAEP mathematics items that students at the Basic level in Grade 4 answered correctly.

Exhibit 17: Mathematics Achievement

See general technical notes regarding NAEP and the NAGB achievement levels.

Source: Ina V.S. Mullis, John A. Dossey, Eugene H. Owen, and Gary W. Phillips, *NAEP 1992 Mathematics Report Card for the Nation and the States: Data from the National and Trial State Assessments* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, April 1993), 64.

Exhibit 18: Mathematics Achievement – Grade 4

See general technical notes regarding NAEP and the NAGB achievement levels.

Source: *Ibid.*, 93, 107.

Exhibit 19: Mathematics Achievement – Grade 8

See general technical notes regarding NAEP and the NAGB achievement levels.

Source: *Ibid.*

Exhibit 20: Mathematics Achievement – Grade 12

See general technical notes regarding NAEP and the NAGB achievement levels.

Source: *Ibid.*

Exhibit 21: Reading Achievement

See general technical notes regarding NAEP and the NAGB achievement levels.

Source: Ina V.S. Mullis, Jay Campbell, and Alan Farstrup, *NAEP 1992 Reading Report Card for the Nation and the States: Data from the National and Trial State Assessments* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1993).

Exhibit 22: Reading Achievement – Grade 4

See general technical notes regarding NAEP and the NAGB achievement levels.

Source: *Ibid.*

Exhibit 23: Reading Achievement – Grade 8

See general technical notes regarding NAEP and the NAGB achievement levels.

Source: *Ibid.*

Exhibit 24: Reading Achievement – Grade 12

See general technical notes regarding NAEP and the NAGB achievement levels.

Source: *Ibid.*

Exhibit 25: Writing Achievement – Grade 4

The 1992 NAEP Writing Framework identifies three primary purposes for writing — informative, persuasive, and narrative. A six-point scoring rubric was used to rate students' responses:

Extensively Elaborated. In these papers, students create a well-developed, detailed, and well-written response to the task. They show a high degree of control over the various elements of writing. These responses may be similar to elaborated responses, but they are better organized, more clearly written, and less flawed.

Elaborated. In these papers, students create a well-developed and detailed response to the task. They may go beyond the requirements of the task.

Developed. In these papers, students provide a response to the task that contains necessary elements. However, these papers may be unevenly developed.

Minimally Developed. In these papers, students provide a response to the task that is brief, vague, or somewhat confusing.

Undeveloped Response to Task. In these papers, students begin to respond to the task, but they do so in a very abbreviated, confusing, or disjointed manner.

Response to Topic. In these papers, students respond to some aspect of the topic but do not appear to have fully understood the task. Or, they recopy text from the prompt.

Not Rated. Blank, totally off task, indecipherable, illegible, and "I don't know."

Source: Arthur N. Applebee, Judith A. Langer, Ina V.S. Mullis, Andrew S. Latham, and Claudia A. Gentile, *NAEP 1992 Writing Report Card* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1994), 26, 29, 33, 46, 49, 53, 68, 71, and 75.

Exhibit 26: Writing Achievement – Grades 8 and 12

See technical notes regarding the NAEP Writing Framework under Exhibit 25.

Source: *Ibid.*, 26, 29, 39, 46, 49, 59-60, 68, 71, and 82.

Exhibit 27: Trends in Science Proficiency

Levels of Science Proficiency

◦ **Level 150—Knows Everyday Science Facts —** Students at this level know some general scientific facts of the type that could be learned from everyday experiences. They can read simple graphs, match the distinguishing characteristics of animals, and predict the operation of familiar apparatuses that work according to mechanical principles.

◦ **Level 200—Understands Simple Scientific Principles —** Students at this level are developing some understanding of simple scientific principles, particularly in the Life Sciences. For example, they exhibit some rudimentary knowledge of the structure and function of plants and animals.

◦ **Level 250—Applies Basic Scientific Information—** Students at this level can interpret data from simple tables and make inferences about the outcomes of experimental procedures. They exhibit knowledge and understanding of the Life Sciences, including a familiarity with some aspects of animal behavior and

of ecological relationships. These students also demonstrate some knowledge of basic information from the Physical Sciences.

- Level 300—Analyzes Scientific Procedures and Data — Students at this level can evaluate the appropriateness of the design of an experiment. They have more detailed scientific knowledge, and the skill to apply their knowledge in interpreting information from text and graphs. These students also exhibit a growing understanding of principles from the Physical Sciences.

- Level 350—Integrates Specialized Scientific Information — Students at this level can infer relationships and draw conclusions using detailed scientific knowledge from the Physical Sciences, particularly Chemistry. They also can apply basic principles of genetics and interpret the societal implications of research in this field.

Source: Ina V.S. Mullis, John A. Dossey, Mary Foertsh, Lee Jones, and Claudia Gentile, *Trends in Academic Progress: Achievement of U.S. Students in Science, 1969-70 to 1990, Mathematics, 1973 to 1990, Reading, 1971 to 1990, and Writing, 1984 to 1990* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1991), 2.

Exhibit 28: Advanced Placement Results

The Advanced Placement program, sponsored by The College Board, provides a way for high schools to offer college-level coursework to students. At present, one or more course descriptions, examinations, and sets of curricular materials are available in art, biology, chemistry, computer science, economics, English, French, German, government and politics, history, Latin, mathematics, music, physics, and Spanish. Advanced Placement examinations, which are given in May, are graded on a five-point scale: 5 – extremely well qualified; 4 – well qualified; 3 – qualified; 2 – possibly qualified; and 1 – no recommendation. Grades of 3 and above generally are accepted for college credit and advanced placement at participating colleges and universities. Two Advanced Placement measures are included in this Report: the number of examinations per 1,000 11th and 12th graders, and the number of examinations graded 3 or above per 1,000 11th and 12th graders. The number of 11th and 12th graders includes public and private students. The enrollment figures were arrived at by multi-

plying the public enrollment by a private-enrollment adjustment factor.

