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## ABSTRACT

In six chapters and 118 tables with interpretive charts, this annual report presents data on the American educational system, including its students, its personnel, and its larger social context. Among its many findings are that Hispanics and students in central cities showed the highest dropout rates; that almost as many female as male high school students expect to go to graduate school; and that higher education costs did not grow appreciably as a percentage of median family income in the 1970s. The topics covered in the report include educational level, public or private control, educational broadcasting, educational participation and attainment, public concerns about education, school organizational structure, enrollment, curricula, financing, school performance, teacher salaries, access to higher education, graduates and degrees, vocational programs, educational status of the labor force, school-to-work transition, youth unemployment, and handicapped students and programs. The authors control for such variables as sex, age, ethnic group, rural/urban residence, geographic region, family socioeconomic and educational background, English language facility, student-teacher ratio, school size, and funding sources. Attached to the report are a cumulative index for the four annual reports from 1978 through 1981 and an appendix giving data sources and definitions of terms. (Author/RW)

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# The Condition of Education

## 1981 Edition

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## On The Inside

### The Context for Education

- Public schools educate the overwhelming majority of students from kindergarten through the undergraduate level of college. However, privately controlled institutions of higher education are responsible for training a substantial proportion of graduate students and more than half of all first-professional students (entry 1.1).

- Of all public television licensees, 79 percent provided educational services at the elementary/secondary level and 84 percent served participants at the postsecondary level (entry 1.5).

- More than three-fourths of adults in the West have graduated from high school compared to less than two-thirds of adults in the South (entry 1.12).

- Metropolitan central cities and nonmetropolitan areas exhibited appreciably higher dropout rates than the rest of the country. Hispanic 14- to 34-year-olds showed the highest rates, about 40 percent in metropolitan areas (entry 1.13).

- The 27,753 provider institutions offering vocational programs enrolled 19,563,175 students in 1978-79. Virtually all secondary level vocational enrollments were in public schools with less than a single percentage point in private schools (entries 4.1 and 4.2).

- Among high school seniors participating in the labor force, nearly a third of blacks and a fifth of Hispanics were unemployed compared to a 15 percent unemployment rate for whites. Unemployment rates among high school students were higher in urban communities than in suburban or rural areas. (entries 5.13 and 5.14).

### Higher Education

- In 1972 high school males were nearly twice as likely as females to say they expected to go to graduate school, but by 1980 that difference had narrowed to less than 2 percent (entry 3.1).

- Nearly two-thirds of the high school class of 1972 had attended college by 1979; one-fourth had obtained a bachelor's degree or higher. High school expectations played an important part in determining higher education attainment (entry 3.2).

- Although higher education tuition and fees grew rapidly during the 1970's, these charges, calculated as a percent of median family income, did not change significantly (entry 3.7).

- After passage of the Middle Income Students Assistance Act in 1978, the proportions of middle and high income students receiving financial aid increased (entry 3.8).

- Higher education enrollment peaked in 1980 at nearly 12 million students (entry 3.9).

- Women have represented the majority of first-year freshmen since 1976 and by 1979, they were the majority of all students (entry 3.11).

- In just 2 years, between 1977 and 1979, the number of men earning the bachelor's degree dropped by nearly 4 percent, and increased for women by nearly 5 percent. Whites earning the bachelor's degree dropped by nearly 1 percent, and the increase for minorities ranged between 2 and 14 percent (entry 3.15).

- Higher education expenditures increased by 117 percent between 1971 and 1979, but when adjusted for inflation and enrollment, expenditures varied by less than 4 percent during that period (entry 3.24).

### Elementary/Secondary Education

- In 7 States, public school enrollment actually increased at both the elementary and secondary level between 1970 and 1979, while in 12 States, total enrollment declined by over 15 percent (entry 2.1).

- Enrollment in private schools was most prevalent in the Northeast and North Central regions and in central city areas. In Northeastern central cities, more than one-fifth of all students attended private schools (entry 2.3).

- Although public secondary schools had slightly lower student-teacher ratios than Catholic schools, they had more students per counselors, assistant deans/principals, and librarians than private schools on the average (entry 2.8).

- While several States across the country proposed competency-based certification of teachers, evaluation activity was concentrated in the South (entry 2.10).

- The distribution of seniors within the broad curricular categories of academic, general, and vocational education differed little by sex but markedly by racial/ethnic group (entry 2.20).

- Although participation in private schools was highly related to family income, the tuition and fees paid did not differ appreciably, except between the highest income group and all other groups (entry 2.25).

- Overall evaluations of students' narrative essays revealed slight shifts in writing performance during the 1970's. Scores of 9-year-olds improved somewhat, those of 13-year-olds declined, primarily between 1969 and 1973, and those of 17-year-olds showed a minor decline (entry 2.26).

- A majority of all handicapped students spent less than 10 hours a week in special education programs, although this varied considerably by the type of handicap. Mentally retarded, seriously emotionally disturbed, orthopedically impaired, and deaf students were far less likely to spend most of their day in regular classrooms (entry 6.8).

**The  
Condition of Education 1981  
Edition**

Statistical Report  
National Center for Education Statistics

By Nancy B. Dearman  
and Valena White Plisko

U.S. Department of Education  
T.H. Bell, Secretary

Office of Educational Research and Improvement  
Dick W. Hays, Acting Assistant Secretary

National Center for Education Statistics  
Marie D. Eldridge, Administrator

**National Center for  
Education Statistics**

“The purpose of the Center shall be to collect and disseminate statistics and other data related to education in the United States and in other nations. The Center shall . . . collect, collate, and from time to time, report full and complete statistics on the conditions of education in the United States; conduct and publish reports on specialized analyses of the meaning and significance of such statistics; . . . and review and report on education activities in foreign countries.”—Section 406 (b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1).

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*The Condition of Education* is the annual statistical report describing conditions in education as well as those in the larger society that affect education. It is prepared by the National Center for Education Statistics as required by Public Law 93-380, Title V, Section 501 (a). This is the seventh such report.

In this report, statistical data are presented on a variety of issues concerning educational institutions, participants, and personnel. The report is organized to reflect the characteristics of the education system and its relationship to the larger society. The first section of this report describes trends and developments affecting education at all levels. Chapter 1 establishes the context for examining the condition of education, chapter 2 covers elementary/secondary education, and chapter 3 examines higher education. In the second section of the report, special topics have been selected for closer analysis. Chapter 4 looks at vocational education, chapter 5 examines education's relationship to employment, chapter 6 describes education of the handicapped.

The narrative for each chapter refers to data presented in chartbook form. Each entry on a topic consists of a table and a chart, which are presented together. The data highlighted in the chart, and briefly described in a statement accompanying the chart, are extracted from the facing table. Data used in the chart appear in boldface type in the table, which may be readily consulted for further information.

An effort was made in preparing this report to address a broad range of significant issues at all levels of education. Data on emerging as well as recurring issues are reported. Many of the statistics presented here relate to issues not included in previous editions of this report. To aid readers desiring statistics on other topics or more data on a particular issue, a cumulative index lists topics and data shown in the 1978, 1979, and 1980 editions, as well as in the present edition.

Part Two of this report contains a description of the activities of the Center for fiscal years 1981 and 1982 to assist the reader in understanding the information and services available in the National Center for Education Statistics.

## Acknowledgements

*The Condition of Education, 1980, Statistical Report*, was prepared by the National Center for Education Statistics (NCES) in the Division of Statistical Services under the supervision of Nancy-Jane Stubbs, Assistant Administrator, and Forrest W. Harrison, Statistical Information Branch Chief.

Project Director Nancy B. Dearman and Associate Project Director Valena White Plisko were responsible for the development and preparation of the report. Richard Whalen assisted in researching data and was responsible for producing all computer graphics used for chart design. Maria Owings contributed materials and text for the chapter on education and work and provided research and editing services.

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## Table of Contents

	Page
<b>I. An Overview of Education</b>	
<b>1. A Context for Examining the Condition of Education</b>	1
by Valena White Plisko	2
Complexity of Structure	2
Variations in Participation and Attainment	5
Diversity of Public Concerns	8
<b>2. Elementary/Secondary Education</b>	48
by Valena White Plisko	
Enrollment	48
Organization	50
Programs and Curriculum	52
Finance	55
Performance	56
<b>3. Higher Education</b>	118
by Nancy B. Dearman	
Access to Higher Education	118
Participation in Higher Education	120
Educational Outcomes	122
Organization	123
<b>II. Selected Topics in Education</b>	
<b>4. Vocational Education</b>	180
by Rolf Wulfsberg and Mary Golladay	
Institutional Perspective	180
Student Characteristics and Outcomes	186
<b>5. Education and Work</b>	218
by Maria Facchina Owings and Nancy B. Dearman	
Educational Status of the Labor Force	218
Transition from Education to Work	220
Youth Unemployment	226
<b>6. Education of the Handicapped</b>	264
by Michael O'Grady, Office for Civil Rights and Paul Byrne, Office of Special Education and Rehabilitative Services	
Students Being Served	264
Environmental Conditions	266
Types of Programs	267
Personnel	267
<b>III. Appendix</b>	
Data Sources	294
Definitions of Selected Terms	302
<b>IV. Cumulative Index</b>	
	311



Table of Entries

I. An Overview of Education

Page

Chapter 1: A Context for Examining the Condition of Education

Complexity of Structure

1.1	Enrollment in Elementary/Secondary and Higher Education by Level and Control	11
1.2	Revenue and Nonrevenue Receipts of Educational Institutions by Source of Funds	13
1.3	Distribution of Public Elementary/Secondary School Students and Schools by Enrollment Size	15
1.4	Institutions of Higher Education by Enrollment Size and Percent of Enrollment by Type and Control	17
1.5	Public Television Stations and Public Radio Stations Providing Educational Services	19
1.6	Museums Offering Programs for Students	21
1.7	Public Libraries and Average Weekly Use	23
1.8	Providers of Instruction in Adult Education Courses	25

Variations in Participation and Attainment

1.9	Educational Participation of the Population by Age	27
1.10	Family Educational Background of High School Dropouts, Graduates With no College, and Full-Time College Students	29
1.11	Adolescent Dropouts and Functionally Illiterate Adults by Racial/Ethnic Group, Nativity, and Non-English Language (NEL) Background	31
1.12	High School Graduates Among Population 25 Years Old and Over by Region and Racial/Ethnic Group	33
1.13	Dropouts Among 14- to 34-Year-Olds by Metropolitan Status and Racial/Ethnic Group	35
1.14	Educational Attainment of Adult Population and Adult Education Participants	37

Diversity of Public Concerns

1.15	Quality of the Public Schools: Opinions of Parents with Public School Children	39
------	--	----

	Page
1.16 Problems Facing the Public Schools: Public Opinion	41
1.17 Confidence in the People Running Institutions: Public Opinion	43
1.18 Spending Levels to Improve National Programs: Public Opinion	45
1.19 Priorities for the U.S. Department of Education: Public Opinion	47

## Chapter 2: Elementary/Secondary Education

### Enrollment

2.1 Public Elementary/Secondary Enrollment Change Between 1970 and 1979	59
2.2 Minority Student Distributions in Schools and Classrooms	61
2.3 Public and Private Elementary/Secondary School Enrollment by Region and Metropolitan Status	63
2.4 Public and Private Elementary/Secondary School Enrollment in Metropolitan Areas by Racial/Ethnic Group	65