Source: The College Board, Advanced Placement Program, Results from the 1991 and 1994 Advanced Placement Examinations, unpublished tabulations, August 1991 and August 1994.

Exhibit 29: Community Service

Source: Mary J. Frase, High School Seniors Performing Community Service (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1993).

Exhibit 30: Young Adult Voter Registration and Voting

Sources: U.S. Department of Commerce, Bureau of the Census, *Voting and Registration in the Election of November 1988*, Current Population Reports, Series P-20, no. 440 (Washington, D.C.: U.S. Government Printing Office, 1989), calculations by the National Education Goals Panel.

U.S. Department of Commerce, Bureau of the Census, *Voting and Registration in the Election of November 1992*, Current Population Reports, Series P-20, no. 466 (Washington, D.C.: U.S. Government Printing Office, 1993), calculations by the National Education Goals Panel.

Goal 5

Exhibit 31: International Science and Mathematics Achievement Comparisons

International Assessment of Educational Progress (IAEP)

Twenty countries assessed the mathematics and science achievement of 13-year-old students and 14 assessed 9-year-old students in these same subjects. In some cases, participants assessed virtually all age-eligible children in their countries, and in other cases they confined samples to certain geographic regions, language groups, or grade levels. In some countries, significant proportions of age-eligible children were not represented because they did not attend school. Also, in some countries, low rates of school or student participation mean that results may be biased. The countries participating in the IAEP

were: Brazil, Canada, China, England, France, Hungary, Ireland, Israel, Italy, Jordan, Korea, Mozambique (mathematics only), Portugal, Scotland, Slovenia, the former Soviet Union, Spain, Switzerland, Taiwan, and the United States. For this Report, the five countries chosen to be compared with the United States had comprehensive populations (France, Hungary, Korea, Switzerland, and Taiwan).

Sources: Archie E. LaPointe, Janice M. Askew, and Nancy A. Mead, *Learning Science* (Princeton, NJ: Educational Testing Service, Center for the Assessment of Educational Progress, 1992), 18.

Archie E. LaPointe, Janice M. Askew, and Nancy A. Mead, *Learning Mathematics* (Princeton, NJ: Educational Testing Service, Center for the Assessment of Educational Progress, 1992), 18.

Exhibit 32: Science Instructional Practices

See general technical note under Goal 3 regarding NAEP.

Source: Lee R. Jones, Ina V.S. Mullis, Senta A. Raizen, Iris R. Weiss, and Elizabeth A. Weston, *The 1990 Science Report Card: NAEP's Assessment of Fourth, Eighth, and Twelfth Graders* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1992), and unpublished tabulations prepared by Westat, Inc., August 1992.

Exhibit 33: Mathematics Instructional Practices – Grade 4

See general technical note under Goal 3 regarding NAEP.

Source: National Center for Education Statistics, *Data Compendium for the NAEP 1992 Mathematics Assessment of the Nation and the States* (Washington, D.C.: U.S. Department of Education, May 1993), 483, 497, 446, 451, 566, 552.

Exhibit 34: Mathematics Instructional Practices – Grade 8

See general technical note under Goal 3 regarding NAEP.

Source: National Center for Education Statistics, *Data Compendium for the NAEP 1992 Mathematics Assessment of the Nation and the States* (Washington, D.C.: U.S. Department of Education, May 1993), 483, 497, 446, 451, 566, 552.

Exhibit 35: Trends in Science Degrees Earned, by Sex

Degrees Earned

Data include only U.S. citizens and resident aliens on permanent visas, and include institutions in U.S. Territories.

Bachelor's and Master's Degrees

The National Education Goals Panel combined the following fields to calculate the total number of science and engineering degrees earned: Engineering, Physical Science, Computer Science, Biological Science, Agricultural Science, Social Science, Psychology, and Health Fields. (Between 1981 and 1985, major changes were made to the Social Science category.)

In this Report, degrees in health technologies were included in the health fields category; in previous Reports, these degrees were not included. As a result, science and engineering degree figures presented in this Report may be higher than those presented in previous Reports.

The number of mathematics degrees comes from a single field of study, Mathematical Science.

Data for bachelor's and master's degrees were collected by NCES, biennial data from the Higher Education General Information Survey (HEGIS) Earned Degrees Surveys, 1977-85, and Integrated Post-secondary Education Data System (IPEDS) Completions Surveys, 1987-90. Data on race/ethnicity were collected biennially from 1977 through 1989 and annually thereafter, but data for 1983 were not released by NCES. National Science Foundation (NSF)/Division of Science Resources Studies tabulated the data. Because data on race/ethnicity of degree recipients are collected on broad fields of study only, these data could not be adjusted to the exact field taxonomies used by the NSF.

Doctoral Degrees

The National Education Goals Panel combined the following fields to calculate the total number of science and engineering doctorates earned: Engineering; Physical Science; Earth, Atmospheric, and Ocean Sciences; Computer Science; Agricultural and Biological Sciences; Social Science; Psychology; and Health Science.

Data on doctorates come from the Survey of Earned Doctorates, which is conducted by the National Research Council (NRC).

Sources: National Science Foundation, *Science and Engineering Degrees, by Race/Ethnicity: 1977-90, A Source Book, Detailed Statistical Tables* (Washington, D.C., 1992), and unpublished tabulations from the National Science Foundation and Quantum Research Corporation, August 1994.

National Science Foundation, Selected Data Tables on Science and Engineering Doctorate Awards: 1992, NSF 93-315 (Washington, D.C., 1993).

National Science Foundation, *Science and Engineering Doctorates: 1960-91*, NSF 93-301, Detailed Statistical Tables (Washington, D.C., 1993).

Doctorate Records File, National Research Council, "Affirmative Action Table #3: Ph.D.s Awarded to U.S. Citizens and Permanent Residents, by Race/Ethnicity, Gender, Fine Field, and Year, 1976-1992" (Washington, D.C., September 1993).

Exhibit 36: Trends in Mathematics Degrees Earned, by Sex

See technical notes under Exhibit 35.

Source: *Ibid.*

Exhibit 37: Trends in Science Degrees Earned, by Race/Ethnicity

See technical notes under Exhibit 35.

Source: *Ibid.*

Exhibit 38: Trends in Mathematics Degrees Earned, by Race/Ethnicity

See technical notes under Exhibit 35.

Source: *Ibid.*

Exhibit 39: Science and Mathematics Teacher Preparation

Science and mathematics teacher characteristics are presented for teachers whose primary teaching assignment was in science or mathematics, and who received a degree in their field, including teachers majoring in science education or mathematics education. High school

teachers are defined as full-time teachers teaching in Grades 9, 10, 11, or 12.

Source: U.S. Department of Education, National Center for Education Statistics, 1987-88 and 1990-91 Teacher Survey of the Schools and Staffing Survey (SASS), unpublished tabulations, August 1992.

Goal 6

Exhibit 40: Adult Literacy

Adult Literacy Scales

The Department of Education (ED) and the Educational Testing Service (ETS) characterized the literacy of America's adults in terms of three "literacy scales" representing distinct and important aspects of literacy: prose, document, and quantitative literacy. Each of the literacy scales, which range from 0 to 500, is as follows:

Prose literacy – the knowledge and skills needed to understand and use information from texts that include editorials, news stories, poems, and fiction; for example, finding a piece of information in a newspaper article, interpreting instructions from a warranty, inferring a theme from a poem, or contrasting views expressed in an editorial.

Level 1 – Most of the tasks in this level require the reader to read relatively short text to locate a single piece of information which is identical to or synonymous with the information given in the question or directive. If plausible but incorrect information is present in the text, it tends not to be located near the correct information.

Level 2 – Some tasks in this level require readers to locate a single piece of information in the text; however, several distractors or plausible but incorrect pieces of information may be present, or low-level inferences may be required. Other tasks require the reader to integrate two or more pieces of information or to compare and contrast easily identifiable information based on a criterion provided in the question or directive.

Level 3 – Tasks in this level tend to require readers to make literal or synonymous matches between the text and information given in the task, or to make matches that require low-level inferences. Other tasks ask readers to integrate information from

dense or lengthy text that contains no organizational aids such as headings. Readers may also be asked to generate a response based on information that can be easily identified in the text. Distracting information is present, but is not located near the correct information.

Level 4 – These tasks require readers to perform multiple-feature matches and to integrate or synthesize information from complex or lengthy passages. More complex inferences are needed to perform successfully. Conditional information is frequently present in tasks at this level and must be taken into consideration by the reader.

Level 5 – Some tasks in this level require the reader to search for information in dense text which contains a number of plausible distractors. Others ask readers to make high-level inferences or use specialized background knowledge. Some tasks ask readers to contrast complex information.

Document literacy – the knowledge and skills required to locate and use information contained in materials that include job applications, payroll forms, transportation schedules, maps, tables, and graphs; for example, locating a particular intersection on a street map, using a schedule to choose the appropriate bus, or entering information on an application form.

Level 1 – Tasks in this level tend to require the reader either to locate a piece of information based on a literal match or to enter information from personal knowledge onto a document. Little, if any, distracting information is present.

Level 2 – Tasks in this level are more varied than those in Level 1. Some require the readers to match a single piece of information; however, several distractors may be present, or the match may require low-level inferences. Tasks in this level may also ask the reader to cycle through information in a document or to integrate information from various parts of a document.

Level 3 – Some tasks in this level require the reader to integrate multiple pieces of information from one or more documents. Others ask readers to cycle through rather complex tables or graphs which contain information that is irrelevant or inappropriate to the task.

Level 4 – Tasks in this level, like those at the previous levels, ask readers to perform multiple-feature matches, cycle through documents, and integrate

information; however, they require a greater degree of inferencing. Many of these tasks require readers to provide numerous responses but do not designate how many responses are needed. Conditional information is also present in the document tasks at this level and must be taken into account by the reader.

Level 5 – Tasks in this level require the reader to search through complex displays that contain multiple distractors, to make high-level text-based inferences, and to use specialized knowledge.

Quantitative literacy – the knowledge and skills required to apply arithmetic operations, either alone or sequentially, using numbers embedded in printed materials; for example, balancing a checkbook, figuring out a tip, completing an order form, or determining the amount of interest from a loan advertisement.

Level 1 – Tasks in this level require readers to perform single, relatively simple arithmetic operations, such as addition. The numbers to be used are provided and the arithmetic operation to be performed is specified.

Level 2 – Tasks in this level typically require readers to perform a single operation using numbers that are either stated in the task or easily located in the material. The operation to be performed may be stated in the question or easily determined from the format of the material (for example, an order form).

Level 3 – In tasks in this level, two or more numbers are typically needed to solve the problem, and these must be found in the material. The operation(s) needed can be determined from the arithmetic relation terms used in the question or directive.

Level 4 – These tasks tend to require readers to perform two or more sequential operations or a single operation in which the quantities are found in different types of displays, or the operations must be inferred from semantic information given or drawn from prior knowledge.

Level 5 – These tasks require readers to perform multiple operations sequentially. They must disembed the features of the problem from text or rely on background knowledge to determine the quantities or operations needed.

Source: Irwin S. Kirsch, Ann Jungeblut, Lynn Jenkins, and Andrew Kolstad, *Adult Literacy in America: A First Look at the Results of the National Adult Literacy Survey* (Washington, D.C.: U.S. Department of Education,

National Center for Education Statistics, September 1993), 17.

Exhibit 41: Adults' Perceptions of Own Literacy Abilities, by Literacy Level

See technical note regarding the literacy scales under Exhibit 40.

Source: *Ibid*, 138-140.