### Organization

2.5 Number and Estimated Distribution of Public Elementary/ Secondary Schools by Level and Grade Span	67
2.6 Student-Teacher Ratios in Public Elementary/Secondary Schools by Grade Span	69
2.7 Private Elementary/Secondary School Enrollment by Religious Affiliation	71
2.8 Secondary School Student-Staff Ratios	73
2.9 Teaching Field Layoffs and Shortages as Percent of all Teacher Layoffs and Shortages	75
2.10 State Competency-Based Teacher Certification Provisions	77

### Programs and Curriculum

2.11 Hispanic and Asian American Students Identified as Limited English Speaking or Non-English Speaking (LES/NES) and Percent Served	79
2.12 Participants in Gifted and Talented Programs as Percent of Public School Enrollment	81

	Page
2.13 Participation in Gifted and Talented Programs by Sex and Racial/Ethnic Group	83
2.14 Secondary Schools Providing Special Programs	85
2.15 Secondary Schools With Students Participating in Federally Funded Programs	87
2.16 Competency Areas Assessed in State-Level Minimum Competency Testing Programs	89
2.17 Secondary Schools Offering Selected Courses	91
2.18 Coursework Participation of Secondary School Students	93
2.19 Enrollment in Traditionally Single Sex Courses	95
2.20 Curricular Program of Secondary School Seniors	97
<b>Finance</b>	
2.21 Local Share of Public Elementary/Secondary School Revenues	99
2.22 Distribution of School Districts by Core Current Expenditure per Student	101
2.23 Public Elementary/Secondary School Expenditures per Student by Function	103
2.24 Private Elementary/Secondary School Tuition and Fees by Level and Affiliation	105
2.25 Private Elementary/Secondary School Tuition and Fees by Family Income and Racial/Ethnic Group	107
<b>Performance</b>	
2.26 Shifts in Overall Quality Assessed in Narrative Essays by Age Group	109
2.27 Standardized Scores of Secondary School Sophomores and Seniors by Racial/Ethnic Group	111
2.28 High School Graduates	113
2.29 Racial/Ethnic Composition of Enrollment and of the High School Graduating Class	115
2.30 Disciplinary Actions by Sex and by Racial/Ethnic Group of Student	117

**Chapter 3: Higher Education****Access to Higher Education**

3.1	Educational Expectations of 1972 and 1980 High School Seniors	127
3.2	Educational Expectations Compared to Attainment by Sex and Racial/Ethnic Group	129
3.3	Educational Expectations Compared to Attainment by Ability and Socioeconomic Status (SES)	131
3.4	Credentials Required for Admission to Institutions of Higher Education	133
3.5	Importance of Admission Test Scores	135
3.6	Means Scores on College Entrance Examinations	137
3.7	Student Charges as a Percent of Median Family Income	139
3.8	Proportion of Federal Financial Aid Recipients Among Sophomores and Juniors	141

**Participation in Higher Education**

3.9	Enrollment in Institutions of Higher Education	143
3.10	Average Annual Percent Change in Full-Time-Equivalent Enrollment, 1970 to 1979, by State	145
3.11	Enrollment of First-Time Freshmen and Total Enrollment in Higher Education by Sex	147
3.12	Population, High School Graduates, and College Enrollment of 18- to 24-Year-Olds by Racial/Ethnic Group	149
3.13	Distribution of College Enrollment and Primary Family Members by Educational Attainment of Family Head	151
3.14	Families by College Enrollment Status and Family Income for 18- to 24-Year-Old Family Members	153

**Educational Outcomes**

3.15	Change in Bachelor's and Master's Degrees Conferred by Race/Ethnicity and Sex	155
3.16	Change in Doctor's and First-Professional Degrees Conferred by Race/Ethnicity and Sex	157
3.17	Change in Area of Study of Earned Degrees, 1971 to 1979	159
3.18	First-Professional Degrees Earned by Discipline Specialty	161

	Page
Organization*	
3.19 Public and Private 2- and 4-Year Institutions of Higher Education by State	163
3.20 Distributions and Trends of Enrollment in Institutions of Higher Education	165
3.21 Percent of Institutions that Offer Summer and Evening Sessions	167
3.22 Higher Education Institutions Offering Evening or Weekend Baccalaureate Degree Credit Courses	169
3.23 Education and General Revenues and Expenditures by Source and Function in Institutions of Higher Education	171
3.24 Current Funds Expenditures, Enrollments, and Price Indices in Higher Education	173
3.25 Faculty Earnings Beyond the Base Salary	175
3.26 Average Faculty Salaries by Academic Rank and Discipline Group	177

**II. Selected Topics****Page****Chapter 4: Vocational Education****Institutional Perspective**

4.1	Providers of Vocational Education	191
4.2	Enrollments in Vocational Education	193
4.3	Vocational Education Enrollments (VEA) by Program Area and Level	195
4.4	Population and Instructional Stations in Vocational Education Institutions Offering Five or More Programs	197
4.5	Institutions with Five or More Vocational Programs by Type and Area Served	199
4.6	Reported Condition of Vocational Education Institutions by Type of Area Served	201
4.7	Racial/Ethnic Distribution of Instructional Staff in Institutions Offering Five or More Vocational Education Programs	203
4.8	Female Full-Time Instructional Staff by Program Area in Institutions Offering Five or More Vocational Education Programs	205

**Student Characteristics and Outcomes**

4.9	Distribution of Vocational Students by Racial/Ethnic Group and Sex	207
4.10	High School Seniors Aspiring to Attend Technical or Vocational Schools	209
4.11	Work Status and Plans of Students in Noncollegiate Postsecondary Schools	211
4.12	Highest Level of Education Received by Young Adults by High School Program	213
4.13	Jobs Held by Young Adults 7½ Years After High School	215
4.14	Job Satisfaction of Young Adults 7½ Years After High School	217

**Chapter 5: Education and Work****Educational Status of the Labor Force**

5.1	Years of School Completed by the Civilian Labor Force	231
5.2	Occupation Group of Employed Persons by Years of School Completed	233
5.3	Employment Status of 16- to 24-Year-Olds Not Enrolled in School by Educational Attainment	235

## Transition from Education to Work

5.4	Labor Force Participation Rates of High School Students by School Program	237
5.5	Characteristics of Jobs Held by High School Students	239
5.6	Occupations of Recent College Graduates by Major Field of Study in the Professions	241
5.7	Occupations of Recent College Graduates by Major Field of Study in Arts and Sciences	243
5.8	Relationship of Schooling to the Current Job of 1972 High School Seniors in 1979	245
5.9	Percent of the High School Class of 1972 Citing Need for More Education in 1979 by High School Program and Educational Attainment	247
5.10	Percent of the High School Class of 1972 Citing Need for More Education in 1979 by Race/Ethnicity and Ability and by Race/Ethnicity and SES	249
5.11	Guidance Counselor's Influence on After High School Plans	251
5.12	Attitudes of Young Adults Toward High School	253

## Youth Unemployment

5.13	Employment Status of High School Students by Racial/Ethnic Group and Sex	255
5.14	Unemployment Rates of High School Students by Type of Community and Racial/Ethnic Group	257
5.15	High School Students Participating in Government Sponsored Work Programs	259
5.16	Distribution of Employed High School Students by Type of Employer	261
5.17	Mean Reservation Wage and Earned Wage of Sophomore and Senior High School Students	263

## Chapter 6: Education of the Handicapped

## Students Being Served

6.1	Handicapped Students Participating in Special Education as Percent of Those Requiring Special Education	269
6.2	Special Education Students Served in Local School Districts and Special Purpose Facilities	271

	Page
6.3 Children Educated and Residing in Special Purpose Facilities	273
6.4 Handicapped Enrollment in Vocational Programs as Percent of Total Enrollment	275
6.5 Special Education Enrollment by Sex and Racial/Ethnic Group	277
6.6 Handicapped Population 3- to 21-Years-Old Served under P.L. 94-142 and P.L. 89-313	279
Environmental Conditions	
6.7 Percent of Handicapped Population Served in Regular Classrooms Under P.L. 94-142 and P.L. 89-313	281
6.8 Amount of Time Spent in Special Education Programs by Type of Handicap	283
6.9 Accessibility to Handicapped Students of Public Elementary/Secondary Schools by State Compared to Nation	285
Types of Programs	
6.10 Alternative Placements Provided by Residential Special Purpose Facilities	287
6.11 Academic, Vocational Education, and Special Training Services Provided by Special Purpose Facilities	289
Personnel	
6.12 Special Classroom Teachers Employed to Meet Full Educational Opportunities Goal for the Handicapped	291



# The Condition of Education

## I An Overview of Education

## Chapter 1 A Context for Examining the Condition of Education

This chapter is intended as an introductory overview to American education. As such it presents only the broadest profile of a very complex system. The American educational system—or systems, to be more accurate—represents a microcosm of American society in all its structural complexity, cultural variety, and public involvement. Just as America is known as a pluralistic society, the educational system can be characterized by its diversity of structure, participating groups, and public support.

Later chapters complete this profile by portraying education at various levels and in various roles. Chapters 2 and 3 detail participation, resources, and outcomes at the elementary/secondary and higher education levels. Chapter 4 examines these components in vocational education at the secondary and postsecondary levels. Chapter 5 focuses on education's role in facilitating the transition to work. Chapter 6 provides, for the first-time, a detailed examination of the extent to which public education offers full participation to handicapped students.

### Complexity of Structure

Administration of American schooling is a responsibility shared by various levels of governance and by both the public and private sectors. Public and private elementary/secondary schools and higher education institutions enrolled about 58.5 million students in the fall of 1979 (entry 1.1). Over 50 million of these students were enrolled in publicly controlled institutions, operated primarily by local school districts at the elementary/secondary level and by State boards of education at the higher education level. Students in privately controlled institutions comprised about 11 percent of all elementary/secondary students and approximately 22 percent of all higher education students. The role of private higher education institutions was most prominent beyond the undergraduate years; these institutions enrolled over one-third of all graduate students and almost 60 percent of all students in first-professional degree programs.

The contributions to education of both the public and private sector are also evidenced in the sources of funding. In the 1978-79 school year, three-fourths of the almost \$160 billion dollars received by educational institutions were derived from governmental sources (entry 1.2). This proportion varied absolutely by control and level of institution; publicly controlled elementary/secondary schools received virtually all of their funding from governmental sources while privately controlled elementary/secondary schools received no direct government support. At the higher education level, non-governmental sources including student fees and private contributions accounted for 39 percent of receipts of public institutions and 79 percent of receipts of private institutions. In the public sector, State government support predominated, sharing the responsibility of school finance with localities at the elementary/secondary level. The Federal Government contributed almost 9 billion dollars to public elementary/secondary education and 4.6 and 3.3 billion dollars to public and private higher education, respectively. The Federal share of funding represented 9.7 percent of public elementary/secondary school receipts, 12.1 percent of public higher education receipts, and 17.9 percent of private higher education receipts.

Responding to a diversity of community, State, and national needs, formal education in the United States exhibits a multitude of organizational structures. The forms of individual structural units are difficult to document statistically and can only be approximated by examining the size of these units. Size serves as a proxy measure because it does influence the scale of administration, may affect the nature of interactions and, as some analysts have posited, perhaps the quality of the educational experience as well.

Enrollment sizes of public elementary/secondary schools in the 1978-79 school year averaged 489 students per school, within a wide range from 50 students or less to 2,000 students or more (entry 1.3). Although one-teacher schools were rare, schools with under 100 students represented 10 percent of all schools. In terms of students, however, they accounted for only 1 percent of the total enrollment. At the opposite end of the scale, schools of 2,000 students or more comprised 1 percent of all schools and enrolled 7 percent of all students. Enrollments of 250 to 499 students represented the modal enrollment size, comprising 34 percent of schools and 26 percent of students. Above this category were found 36 percent of schools and 65 percent of students. The enrollment sizes of private elementary/secondary schools were smaller than public schools, averaging 259 students per school for school year 1978-79 (see entry 2.7 in Chapter 2). Although the range was narrower, there was some variation by religious affiliation, with unaffiliated schools being generally smaller in size. Among religiously affiliated schools, Catholic schools were the largest, with an average size of 332 students, and Seventh Day Adventist schools were the smallest, with enrollments of 134 students.

On a larger scale, higher education exhibits a similar diversity of forms. Sixty-five percent of institutions had enrollments of under 2,500 students, representing 16 percent of the total enrollment in the fall of 1979 (entry 1.4). At the other end of the scale, 10 percent of all institutions, those with enrollments of 10,000 students or more, enrolled almost half of all students. Public institutions made up less than half of all institutions but accounted for 78 percent of enrollment, meaning that they were fewer in number but larger in enrollment size. Private 4-year institutions represented the most typical form, accounting for 20 percent of enrollments.

Schooling is supplemented outside of the formal structure by numerous educational providers. Public television and radio provide educational services to millions of Americans both within and outside the classroom. Of the 166 public television licensees, 79 percent offered programs at the elementary/secondary level and 84 percent offered programs at the postsecondary level in 1978-79 (entry 1.5). The 131 licensees providing elementary/secondary services, broadcast an average of 53 series—36 at the elementary level and 17 at the secondary level. Licensees served 43 percent of the potential public school districts and 33 percent of the potential private schools estimated in their viewing areas. Within these viewing areas, educational television broadcasts reached an estimated 14 million students, or 36 percent of the potential audience. At the postsecondary level, 139 licensees provided services, offering formal series for credit, informal adult education series, and to a lesser extent, inservice series intended primarily for professional certification. The licensees estimated in their combined total viewing areas that there were 1,361 4-year institutions and 1,045 2-year institutions of higher education. Regular liaison had been established with 516 4-year institutions and 467 2-year institutions. Formal series reached an estimated 51,000 participants, inservice series another 52,000, and informal adult education an audience estimated at over 916,000.

Public radio licensees provided educational services to a lesser extent: 10 percent aired programs at the elementary/secondary level and 26 percent broadcast at the postsecondary level. Elementary/secondary series reached an estimated 1.2 million students. Public radio was more involved in postsecondary education. Fourteen percent of licensees provided formal series, 16 percent offered informal adult education series, and 4 percent broadcast inservice training.

Museums also shared in providing educational activities. According to the 1979 Museum Program survey, education was ranked by more than two-thirds of museums as a major priority, outranked only by exhibiting. Two-thirds of the Nation's 4,408 museums also reported an increase in their educational activities and programs in 1979, while only 2 percent reported a decrease. The high priority given to education was manifest in a multitude of programs serving participants at all levels. Nearly 9 out of 10 museums offered tours designed for elementary students and almost three-fourths offered tours for secondary school students (entry 1.6). More than half of all museums arranged for tours and almost one-third scheduled lectures for higher education students. Furthermore, no less than one-fifth of the museums provided special demonstrations, lectures, and film-related media programs for these students.

In addition to offering informal nontraditional activities and programs, nearly one-third of museums cooperated with an accredited school, college, or university to provide programs for academic credit. Programs to train teachers to use museum resources were provided by 27 percent of all institutions. To assist the scholar, researcher, or visitor, two-thirds of the museums had library facilities and 25 percent maintained museum classrooms. Informal and formal programs combined provided an estimated 25 million semester hours of education.

Public libraries, too, provided learning experiences outside of the classroom setting and even beyond the traditional library setting. In the fall of 1978, there were 8,456 central libraries and 6,527 branch libraries located throughout the Nation (entry 1.7). Over 49 thousand bookmobile and other mobile unit stops extended library services beyond the library facility and into the community. These extension units comprised the largest category of service outlets. An estimated 8.5 million library visits were reported during a typical week in 1978. It was also estimated that, in an average week, visitors used over 3.8 million library materials in the library and librarians handled over 3 million reference transactions.

A recent development which promises to extend further the full range of library services is networking, whereby libraries join in a cooperative arrangement to share their resources. These arrangements go beyond reciprocal borrowing, and may include joint acquisitions, shared cataloging, and managing and administering of computer information systems. In 1977-78, 608 such networks operated among 32,148 public, local elementary/secondary, college and university, State agency, and special libraries. Through networking, public library users can have access to resources not available from the public library system alone.

Together with traditional postsecondary institutions, many organizations and agencies outside the educational system provide a wealth of adult education activities. These organizations were quite diverse, with no single category of course provider administering more than one-fifth of all courses in 1978 (entry 1.8). Two-year colleges and vocational-technical institutes provided about 18 percent of all courses, 4-year colleges and universities 20 percent, and trade and business schools 7 percent. Postsecondary collegiate and noncollegiate schools combined accounted for 45 percent of adult education instruction. This suggests that another 55 percent of courses were taken through providers other than those which were established to offer educational services to adults. Among these other providers, business/industry provided 11 percent of all courses and government agencies and private community organizations each provided about 8 percent of all courses.

### Variations in Participation and Attainment

Of all our social institutions, the educational system perhaps best typifies the openness of American society. Yet as a reflection of the larger society, education mirrors the variations in participation and attainment by different groups in the social structure. While opening opportunities, it may also reinforce existing differences in status, wealth, and power. An examination of rates of participation and levels of attainment documents that education is not distributed equally across age, socioeconomic, or racial/ethnic lines.

About 59 million Americans, or 29 percent of the population, were enrolled in formal education in October of 1979. An examination of participation rates by age group readily suggests that formal schooling was focused upon the young (entry 1.9). From 25 percent of the population enrolled at age 3, the participation rate rose steeply to 92 percent by age 5. Enrollment approached 100 percent between the ages of 6 and 14, tapering off to 84 percent by age 17. The majority of 18-year-olds and about one-third of 19- to 21-year-olds were engaged in formal schooling, mainly at the higher education level. About 10 percent of the population 25 to 29 years old also participated. Participation beyond age 34, however, was not appreciable, engaging 4 percent or less of the population.

A look at the relationship between the educational status of family members and the educational attainment of family heads reveals both the disparities that exist and the progress that has been made to equalize educational opportunities. Most high school dropouts had family heads with only limited schooling in 1979 (entry 1.10). Two-thirds of family members who dropped out of high school had family heads who never finished high school. Most high school graduates with no college experience had family heads who did not go beyond high school. Similarly, a majority of family members who were full-time college students were from households in which the heads had some college training.

However, the data also indicate that appreciable gains in educational status have been made in a single generation by racial/ethnic minorities. Most black and Hispanic family members had family heads with fewer than 12 years of schooling. Although minority members in college tended to have better educated family heads than blacks and Hispanics in general, 44 percent of blacks and 55 percent of Hispanics were from families in which the heads had less than a high school education. Only one-fourth of black and Hispanic college students had family heads with any college experience. These findings suggest that education may reinforce the status ascribed by birth, but also may offer opportunities for upward mobility.

Measures of educational progress and attainment among adolescents and adults indicate considerable variation by racial/ethnic membership, country of origin, and language background. Data from the Spring 1976 Survey of Income and Education provide a detailed look at the educational status of whites, blacks, Hispanics, Asian Americans, and American Indians among two age groups. Racial/ethnic membership in some but not all cases distinguished those 14- to 17-year-olds who had fallen behind in school (entry 1.11). Adolescents of Hispanic origin were somewhat more likely than other groups to be enrolled below the expected grade, while Asian Americans were the least likely. Proportions of blacks and American Indians behind in school were not different from the percentage of all 14- to 17-year-olds below the expected grade; in fact, American Indian rates were lower than the general population. This finding is difficult to interpret without later looking at the dropout rate among American Indian adolescents. Variations in expected grade status were not clearly apparent by nativity or language background.

Distinctions by racial/ethnic group, nativity, and language background were clearer when the adolescent dropout rate was examined. Black, Hispanic, and American Indian 14- to 17-year-olds were decidedly more likely to have dropped out of school. Compared to the national rate of 10 percent, the rate for blacks was 15 percent and the rates for Hispanics and American Indians were 20 and 22 percent, respectively. This suggests that American Indian adolescents were more likely to drop out of school completely rather than be retained below the expected grade. Distinctions by nativity and language background were most evident among Hispanics. Hispanic adolescents who were foreign born or had non-English language backgrounds had significantly higher dropout rates than other Hispanics. Hispanics with predominantly English language backgrounds, in contrast, had rates that approached the national average.

It is among the population 18 years old and over that the distinctions by racial/ethnic membership, nativity, and language background were most sharply drawn. Whites and Asian Americans had the highest attainment rates, followed much further behind by blacks, American Indians, and Hispanics. Whereas 3 percent of the general population was classified as functionally illiterate, having completed less than 5 years of schooling, comparable rates for blacks and American Indians were 8 percent and for Hispanics, 14 percent. In all racial/ethnic groups, adults with non-English backgrounds had lower educational attainments than the predominantly English language population. Except among blacks and American Indians, foreign-borns were also at a distinct educational disadvantage. Foreign-born Asian Americans had illiteracy rates twice as high as the national average, while native-born Asian Americans had rates far below the Nation.

Regions of the Nation exhibited some variation in the level of educational attainment of adults partially as a result of the racial/ethnic and socioeconomic mix of the population. A consistent ordering in the level of educational attainment of whites, blacks, and Hispanics was evident in all regions of the country in March of 1979 (entry 1.12). The West had the highest attainment rates, with high school graduates comprising three-fourths of the residents. Regional variations were sharpest among blacks; 42 percent of blacks in the South held a high school diploma compared to 62 percent in the West. Within each region including the West, Hispanics had rates far lower than the general population; across the Nation only 42 percent had graduated from high school.

The consistent ranking in educational status of whites, blacks, and Hispanics was also evident when dropout rates of young adults were examined in terms of their metropolitan residence. Among the population 14 to 34 years old, Hispanics had the highest dropout rates, approaching 40 percent in nonmetropolitan areas in 1979 (entry 1.13). Rates among blacks showed the largest variation by area of residence; 15 percent of blacks living in metropolitan areas outside the central cities had dropped out of school compared to 21 percent in the central cities and 25 percent in the nonmetropolitan areas. These findings, taken together, document that although progress has been made, considerable variation continues to exist among segments of the population in obtaining a basic education.