Exhibit 42: Perceived Usefulness of Skills in the Future

The Meaning of Work research project interviewed a random sample of the labor force in Flanders (Belgium) during October-December 1990, in the Federal Republic of Germany during November-December 1989 (before reunification), in Japan during August-November 1991, and in the United States during January-July 1989.

Source: S.A. Ruiz Quintanilla, *Work-Related Attitudes Among Workers in Flanders (Belgium), F.R. Germany, Japan, and the U.S.A.*, Report prepared for the National Education Goals Panel (Ithaca: Cornell University, 1992).

Exhibit 43: Perceived Responsibility for Improving Job Performance

See technical note under Exhibit 42.

Source: *Ibid*.

Exhibit 44: Participation in Adult Education

The population estimates for the National Household Education Survey data on participation in adult education cover adults 17 years and older, excluding those engaged in full-time study.

Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey: 1991 Adult Education Component, unpublished tabulations prepared by Westat, Inc., August 1991.

Exhibit 45: Participation in Adult Education, by Occupation

See technical note under Exhibit 44.

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

Education Survey: 1991 Adult Education Component, unpublished tabulations prepared by Westat, Inc., August 1993.

Exhibit 46: Worker Training

Source: Tom Amirault, *Job Qualifying and Skill Improvement Training: 1991* (Washington D.C.: U.S. Department of Labor, Bureau of Labor Statistics, 1992).

Exhibit 47: College Enrollment

Source: U.S. Department of Commerce, Bureau of the Census, October Current Population Surveys, 1988-93, unpublished tabulations from the National Center for Education Statistics, prepared by Pinkerton Computer Consultants, Inc., August 1994.

Exhibit 48: College Completion

Source: U.S. Department of Commerce, Bureau of the Census, 1992 and 1993 March Current Population Surveys, unpublished tabulations from the National Center for Education Statistics, prepared by Pinkerton Computer Consultants, Inc., August 1994.

Exhibit 49: Voter Registration and Voting

Sources: U.S. Department of Commerce, Bureau of the Census, *Voting and Registration in the Election of November 1988*, Current Population Reports, Series P-20, no. 440 (Washington, D.C.: U.S. Government Printing Office, 1989), calculations by the National Education Goals Panel.

U.S. Department of Commerce, Bureau of the Census, *Voting and Registration in the Election of November 1992*, Current Population Reports, Series P-20, no. 466 (Washington, D.C.: U.S. Government Printing Office, April 1993), calculations by the National Education Goals Panel.

Goal 7

Exhibit 50: Sale of Drugs at School

Source: Lloyd D. Johnston, Patrick M. O'Malley, and Jerald G. Bachman, *Selected 1993 Outcome Measures from the Monitoring the Future Study for Goal 7 of the National Education Goals: A Special Report for the National Education Goals Panel* (Ann Arbor: University of Michigan's Institute for Social Research, July 1994).

Exhibit 51: Obtaining Illegal Drugs at School

Student's residence (the variable ZIPURBAN) was created by matching the National Household Education Survey (NHES): 1993 School Safety and Discipline Component 5-digit codes to the 1990 Census Bureau file. ZIPURBAN defines a ZIP code (or part of a ZIP code) as urban or rural. Urban is further broken down into the inside urbanized areas (UAs) and outside UAs. The three categories of ZIPURBAN are 1) urban, inside UA; 2) urban, outside UA; and 3) rural. The definitions for these categories are taken directly from the 1990 Census of Population.

A UA comprises a place and the adjacent densely settled surrounding territory that together have a minimum population of 50,000 people. The term "place" in the UA definition includes both incorporated places such as cities and villages, and Census-designated places (unincorporated population clusters for which the Census Bureau delineated boundaries in cooperation with state and local agencies to permit tabulation of data for Census Bureau products). The "densely settled surroundings territory" adjacent to the place consists of contiguous and noncontiguous territory of relatively high population density within short distances.

The urban, outside of UA category includes incorporated or unincorporated places outside of a UA with a minimum population of 2,500 people. One exception is for those who live in extended cities. Persons living in rural portions of extended cities are classified as rural other than urban.

Places not classified as urban are rural.

To classify a ZIP code as one of these three categories, the number of persons in each category for each ZIP code was examined. Since a ZIP code can cut across geographic areas that are classified in any of the three categories, the ZIPURBAN variable is classified into the category that has the largest number of persons.

Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey: 1993 School Safety and Discipline Component, unpublished tabulations prepared by Westat, Inc., August 1993.

Exhibit 52: Use of Drugs at School by 8th and 10th Graders

Source: Lloyd D. Johnston, Patrick M. O'Malley, and Jerald G. Bachman, *Selected 1993 Outcome Measures from the Monitoring the Future Study for Goal 7 of the*

National Education Goals: A Special Report for the National Education Goals Panel (Ann Arbor: University of Michigan's Institute for Social Research, July 1994).

Exhibit 53: Use of Drugs at School by 12th Graders

The data for the 12th grade racial and ethnic subgroups are three-year averages to increase the sample size and produce more reliable estimates. The racial and ethnic subgroup numbers are 1988-1990 averages for 1990 and 1991-1993 averages for 1993.

Source: *Ibid.*

Exhibit 54: Overall Student Drug Use

The data for the racial and ethnic subgroups are two-year averages to increase the sample size and produce more reliable estimates. The racial and ethnic subgroup numbers for 12th graders are 1989-1990 averages for 1990 and 1992-1993 averages for 1993; for 8th and 10th graders, the numbers are 1991-1992 averages for 1991 and 1992-1993 averages for 1993.

Use of "any illicit drugs" includes any use of marijuana, hallucinogens, cocaine, and heroin, or use of any other opiates, stimulants, barbiturates, methaqualone (excluded since 1990), or tranquilizers not under a doctor's orders.