A look at participation in adult education indicates that those differences are not likely to disappear within a single generation. The findings document that adult education in 1978 engaged participants with relatively high educational attainments, not persons with low levels. Participants in adult part-time educational activities in 1978 were almost twice as likely as the general adult population to have higher education experience—57 percent compared to 30 percent (entry 1.14). Almost 33 percent of adult education participants had completed at least 4 years of college, in comparison to 14 percent of the total adult population. Although adults who had not completed high school comprised one-third of the adult population, they made up only one-tenth of all participants in adult education. This is so despite the fact that the focus of Federal support for adult education is directed toward adults with learning deficiencies.

### Diversity of Public Concerns

Dependent on governmental funding and designed to serve the whole of American society, education in the United States is subject to public scrutiny and concern. According to the Gallup Poll, parents' estimations of the public schools that their children attend generally declined from 1974, the first year in which the question was asked (entry 1.15). In 1974, almost two-thirds of parents with public school children rated their community schools superior or above average. By 1979, the proportion according the school high marks had dropped to less than half, and this trend continued into 1980. Some note of optimism may be sounded, however, in that the average rating in 1980, about a C+, was slightly higher than in 1979, although the change was not significant statistically. Any conclusion that this indicates an end to the decline must await further data and future developments.

For the 12th consecutive year, the Gallup Poll has asked respondents to cite what they believe to be the major problems facing the public schools in their community (entry 1.16). The question is open-ended, meaning that respondents may cite any problems that come to mind rather than selecting an answer from among fixed choices. Interestingly enough, not only has there been little change in the list that respondents have drawn up over time, the rank order of concerns also has remained fairly stable. Discipline continued to be the major concern in 1980; approximately one person in every four cited it as a major problem. As in 1979, the related problem of use of dope or drugs ranked second. Poor curriculum also figured among the major concerns. Over the same period, the public's concern over racial policies diminished along with its concern over inadequate funding and staff.

According to National Opinion Research Center findings, public confidence in educational leaders stabilized in 1980, following a period of jagged decline from the mid-1970's (entry 1.17). These results are consistent with those reported by the Gallup Poll on parents' opinions about their local schools. It is uncertain what this stability represents since confidence in other leaders outside of government actually rose in 1980, after experiencing a similar pattern of decline in the 1970's. Most respondents in 1980 expressed "only some confidence" in the people running educational institutions, slightly under one-third responded with a "great deal" of confidence, and about 12 percent said that they had "hardly any" confidence.

Contrasting these ratings with those given to the scientific community over the same period reveals this loss of support for educational leadership. In earlier years, educational leadership engendered the same level of public confidence as the scientific community and even as late as 1977, the two groups were evenly matched. Yet in the late 1970's, a gap developed and widened with support deteriorating for educational leaders. As of 1980, the public's estimation of educational leadership was appreciably lower than that accorded the medical and the scientific professions but significantly higher than that given to the executive and the legislative branches of the Federal Government and to the television industry.



Despite the deterioration in the late 1970's in current opinion about the local schools and the Nation's educational leadership, public support for educational spending remained remarkably stable during this period (entry 1.18). In addition, this stability in public support for educational spending did not hold true for spending on other national programs. Using National Opinion Research Center data from 1973 through 1980, a net support index was computed which took into account not only positive responses but negative responses as well. By subtracting the proportion of respondents answering that "too much is being spent" from the proportion answering that "too little is being spent", the net support index yielded values that could range from a possible +100.0 indicating complete positive support for increased spending to a possible -100.0 percent, indicating a total lack of support.

From 1973 to 1980, the net support index for spending to improve education remained at about 40 percentage points, a relatively high level of support. In addition the measure varied by less than 5 percentage points throughout the period, indicating considerable stability. Support for spending in most other areas showed a general decline. A noteworthy exception was support for national defense spending which rose precipitously from a negative value in 1976. In 1980, support for educational spending was outranked by support for increased spending for crime prevention, health, and national defense. These areas are likely to compete with education for further public attention and funding, particularly in an era of tight fiscal constraints. Thus, despite the generally favorable support for increased educational funding, competition for public support and financing from these other programs may diminish the resources that education can command.

Not only does education contend with other national programs for public support; various concerns must compete for public attention within education itself. Educators and policy-makers at all levels of governance must balance those concerns in allocating limited resources. Creation of a Federal Department of Education has encouraged discussion as to what the Nation's educational priorities should be. To find out what the public considered to be the top educational priorities for the Department, the most recent Gallup Poll asked respondents to select their most important concerns from a list of priorities (entry 1.19). Respondents in 1980 were asked to choose 5 areas out of 13 which they considered to merit the greatest national attention in the next few years.

The largest proportion of respondents, two-thirds, cited a "basic education (reading, writing, arithmetic)" among the five highest priorities. Over-half of the respondents included vocational training of students among the most important concerns. Also featured in the top five were improved teacher training and education, career counseling, and parent training. Somewhat further down the list were expanded college opportunities, individualized education plans, and expanded opportunities for gifted students. It was noteworthy that even those concerns that were low on the national list were selected by approximately one-fifth to one-fourth of respondents. This suggests that except for the mandate to provide a basic education and vocational training, there was no agreement among the majority of the public on educational priorities for the Nation.

**Table 1.1**  
**Enrollment in educational institutions, by control of institution and**  
**level of instruction: Fall 1979**

Level of instruction	Total	Publicly controlled	Privately controlled
All levels (elementary/secondary, higher)	58,490,564	50,837,487	7,653,077
Elementary/secondary	46,920,665	41,800,665	5,120,000
Preprimary	2,894,223	2,692,223	202,000
Regular <sup>1</sup>	2,875,223	2,675,223	200,000
Other <sup>2</sup>	19,000	17,000	2,000
Grades 1st to 8th	28,725,209	25,352,209	3,373,000
Regular <sup>1</sup>	28,559,209	25,209,209	3,350,000
Other <sup>2</sup>	166,000	143,000	23,000
Grades 9th to 12th and postgraduate	15,301,233	13,756,233	1,545,000
Regular <sup>1</sup>	15,204,233	13,694,233	1,510,000
Other <sup>2</sup>	97,000	62,000	35,000
Higher education <sup>3</sup>	11,569,899	9,036,822	2,533,077
Undergraduate	8,820,657	7,040,027	1,780,630
Graduate	1,069,749	700,059	369,690
First-professional	263,404	106,148	157,256
Unclassified	1,416,089	1,190,588	225,501

<sup>1</sup> Includes enrollments in local public school systems and in private schools (church-affiliated and nonsectarian). Excludes subcollegiate departments of higher education, residential schools for exceptional children, and Federal schools.

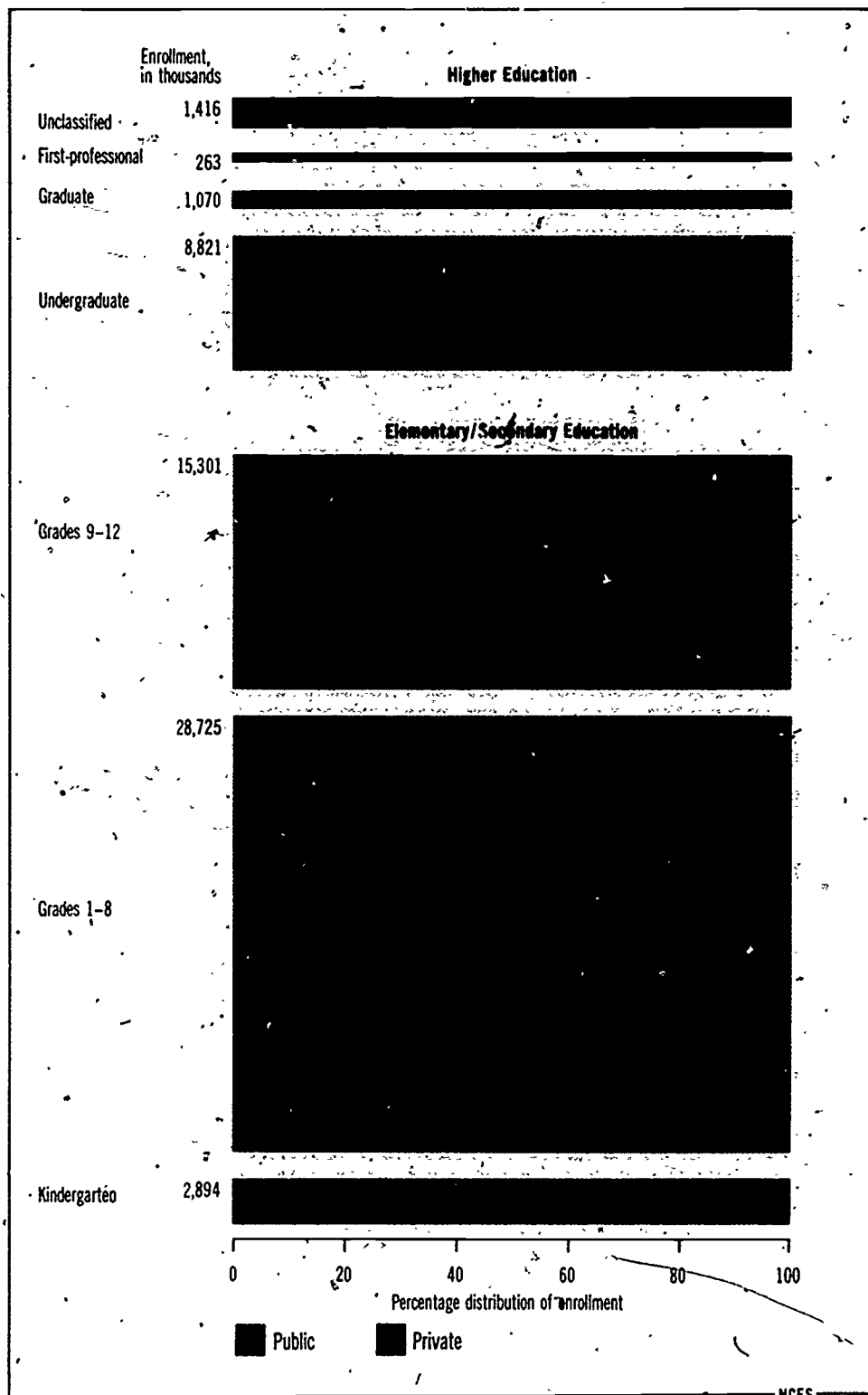
<sup>2</sup> Estimated.

<sup>3</sup> Includes degree-credit and non-degree-credit students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public Elementary and Secondary Day Schools, Fall 1979*, *Fall Enrollment in Higher Education, 1979*, and unpublished data.

**Chart 1.1**  
**Enrollment in Elementary/Secondary and Higher Education by**  
**Level and Control.**

Responsibility for education is shared by public and private instructional institutions, with public schools educating the overwhelming majority of students from kindergarten through the undergraduate level of college. However privately controlled institutions of higher education are responsible for training a substantial proportion of graduate students and more than half of all first-professional students.