Source: *Ibid.*

Exhibit 55: Being Under the Influence of Alcohol or Other Drugs While at School

Source: *Ibid.*

Exhibit 56: Carrying Weapons to School

Source: *Ibid.*

Exhibit 57: Student Victimization

Source: *Ibid.*

Exhibit 58: Student Membership in Gangs

See technical note under Exhibit 51.

Source: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey: 1993 School Safety and Discipline Component, unpublished tabulations prepared by Westat, Inc., August 1993.

Exhibit 59: Student Safety

Source: Lloyd D. Johnston, Patrick M. O'Malley, and Jerald G. Bachman, *Selected 1993 Outcome Measures from the Monitoring the Future Study for Goal 7 of the National Education Goals: A Special Report for the National Education Goals Panel* (Ann Arbor: University of Michigan's Institute for Social Research, July 1994).

Exhibit 60: Teacher Safety

Definitions of school locations are as follows:

City – A central city of a Standard Metropolitan Statistical Area (SMSA).

Suburb/Urban Fringe – A place within an SMSA of a large or mid-size central city and defined as urban by the U. S. Bureau of the Census.

Town – A place not within an SMSA, but with a population greater than or equal to 2,500, and defined as urban by the U. S. Bureau of the Census.

Rural – A place with a population less than 2,500 and defined as rural by the U. S. Bureau of the Census.

Source: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, Teacher Survey on Safe, Disciplined, and Drug-free Schools, FRSS 42, 1991.

Exhibit 61: Teacher Victimization

See technical note under Exhibit 60.

Victimization at-school includes victimization inside the school building, on school grounds, or on a school bus.

Source: *Ibid.*

Exhibit 62: Disruptions in Class by Students

Source: Lloyd D. Johnston, Patrick M. O'Malley, and Jerald G. Bachman, *Selected 1993 Outcome Measures from the Monitoring the Future Study for Goal 7 of the National Education Goals: A Special Report for the National Education Goals Panel* (Ann Arbor: University of Michigan's Institute for Social Research, July 1994).

Exhibit 63: Skipping School and Classes

See technical note for racial and ethnic subgroup data under Exhibit 54.

Source: *Ibid.*

Exhibit 64: Teacher Beliefs About the School Environment

Source: U.S. Department of Education, National Center for Education Statistics, 1990-91 Teacher Survey of the Schools and Staffing Survey (SASS), unpublished tabulations, August 1992.

Exhibit 65: Student Attitudes Toward Drug Use

Source: Lloyd D. Johnston, Patrick M. O'Malley, and Jerald G. Bachman, *Selected 1993 Outcome Measures from the Monitoring the Future Study for Goal 7 of the National Education Goals: A Special Report for the National Education Goals Panel* (Ann Arbor: University of Michigan's Institute for Social Research, July 1994).

Readers interested in further information from data sources presented in *Volume One* of this Report can contact the sponsoring agencies, as follows:

Data Source	Sponsoring Agency	Contact
Advanced Placement Program	The College Board	Wade Curry (212) 713-8000
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The Condition of Education	National Center for Education Statistics (NCES)	Nabeel Alsalam (202) 219-2252
Fast Response Survey System (FRSS)	NCES	Judi Carpenter (202) 219-1333
High School and Beyond (HS&B)	NCES	Aurora D'Amico (202) 219-1365
Integrated Postsecondary Education Data System (IPEDS)	NCES	Roslyn Korb (202) 219-1587
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Meaning of Work Study	Cornell University	Antonio Ruiz Quintanilla (607) 255-2742
Monitoring the Future	University of Michigan, Institute for Social Research	Lloyd Johnston (313) 763-5043
National Adult Literacy Survey (NALS)	NCES	Andrew Kolstad (202) 219-1773
National Assessment of Educational Progress (NAEP)	NCES	Gary Phillips (202) 219-1761
National Education Longitudinal Study of 1988 (NELS: 88)	NCES	Jeff Owings (202) 219-1777
National Health Interview Survey Immunization Section	Centers for Disease Control and Prevention	Elizabeth Zell (404) 639-3311
National Household Education Survey (NHES)	NCES	Kathryn Chandler (202) 219-1767
NHES Adult Education Component	NCES	Peter Stowe (202) 219-1363
National Longitudinal Study of the High School Class of 1972 (NLS:72)	NCES	Aurora D'Amico (202) 219-1365

Data Source	Sponsoring Agency	Contact
NCES items in the Current Population Survey (CPS)	NCES	Elvira Hausken (202) 219-1623
Schools and Staffing Survey (SASS)	NCES	Daniel Kasprzyk (202) 219-1588
SASS Teacher Followup Survey	NCES	Sharon Bobbitt (202) 219-1461
Survey of Earned Doctorates Awarded in the United States	NCES	Nancy Schantz (202) 219-1590

Readers interested in further analyses from NCES data sources can contact the National Data Resource Center (NDRC) at the National Center for Education Statistics. NCES has established the NDRC to enable state education personnel, education researchers, and others to obtain special statistical tabulations and analyses of data sets maintained by NCES. Researchers and others can ask the Data Center to perform specific tabulations or analyses, or they can work on-site directly with confidential files upon signing a confidentiality pledge. This service currently is provided free of charge by NCES.

The Data Center has files available from the:

Common Core of Data (CCD),
 Integrated Postsecondary Education Data System (IPEDS),
 National Education Longitudinal Study (NELS:88),
 National Household Education Survey (NHES),
 National Postsecondary Student Aid Study (NPSAS),
 National Study of Postsecondary Faculty, and
 Schools and Staffing Survey (SASS).

In the future, the Data Center plans to add additional databases to its inventory.