NCS

**Table 1.2**  
**Receipts of educational institutions, by level of instruction, control of institution,**  
**and source of funds: School year 1978-79**

Control of institution and source of funds	Elementary/secondary education <sup>1</sup>				Higher education <sup>2</sup>		
	All levels	Total	Revenue	Nonrevenue	Total <sup>3</sup>	Current funds revenue	Estimated capital outlay by source
Amount, in thousands of dollars							
Total	\$159,630,102	\$103,145,483	\$99,311,997	\$3,833,486	\$56,484,619	\$51,837,789	\$4,646,830
Publicly controlled	130,236,112	92,290,483	88,456,997	3,833,486	37,945,629	34,527,476	3,418,153
Government	115,379,537	92,090,483	88,256,997	3,833,486	23,289,054	22,018,614	1,270,440
Federal	13,600,161	8,994,493	8,994,493	...	4,605,668	4,539,102	66,566
State	57,317,467	40,245,891	40,245,891	...	17,071,576	16,018,101	1,053,475
Local	44,461,909	42,850,099	39,016,613	3,833,486	1,611,810	1,461,411	150,399
Student fees						4,380,567	
Private gifts and grants	14,856,575	200,000	200,000	...	14,656,575	835,892	2,147,713
All other sources						7,292,403	
Privately controlled	29,393,990	<sup>4</sup> 10,855,000	<sup>4</sup> 10,855,000	( <sup>5</sup> )	18,538,989	17,310,313	1,228,676
Government	3,811,729	...	...	...	3,811,729	3,769,513	42,216
Federal	3,334,413	...	...	...	3,334,413	3,312,224	22,189
State	365,218	...	...	...	365,218	345,682	19,536
Local	112,098	...	...	...	112,098	111,607	491
Student fees						6,323,604	
Private gifts and grants	25,582,261	<sup>4</sup> 10,855,000	<sup>4</sup> 10,855,000	( <sup>5</sup> )	14,727,261	1,653,475	1,186,460
All other sources						5,563,722	

<sup>1</sup> Includes estimated income for other schools, such as residential schools for exceptional children, Federal schools for Indians, and Federal schools on Federal installations. Subcollegiate departments of institutions of higher education are included under higher education.

<sup>2</sup> Includes subcollegiate departments of institutions of higher education. Excludes schools of nursing not affiliated with colleges and universities.

<sup>3</sup> Includes estimates of revenue for plant expansion.

<sup>4</sup> Estimated on the basis of expenditure per teacher in public elementary/secondary schools.

<sup>5</sup> Included in revenue.

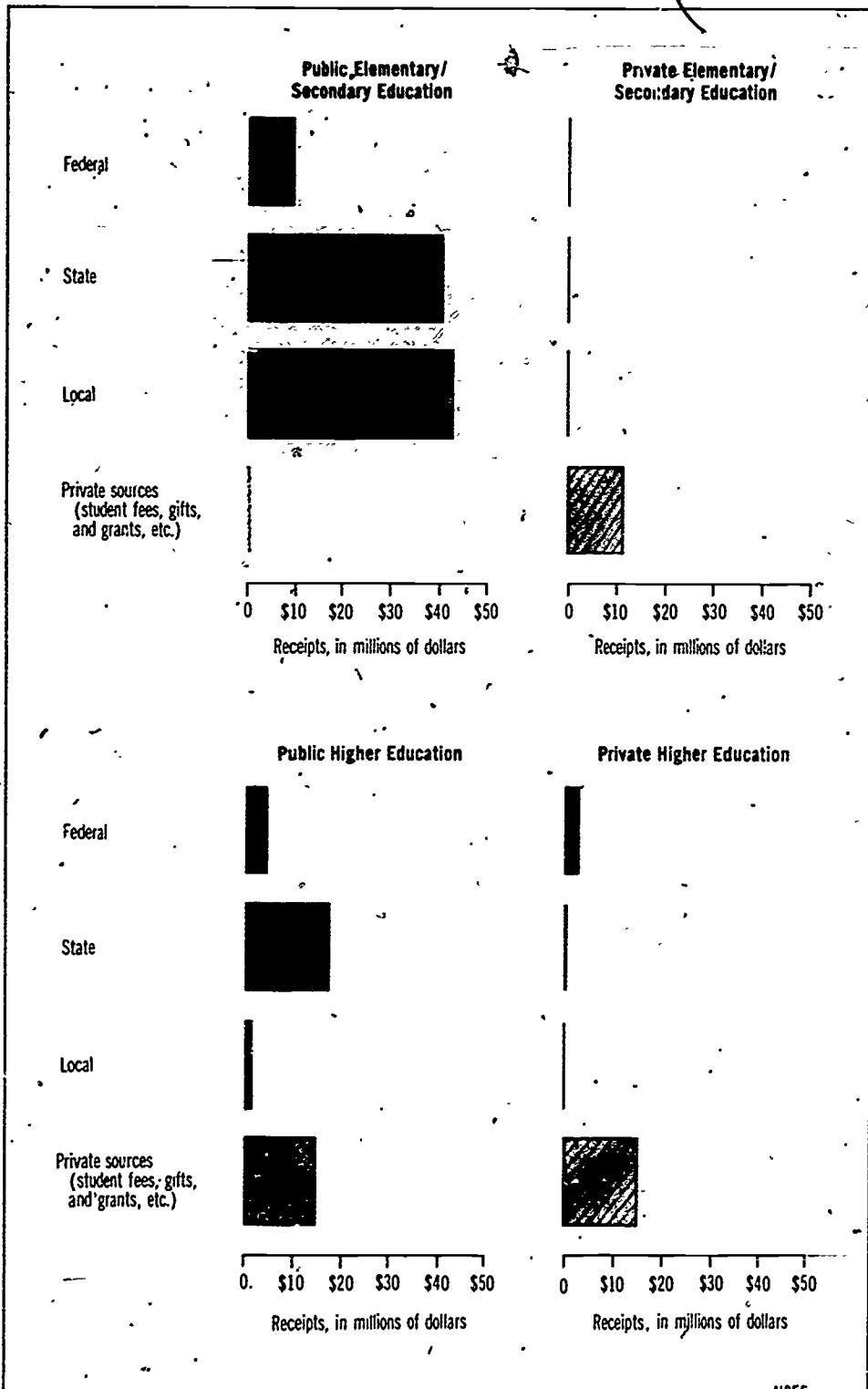
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Revenues and Expenditures for Public Elementary and Secondary Education, 1978-79*, forthcoming; *Financial Statistics of Institutions of Higher Education, Fiscal Year 1979*; and unpublished data.

**Chart 1.2**

**Revenue and Nonrevenue Receipts of Educational Institutions by Source of Funds**

Funding for public education was derived largely from State government funds, followed closely by local government funds at the elementary/secondary level, and, to a lesser degree, by Federal funds at the higher education level. For private education, the main sources of funding were student fees, private gifts and grants, and other nongovernmental sources, with the Federal Government having contributed a small but significant share of private higher education funding.



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**Table 1.3**

**Estimated percentage distribution of public elementary/secondary school students and schools, by enrollment size of school: School year 1978-79**

School enrollment size	Students	Schools
	Number	
Total	42,550,000	87,006
	Percentage distribution	
Total	100.0	100.0
Fewer than 50 students	.2	5.1
50 to 99 students	.8	5.4
100 to 249 students	7.2	19.6
250 to 499 students	26.5	34.3
500 to 749 students	24.4	19.2
750 to 999 students	14.0	7.8
1,000 to 1,999 students	20.2	7.3
2,000 students or more	6.7	1.3

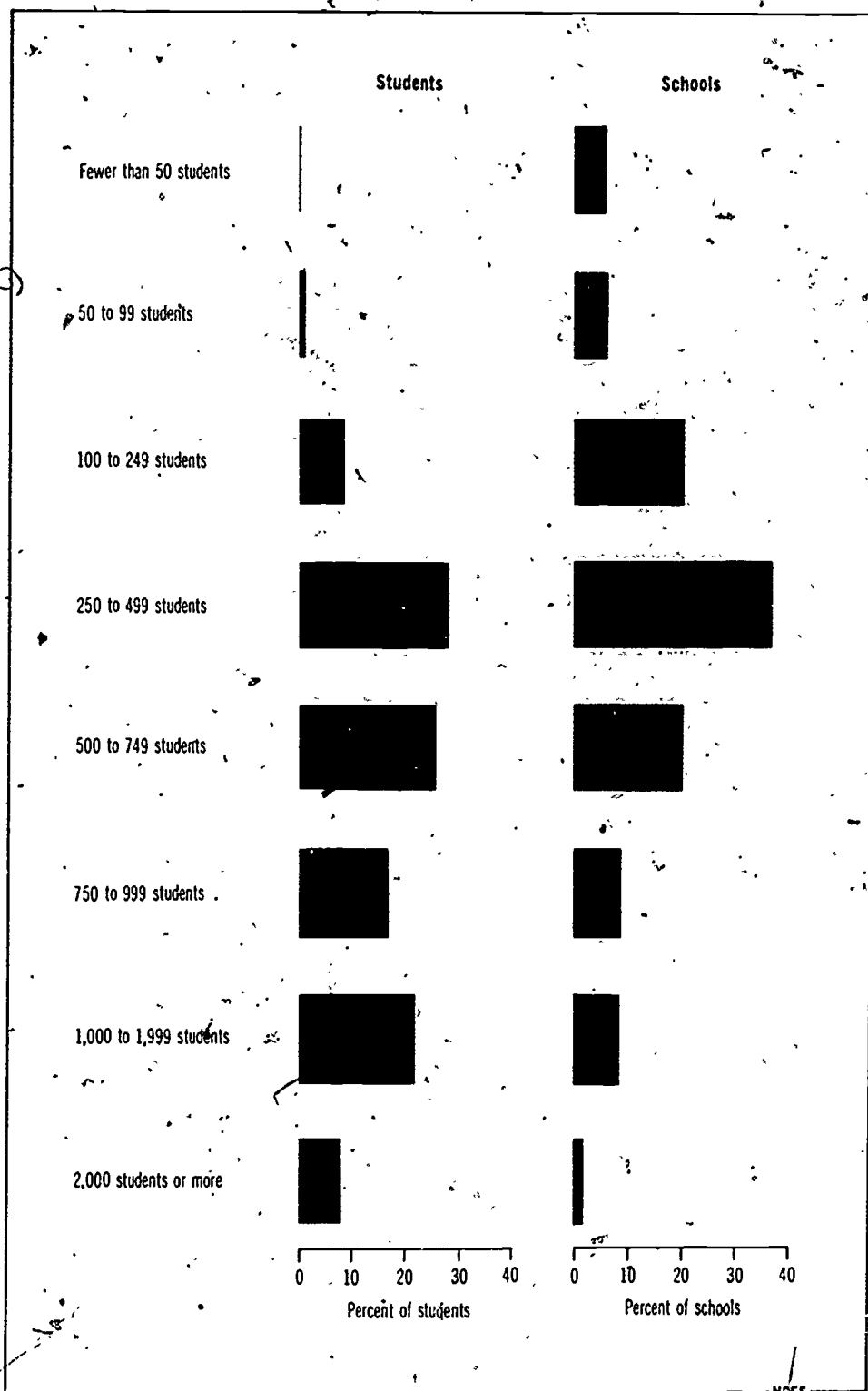
NOTE: The distribution of schools was estimated from data reported by 47 States, representing 87 percent of all students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD) 1978-79 Survey, unpublished tabulations.

**Chart 1.3**

**Distribution of Public Elementary/Secondary School Students and Schools by Enrollment Size**

Enrollment sizes of public elementary/secondary schools varied considerably, ranging from fewer than 50 students to 2,000 students or more. The modal enrollment category, 250 to 499 students, represented one-fourth of all students and one-third of all schools.



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**Table 1.4**

**Number of institutions<sup>1</sup> and branches of higher education and enrollment distribution, by type, control, and enrollment size: Fall 1979**

Control of institution and enrollment size	All institutions		4-year institutions		2-year institutions	
	Number	Percent of total enrollment	Number	Percent of total enrollment	Number	Percent of total enrollment*
Public and private	3,150	100.0	1,957	63.6	1,193	36.4
Under 500	679	1.4	486	.9	193	.5
500 to 999	529	3.4	336	2.1	193	1.2
1,000 to 2,499	845	11.7	497	6.9	348	4.8
2,500 to 4,999	422	12.9	231	7.2	191	5.7
5,000 to 9,999	358	21.8	193	11.8	165	10.0
10,000 to 19,999	219	25.9	138	16.2	81	9.8
20,000 and over	98	22.9	76	18.4	22	4.5
Public	1,474	78.1	549	43.0	925	35.1
Under 500	50	.2	14	(2)	36	.1
500 to 999	133	.9	18	.1	115	.7
1,000 to 2,499	416	5.9	95	1.5	321	4.5
2,500 to 4,999	299	9.2	112	3.6	187	5.6
5,000 to 9,999	292	17.8	129	7.9	163	9.9
10,000 to 19,999	194	23.1	113	13.4	81	9.8
20,000 and over	90	21.0	68	16.5	22	4.5
Private	1,676	21.9	1,408	20.5	268	1.4
Under 500	629	1.3	472	.9	157	.4
500 to 999	396	2.5	318	2.0	78	.5
1,000 to 2,499	429	5.7	402	5.4	27	.3
2,500 to 4,999	123	3.7	119	3.6	4	.1
5,000 to 9,999	66	4.0	64	3.9	2	.1
10,000 to 19,999	25	2.8	25	2.8	0	0
20,000 and over	8	1.9	8	1.9	0	0

<sup>1</sup> Includes only those institutions reporting enrollment. Does not include correspondence schools.

\* Less than 0.05 percent.

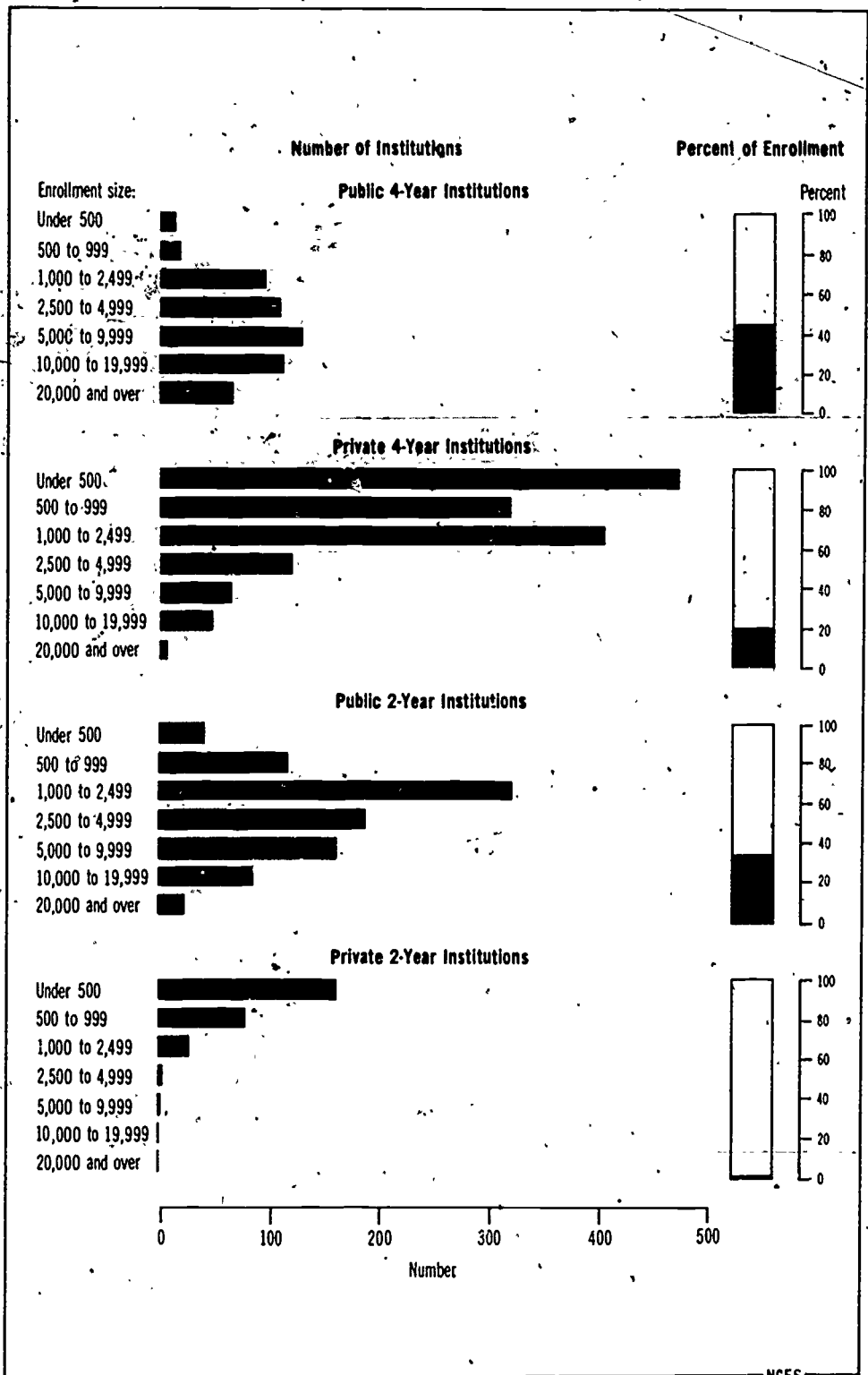
NOTE: Details may not add to totals because of rounding.

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



**Chart 1.4**  
**Institutions of Higher Education by Enrollment Size and Percent of Enrollment by Type and Control**

Public institutions of higher education, while fewer in number than private institutions, were more likely to be larger in terms of enrollment size. Public 4-year and 2-year institutions comprised more than 78 percent of higher education enrollment in 1979-80.



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**Table 1.5**  
**Public television stations and public radio stations providing educational services,**  
**by level of service: 1978-79**

Item	Elementary/secondary services	Postsecondary services			Total
		Formal <sup>1</sup>	Informal adult <sup>2</sup>	Inservice <sup>3</sup>	
<b>Public television</b>					
Number of licensees providing educational services	131	107	104	54	139
Licensees providing as percent of all (166) licensees	79	64	63	33	84
Average number of educational series broadcast	53	4	4	3	11
Estimated enrollment or audience	14,000,000	50,647	916,771	51,648	(+)
<b>Public radio</b>					
Number of licensees providing educational services	21	28	32	9	52
Licensees providing as percent of all (202) licensees	10	14	16	4	26
Average number of educational series broadcast	30	2	3	1	6
Estimated enrollment or audience	1,200,000	8,762	4,635	324	(+)

<sup>1</sup> Services offered usually for credit with some feedback.

<sup>2</sup> Services not for credit with little or no feedback.

<sup>3</sup> Services provided usually for professional certification.

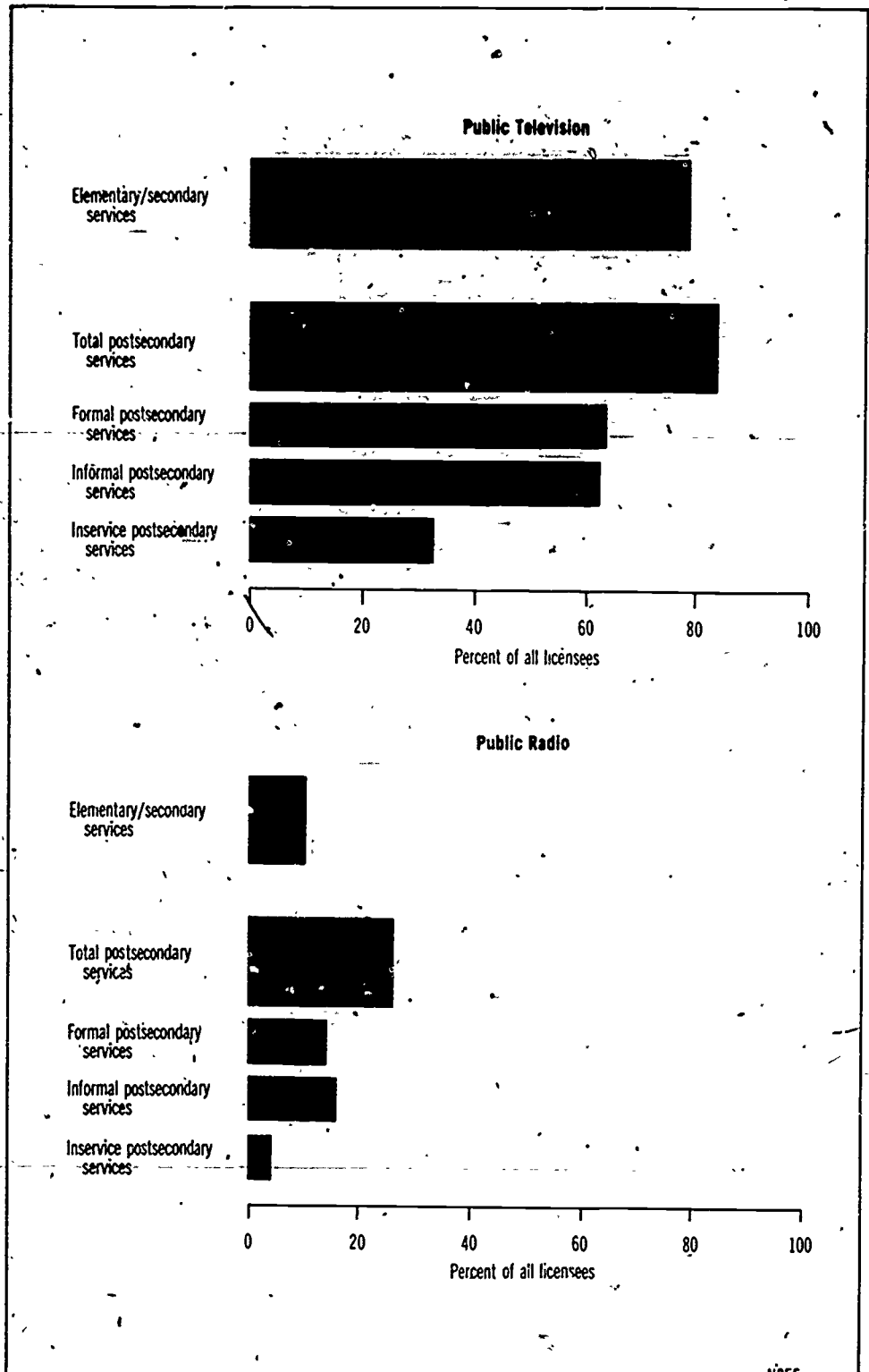
<sup>4</sup> Unduplicated total counts not available.