To contact the National Data Resource Center, write or call:

Carl Schmitt
 Elementary and Secondary Education Statistics Division
 National Center for Education Statistics
 555 New Jersey Ave, NW
 Washington, DC 20208-5651
 (202) 219-1642

Appendix B: Acknowledgements

The National Education Goals Panel and staff gratefully acknowledge the contributions of many thoughtful and knowledgeable people to the development of the *1994 National Education Goals Report*. Some served on the Panel's Working Group as staff to Goals Panel members or on advisory groups convened to recommend core indicators or to identify actions that federal, state, and local governments should take to achieve the National Education Goals. Others were invaluable consultants offering their expertise on data acquisition and analysis or report production and release. We extend a special thanks to W. Davis Lackey and Leo Martin, representatives of the 1993-94 Chair of the Panel, Governor John R. McKernan, Jr., of Maine, for their contributions. We remain appreciative of the good counsel and support we received from all.

REPORT PRODUCTION

Justin Boesel, Westat, Inc.
Babette Gutmann, Westat, Inc.
Allison Henderson, Westat, Inc.
Anne Lewis, free-lance writer
Scott Miller, Editorial Experts, Inc.
Jim Page, Impact Design, Inc.
Kelli Sechrist, Impact Design, Inc.
Patricia Treichel, U.S. Department of Education
Agnes Tyer, U.S. Department of Education

REPORTING COMMITTEE

Patricia Brown, National Governors' Association
John Burkett, U.S. Department of Education,
National Center for Education Statistics
Alison Englund, Office of the Governor of Minnesota
Lori Gremel, Office of the Governor of Michigan
W. Davis Lackey, Office of the Governor of Maine

Leo Martin, Office of the Governor of Maine
Mary Rollefson, U.S. Department of Education,
National Center for Education Statistics
Marjorie Steinberg, U.S. Senate, Office of
Senator Bingaman
Susan Traiman, National Governors' Association
Georgia Jackson VanAdestine, Office of the Governor
of Michigan

WORKING GROUP

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Patrick Lester, The White House, Office of Domestic Policy
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Kimberly Ross, U.S. Department of Education, Office of Intergovernmental and Interagency Affairs
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Greg McGinity, U.S. Senate, Office of Senator Cochran
Marjorie Steinberg, U.S. Senate, Office of Senator Bingaman

Susan Wilhelm, U.S. House of Representatives, Office of Representative Kildee

State Legislators' Representatives

Angela Bruce-Raeburn, Wisconsin State Legislature, Office of State Representative Coggs
Jean Diener, Delaware State Legislature, Office of State Senator Connor
James Watts, North Carolina State Legislature, Office of State Representative Barnes

Other Working Group Contributors

Aaron Bell, National Conference of State Legislatures
Patty Sullivan, National Governors' Association
Susan Traiman, National Governors' Association
Bayla White, Office of Management and Budget

RESOURCE GROUP ON FEDERAL, STATE, AND LOCAL ACTIONS TO ACHIEVE THE GOALS

Resource Group Convener: Susan Fuhrman, Rutgers University

Members:

Sharon Brumbaugh, Pennsylvania School Boards Association
Gene Carter, Association for Supervision and Curriculum Development
Michael Casserly, The Council of the Great City Schools
Chester Finn, Jr., Edison Project
Frank Newman, Education Commission of the States
Ramsay Selden, Council of Chief State School Officers
Peggy Siegel, National Alliance of Business

Working Group Representatives:

Aaron Bell, National Conference of State Legislatures
Patty Sullivan, National Governors' Association

ADVISORS ON CORE INDICATORS

C. Leonard Anderson, Portland Public Schools
Janet Baldwin, General Education Development Testing Service
Paul Barton, Educational Testing Service
Rolf Blank, Council of Chief State School Officers
Barbara Clements, Council of Chief State School Officers
Peter Ewell, National Center for Higher Education Management Systems

Chester Finn, Jr., Edison Project
Sarah Greene, National Head Start Association
Michael Guerra, National Catholic Education Association
J. David Hawkins, Social Development Research Group
Anne Heald, University of Maryland
Barbara Huff, Federation of Families for Children's Mental Health
Lloyd Johnston, University of Michigan
Sharon Lynn Kagan, Yale University
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Michael Nettles, University of Michigan
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Claire Pelton, San Jose Unified School District
John Porter, Urban Education Alliance, Inc.
Senta Raizen, National Center for Improving Science Education
Chester Richmond, Oak Ridge National Laboratory
William Schmidt, Michigan State University
Ramsay Selden, Council of Chief State School Officers
Thomas Sticht, Applied, Behavioral, and Cognitive Sciences, Inc.
Ronda Talley, American Psychological Association
Rafael Valdivieso, Academy for Educational Development, Inc.
Nicholas Zill, Westat, Inc.

DATA ACQUISITION

Nabeel Alsalam, U.S. Department of Education
Jim Bethel, Westat, Inc.
Marilyn Binkley, U.S. Department of Education
Rolf Blank, Council of Chief State School Officers
Justin Boesel, Westat, Inc.
Marsha Brauen, Westat, Inc.
Susan Broyles, U.S. Department of Education
Joyce Buchanon, University of Michigan
John Burkett, U.S. Department of Education
Amy Cellini, Educational Testing Service
Sally Clarke, U.S. Department of Health and Human Services
Janet Collins, Centers for Disease Control and Prevention
Mary Collins, Westat, Inc.