SOURCE: Corporation for Public Broadcasting, Office of Educational Activities, *A Survey of Public Television Stations' Educational Services, 1978-79, 1980*, and *A Study of Public Radio Stations' Educational Services, 1978-79, 1980*.

**Chart 1.5**

**Public Television Stations and Public Radio Stations Providing Educational Services**

Of all public television licensees, 79 percent provided educational services at the elementary/secondary level and 84 percent provided services at the postsecondary level. Public radio stations much less frequently provided instruction: only 10 percent at the elementary/secondary level and 26 percent at the postsecondary level.



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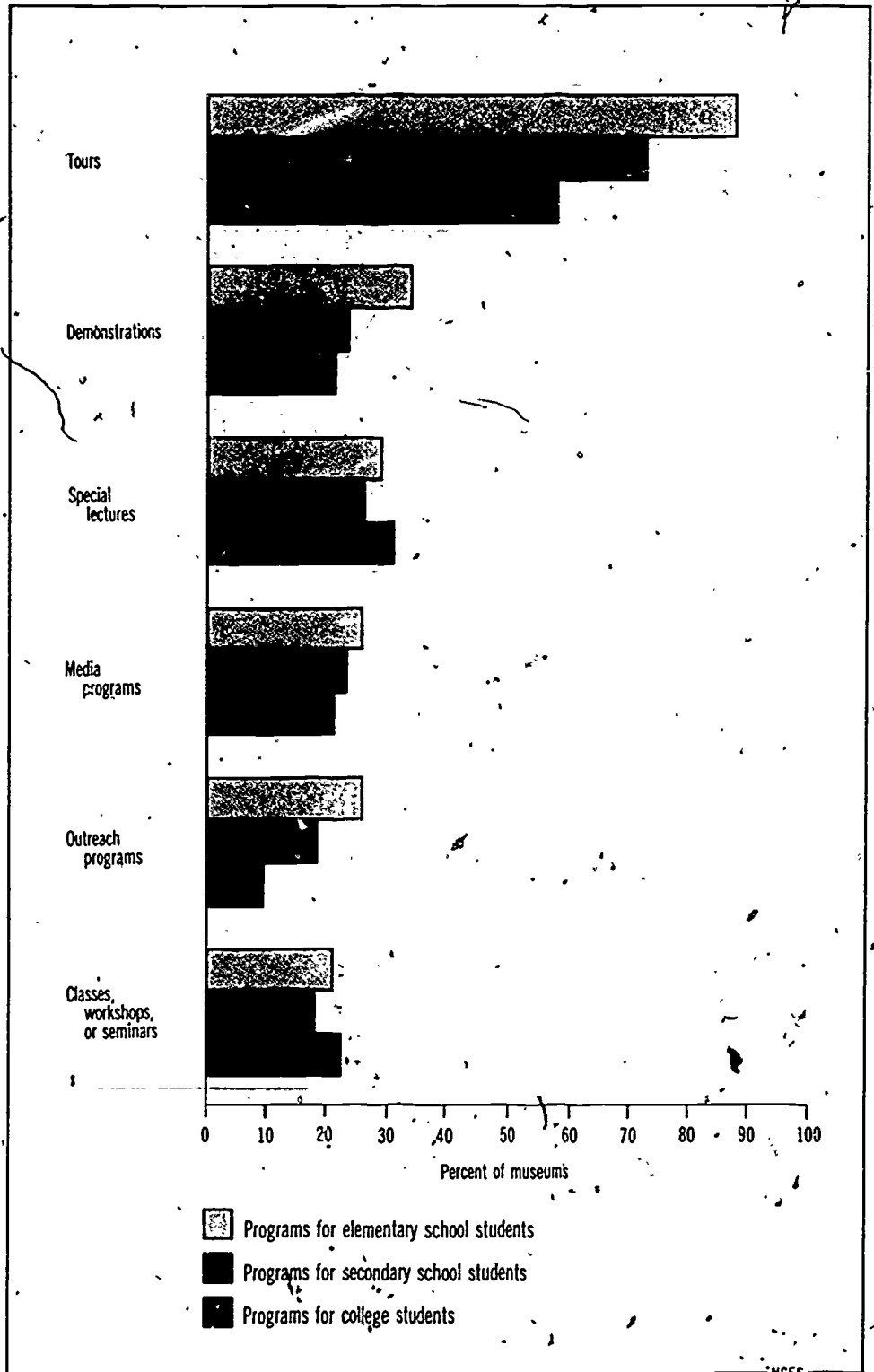
**Table 1.6****Museums offering educational programs for students, by level of program: 1979**

Program	Elementary	Secondary	College
	Percent of museums		
Tours	88	73	58
Demonstrations	34	23	21
Special lectures	29	26	31
Film and other media programs	26	23	21
Outreach programs	26	18	9
Classes, workshops, seminars	21	18	22
Performing arts	8	5	8
Other	5	5	4

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Museum Programs 1979*, forthcoming.

**Chart 1.6**  
**Museums Offering Programs for Students**

Museums offered a variety of educational programs to students at all levels, with tours for elementary school students being the most frequently offered. Almost one-third of museums provided special lectures designed for college students as well.



**Table 1.7**  
**Number of public libraries and average weekly use: Fall 1978**

Item	Number
Total public library service outlets	70,956
Central libraries	8,456
Branches	6,527
Bookmobile and other mobile unit stops	49,343
Other public service outlets	6,630
Attendance per week	8,509,105
In-library use of library materials per week	3,823,401
Reference transactions <sup>1</sup> per week	3,050,371
Directional transactions <sup>2</sup> per week	1,768,631

<sup>1</sup> Information contact which involves the knowledge, use, or instruction in the use of one or more information sources by library staff.

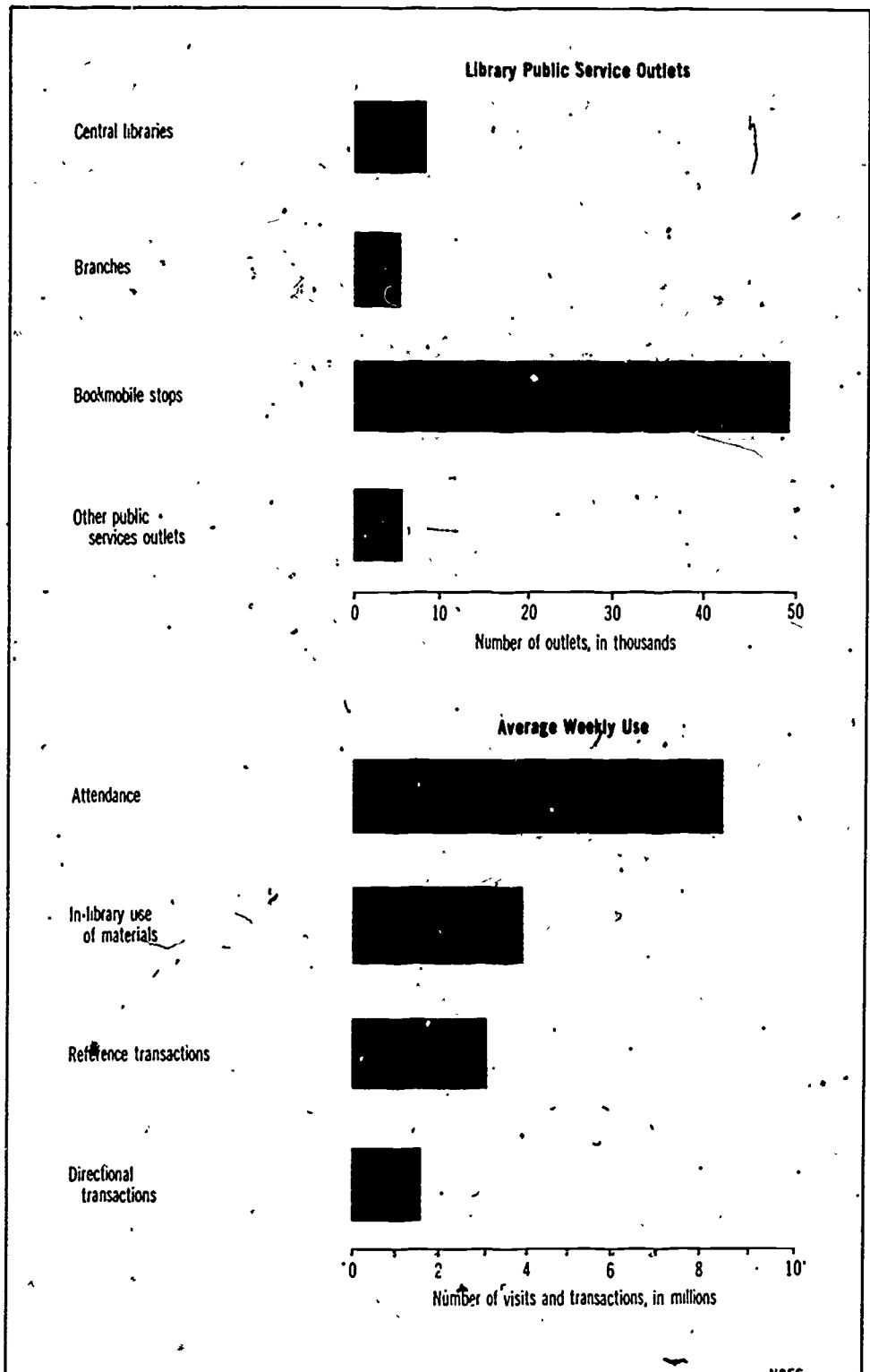
<sup>2</sup> Information contact which facilitates the use of the library and which does not involve the knowledge, use, or instruction in the use of any information sources other than those which describe the library.

NOTE: An average week is a week in which the library is open its regular hours, containing no holidays.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Library General Information Survey, LIGIS III, unpublished tabulations.

**Chart 1.7**  
**Public Libraries and Average Weekly Use**

In an average week, 8.5 million visits were reported in the more than 70 thousand public library service outlets.