Jude Corina, Pinkerton Computer Consultants, Inc.
Elaine Cousino, University of Michigan
Wade Curry, The College Board
Julie Daft, Westat, Inc.
Margaret Daly, Westat, Inc.
Lou Danielson, U.S. Department of Education
Emerson Elliott, U.S. Department of Education
Elizabeth Farris, Westat, Inc.
Claudia Gentile, Educational Testing Service
Steven Gorman, U.S. Department of Education
Doreen Gruebel, Council of Chief State School Officers
Babette Gutmann, Westat, Inc.
Elvie Germino Hausken, U.S. Department of Education
Allison Henderson, Westat, Inc.
Susan Hill, National Science Foundation
Ron Hirschhorn, Westat, Inc.
J.G. Huckenpohler, National Science Foundation
Lloyd Johnston, University of Michigan
Laura Kann, Centers for Disease Control and Prevention
Phillip Kaufman, Management Planning Research Associates, Inc.
Walter MacDonald, Educational Testing Service
Ginger Maggio, University of Michigan
Joyce Martin, U.S. Department of Health and Human Services
Marilyn McMillan, U.S. Department of Education
Christine Winqvist Nord, Westat, Inc.
George Mozicka, Quantum Research Corporation
Patrick O'Malley, University of Michigan
Jeffrey Owings, U.S. Department of Education
Linda Penn, Quantum Research Company
Douglas Rhodes, Educational Testing Service
Ethel Sanniez, Westat, Inc.
Elizabeth Sinclair, Westat, Inc.
Thomas Smith, U.S. Department of Education
Stephanie Ventura, U.S. Department of Health and Human Services
Elizabeth Zell, Centers for Disease Control and Prevention
Nicholas Zill, Westat, Inc.

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RESOURCE AND TECHNICAL PLANNING GROUPS

GOAL 1: READY TO LEARN

Resource Group Convener: Ernest Boyer,
The Carnegie Foundation for the Advancement
of Teaching

Members:

James Comer, Yale University
Donna Foglia, Evergreen School District, California
Peter Gerber, MacArthur Foundation
Sarah Greene, National Head Start Association
Sharon Lynn Kagan, Yale University
William Kolberg, National Alliance of Business
Luís Laosa, Educational Testing Service
Michael Levine, Carnegie Corporation of New York
Samuel Meisels, University of Michigan
Evelyn Moore, National Black Child Development
Institute
Lucile Newman, Brown University
Douglas Powell, Purdue University
Julius Richmond, Harvard Medical School
Marilyn Smith, National Association for the Education
of Young Children
James Wilsford, Jim Wilsford Associates, Inc.
Nicholas Zill, Westat, Inc.

Technical Planning Group on Readiness for School
Leader: Sharon Lynn Kagan, Yale University

Members:

Ernest Boyer, The Carnegie Foundation for the
Advancement of Teaching
Sue Bredekamp, National Association for the
Education of Young Children
M. Elizabeth Graue, University of Wisconsin
Luís Laosa, Educational Testing Service

Samuel Meisels, University of Michigan
Evelyn Moore, National Black Child Development
Institute
Lucile Newman, Brown University
Lorrie Shepard, University of Colorado
Valora Washington, The Kellogg Foundation
Nicholas Zill, Westat, Inc.

GOAL 2: SCHOOL COMPLETION

Resource Group Convener: Rafael Valdivieso,
Academy for Educational Development, Inc.

Members:

Janet Baldwin, General Education Development
Testing Service
José Cardenas, The Intercultural Development
Research Association
Barbara Clements, Council of Chief State School
Officers
Edmond Gordon, City College of New York
Noreen López, Illinois State Board of Education
Pamela Keating, University of Washington
Steven Neilson, Milliman and Robertson, Inc.
Bill Padia, California Department of Education
Aaron Pallas, Michigan State University
Richard Wallace, University of Pittsburgh

Technical Planning Subgroup on Core Data Elements
Leader: Barbara Clements, Council of Chief State
School Officers

Members:

Linda Baker, Maryland State Department of Education
Paul Barton, Educational Testing Service
Matthew Cohen, Ohio Department of Education
Dennis Jones, National Center for Higher Education
Management Systems
Glynn Ligon, Evaluation Software Publication
John Porter, Urban Education Alliance, Inc.
Ramsay Selden, Council of Chief State School Officers
Nicholas Zill, Westat, Inc.

GOAL 3: STUDENT ACHIEVEMENT AND CITIZENSHIP

Resource Group Convener: Lauren Resnick,
University of Pittsburgh

Members:

Gordon Ambach, Council of Chief State School
Officers

Chester Finn, Jr., Edison Project
Asa Hilliard, Georgia State University
David Hornbeck, Philadelphia Public Schools
Richard Mills, Vermont Department of Education
Claire Pelton, San Jose Unified School District

Goal 3/5 NAEP Technical Advisory Subgroup
Leader: Ramsay Selden, Council of Chief State
School Officers

Members:

Eva Baker, University of California, Los Angeles
Dorothy Gilford, National Academy of Sciences
Robert Glaser, University of Pittsburgh
Steven Leinwand, Connecticut State Department
of Education
Robert Linn, University of Colorado
Michael Nettles, University of Michigan
Senta Raizen, National Center for Improving
Science Education
William Schmidt, Michigan State University
Elizabeth Stage, National Research Council
Uri Treisman, University of Texas, Austin
James Wilsford, Jim Wilsford Associates, Inc.

**GOAL 4: TEACHER EDUCATION AND
PROFESSIONAL DEVELOPMENT**

(Resource Group will be formed during 1994-95.)

GOAL 5: MATHEMATICS AND SCIENCE

Resource Group Convener: Alvin Trivelpiece, Oak
Ridge National Laboratory

Members:

Iris Carl, National Council of Teachers of Mathematics
Steven Leinwand, Connecticut State Department of
Education
Michael Nettles, University of Michigan
Alba Ortiz, University of Texas, Austin
Senta Raizen, National Center for Improving Science
Education
Ramsay Selden, Council of Chief State School Officers

Goal 3/5 Standards Review Technical Planning
Subgroup Leader: Shirley Malcom, American
Association for the Advancement of Science

Members:

Iris Carl, National Council of Teachers of Mathematics

Thomas Crawford, U.S. Olympic Committee
Mihaly Csikszentmihalyi, University of Chicago
Phillip Daro, University of California
Chester Finn, Jr., Edison Project
Anne Heald, University of Maryland
David Hornbeck, Philadelphia Public Schools
David Kearns, Xerox Corporation
Richard Mills, Vermont Department of Education
Harold Noah, Teachers College, Columbia University
Claire Pelton, San Jose Unified School District
James Renier, Honeywell Corporation
Sidney Smith, Coalition of Essential Schools/Atlas
James Wilsford, Jim Wilsford Associates, Inc.

**Goal 3/5: Higher Education Advisory Group on
Standards Leader:** Michael Timpane, Teachers
College, Columbia University

Members:

Bob Albright, Educational Testing Service
Michael Behnke, Massachusetts Institute of Technology
Kenneth Boutte, Xavier University
David Conley, University of Oregon
Jon Fuller, National Association of Independent
Colleges and Universities
Claire Gaudiani, Connecticut College
Terry Hartle, American Council of Education
Doris Helms, Clemson University
Bob McCabe, Miami-Dade Community College
Arturo Pacheco, University of Texas--El Paso
Paul Ruiz, American Association of Higher Education
Donald Stewart, The College Board
Art Wise, National Council for Accreditation of
Teacher Education

**GOAL 6: ADULT LITERACY AND
LIFELONG LEARNING**

Resource Group Convener: Mark Musick, Southern
Regional Education Board

Members:

Paul Barton, Educational Testing Service
Forest Chisman, Southport Institute for Policy Analysis
Peter Ewell, National Center for Higher Education
Management Systems
Joy McLarty, American College Testing
William Spring, Federal Reserve Bank of Boston
Thomas Sticht, Applied, Behavioral, and Cognitive
Sciences, Inc.
Marc Tucker, National Center on Education and
the Economy

GOAL 7: SAFE, DISCIPLINED, AND ALCOHOL- AND DRUG-FREE SCHOOLS

Resource Group Convener: John Porter, Urban Education Alliance

Members:

C. Leonard Anderson, Portland Public Schools
Michael Guerra, National Catholic Education Association
J. David Hawkins, Social Development Research Group
Fred Hechinger, Carnegie Corporation of New York
Barbara Huff, Federation of Families for Children's Mental Health
Lloyd Johnston, University of Michigan
Ronda Talley, American Psychological Association

Consultants for Resource Group on Safe, Disciplined, Alcohol- and Drug-free Schools:

Janet Collins, Centers for Disease Control and Prevention
Vincent Giordano, New York City Public Schools
Oliver Moles, U.S. Department of Education
Ed Zubrow, Independent Consultant

Task Force on Disciplined Environments Conducive to Learning Leader: Ronda Tally, American Psychological Association

Members:

C. Leonard Anderson, Portland Public Schools
Michael Guerra, National Catholic Education Association
J. David Hawkins, Social Development Research Group
Fred Hechinger, Carnegie Corporation of New York
Barbara Huff, Federation of Families for Children's Mental Health

Consultants for Task Force on Disciplined Environments Conducive to Learning:

Oliver Moles, U.S. Department of Education
Ed Zubrow, Independent Consultant

GOAL 8: PARENTAL PARTICIPATION

(Resource Group will be formed during 1994-95.)

TASK FORCE ON EDUCATION NETWORK TECHNOLOGY

Leader: Robert Palaich, Education Commission of the States

Members:

Laura Breeden, U.S. Department of Commerce
John Clement, National Science Foundation
Jan Hawkins, Bank Street College of Education
Robert Kansky, National Academy of Sciences
Pamela Keating, University of Washington
Glenn Kessler, Fairfax County Public Schools, Virginia
Mark Musick, Southern Regional Education Board
Bill Padia, California Department of Education
Nora Sabelli, National Science Foundation
Rafael Valdivieso, Academy for Educational Development, Inc.

Task Force Advisors:

Steven Gould, Congressional Research Service
Gerald Malitz, U.S. Department of Education
Linda Roberts, U.S. Department of Education

National Education Goals Panel Staff

Ken Nelson
Executive Director

Cynthia D. Prince
Associate Director for Analysis and Reporting

Ruth Whitman Chacon
Associate Director for Communications

Martin E. Orland
Associate Director for Analysis and Reporting – through July 9, 1994
Acting Director – through December 1993

PROGRAM STAFF

Leslie A. Lawrence
Education Associate

Emily O. Wurtz
Senior Education Associate

ADMINISTRATIVE STAFF

Tia M. Cosey
Receptionist and Office Automation Assistant

Cynthia M. Dixon
Program Assistant

Charles J. Walter
Executive Officer

with assistance from

Hilary M. Cairns
Bryan J. Flynn
Ramesh Ganeshram
Geri Anderson Nielsen
Julie O'Brian
Barbara A. Pape
Cristina Ritchie

1994 National Education Goals Report and Data Volumes
QUESTIONNAIRE

The National Education Goals Panel values your response to the *1994 Goals Report* and the *National and State Data Volumes*. Please take a few moments to fill out and return this questionnaire so that we can continue to improve future reports. Mail or FAX to:

National Education Goals Panel
1850 M Street, NW, Suite 270, Washington, DC 20036
PHONE (202) 632-0952
FAX (202) 632-0957

Name: _____

Organization: _____

Title/Position: _____

Address: _____

Phone: _____ Fax: _____

Please Circle As Many As Apply:

Student / Parent / Educator / Business or Community Leader /
Federal, State, or Local Policymaker / Concerned Citizen

1. Do you have any general comments about the Report (e.g., clarity of the data and text, new focus on sixteen core indicators, graphics, etc.)?

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1994 Volume Two: State Data

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Goal 1 Ready to Learn

Goal 2 School Completion

Goal 3 Student Achievement and Citizenship

Goal 4 Teacher Education and Professional Development

Goal 5 Mathematics and Science

Goal 6 Adult Literacy and Lifelong Learning

Goal 7 Safe, Disciplined, and Alcohol- and Drug-free Schools

Goal 8 Parental Participation

NATIONAL EDUCATION GOALS PANEL
1850 M STREET, N.W., SUITE 270
WASHINGTON, D.C. 20036
(202) 632-0952