NCES

**Table 1.8**  
**Courses taken by participants in adult education, by type of provider of instruction: Year ending May 1978**

Provider of instruction	Number of courses in thousands	Percentage distribution
Total courses	28,894	100.0
Type of provider of instruction:		
School	16,554	57.3
Elementary, junior, or high school	2,725	9.4
2-year college or vocational- technical institute	5,321	18.4
4-year college or university	5,666	19.6
Vocational, trade, or business school	1,933	6.7
Other school	909	3.1
Business or industry	3,165	11.0
Labor organization or professional association	1,086	3.8
Government agency	2,445	8.5
Private community organization	2,394	8.3
Tutor or private instructor	1,338	4.6
Other	1,268	4.4
Did not know	100	.3
Not reported	544	1.9
Employer provided instruction for employees:	4,741	100.0
School	1,146	24.2
Business or industry	1,998	42.1
Labor organization or professional association	213	4.5
Government agency	985	20.8
Private community organization	116	2.4
Other	283	6.0

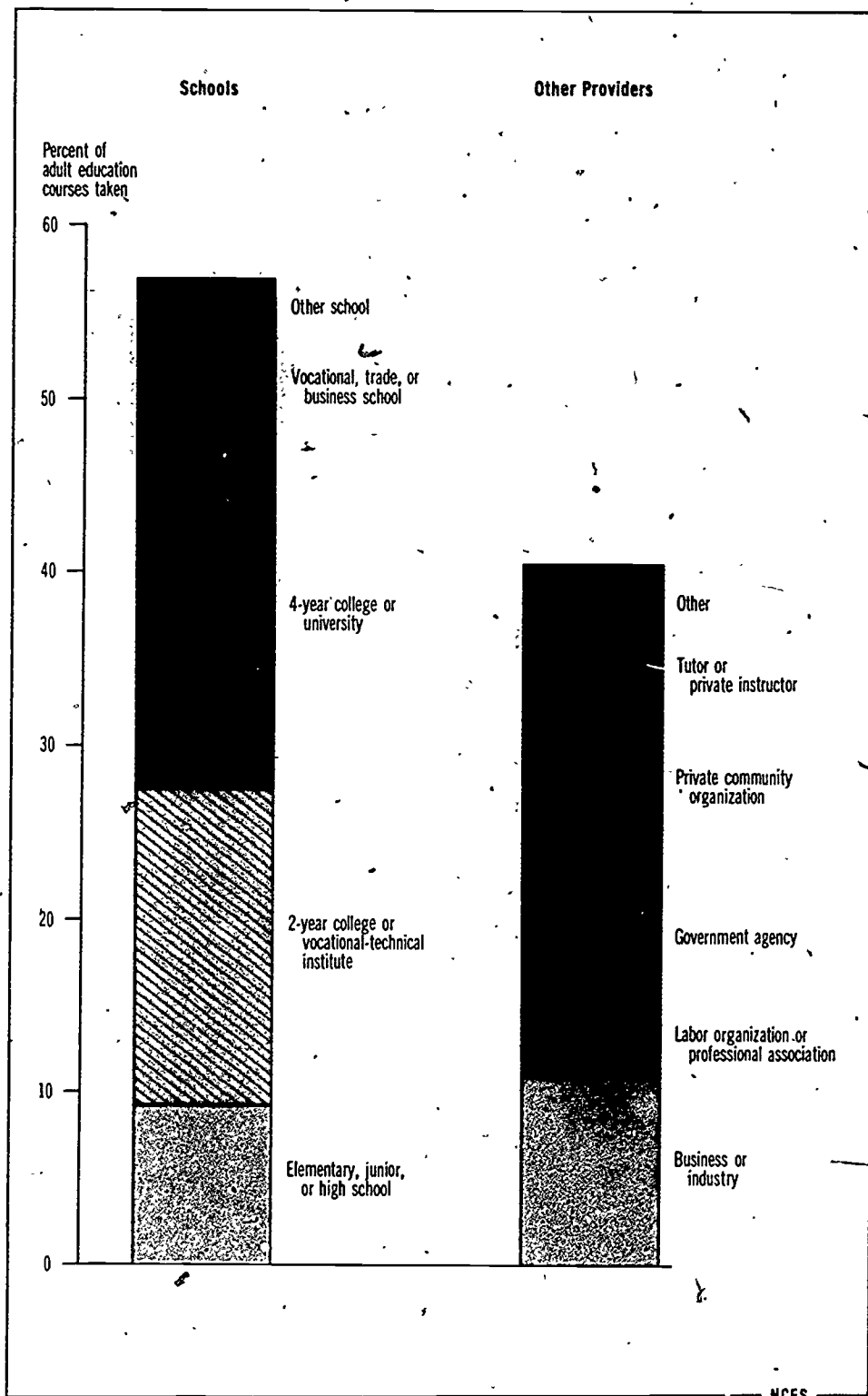
NOTE: Details may not add to totals because of rounding

SOURCE: U.S. Department of Education, National Center for Education Statistics,  
*Participation of Adults in Education, 1978*, forthcoming.



**Chart 1.8**  
**Providers of Instruction in Adult Education Courses**

Schools accounted for the majority of providers of adult education courses with institutions of higher education and vocational-technical institutes comprising a large share of the total. Among other providers, business/industry provided 11 percent of all courses and government agencies and private community organizations each provided about 8 percent of all courses.



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**Table 1.9****Educational participation of civilian noninstitutional population 3 years old and over, by level of school and age group: October 1979**

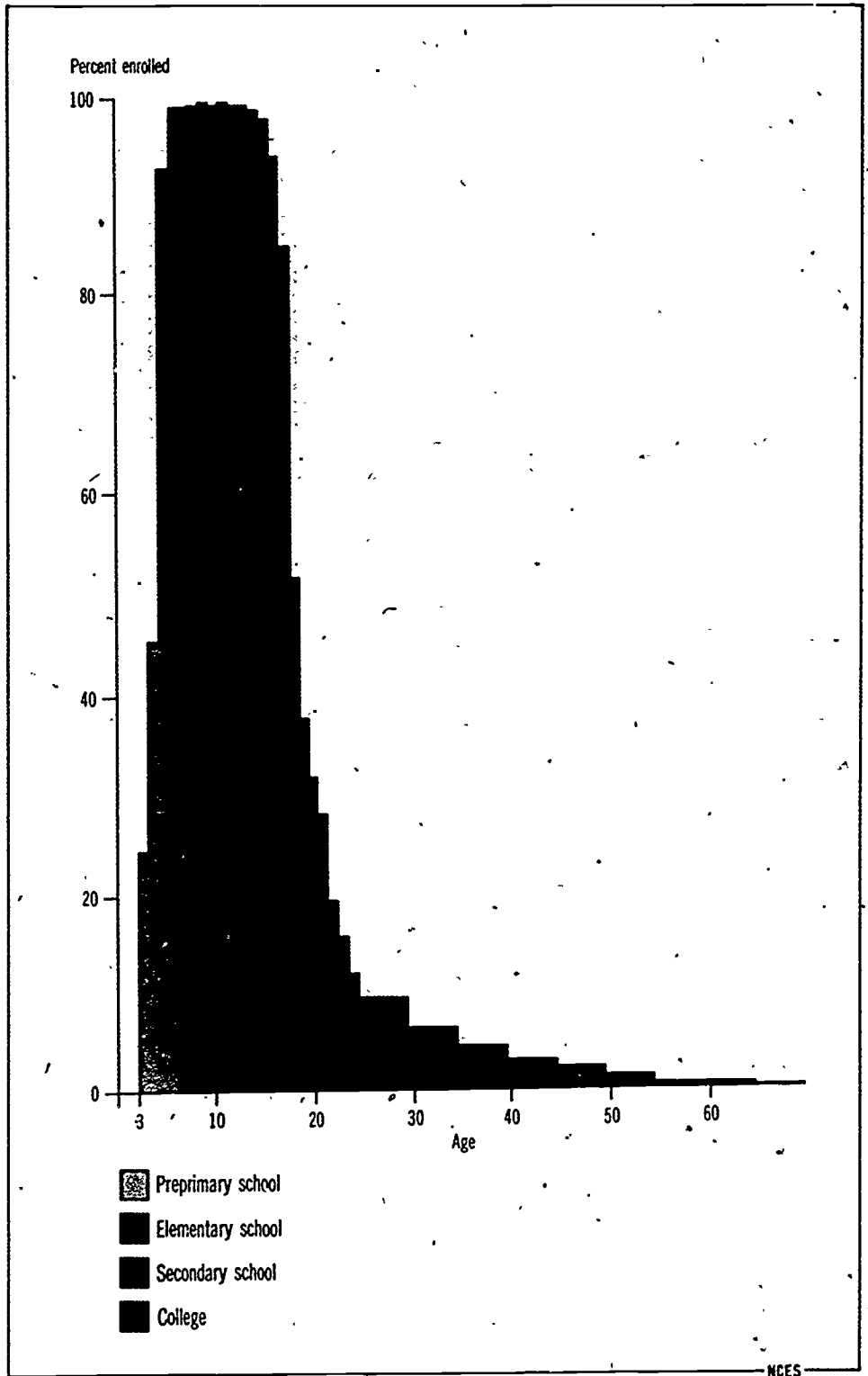
Age	Total population	Enrolled in school					
		Number	Percent	Preprimary school	Elementary school	Secondary <sup>1</sup> school	College
Numbers in thousands							
Total, 3 years old and over	206,768	59,343	28.7	1,869	30,889	15,203	11,380
3 years old	3,025	746	24.6	746	---	---	---
4 years old	3,070	1,393	45.4	1,393	---	---	---
5 years old	3,024	2,799	92.5	2,525	273	---	---
6 years old	3,081	3,047	98.9	230	2,817	---	---
7 years old	3,247	3,219	99.1	---	3,219	---	---
8 years old	3,476	3,446	99.2	---	3,446	---	---
9 years old	3,536	3,514	99.4	---	3,514	---	---
10 years old	3,533	3,504	99.2	---	3,504	---	---
11 years old	3,476	3,451	99.3	---	3,451	---	---
12 years old	3,517	3,482	99.0	---	3,468	14	---
13 years old	3,563	3,529	99.1	---	3,223	306	---
14 years old	3,806	3,751	98.6	---	760	2,987	4
15 years old	4,033	3,939	97.7	---	144	3,787	8
16 years old	4,142	3,890	93.9	---	17	3,846	25
17 years old	4,015	3,389	84.5	---	3	3,111	276
18 years old	4,177	2,163	51.8	---	4	719	1,442
19 years old	4,037	1,530	37.8	---	2	126	1,402
20 years old	4,023	1,296	32.1	---	2	56	1,237
21 years old	4,077	1,151	28.3	---	---	35	1,117
22 years old	3,969	776	19.6	---	2	16	758
23 years old	3,934	616	15.8	---	2	22	593
24 years old	3,757	452	12.0	---	---	8	442
25 to 29 years old	18,012	1,728	9.6	---	9	40	1,680
30 to 34 years old	16,377	1,045	6.4	---	5	44	995
35 to 39 years old	13,442	593	4.4	---	NA	27	566
40 to 44 years old	11,401	344	3.0	---	NA	15	330
45 to 49 years old	11,067	241	2.2	---	NA	18	223
50 to 54 years old	11,626	156	1.3	---	NA	17	139
55 to 64 years old	20,803	118	.6	---	NA	7	111
65 years old and over	23,525	38	.2	---	NA	4	33

NA Not available.

<sup>1</sup> Includes elementary school for persons 34 years old and over.SOURCE: U.S. Department of Commerce, Bureau of Census, *Current Population Reports, School Enrollment—Social and Economic Characteristics of Students: October 1979*, Series P-20, forthcoming and unpublished tabulations.

**Chart 1.9**  
**Educational Participation of the Population by Age**

Participation in education approaches 100 percent between the ages of 6 and 14, tapering off to 84 percent by age 17. The majority of 18-year-olds and about one-third of 19- to 21-year-olds were also engaged in formal education. Among 25- to 29-year-olds, participation ran about 10 percent.



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**Table 1.10**

**Family educational background of family members 14 to 34 years old, by racial/ethnic group and current educational status: October 1979**

Racial/ethnic group and educational status	Years of school completed by family head			
	Total	Less than 4 years of secondary school	4 years of secondary school	1 year or more of college
Percentage distribution				
All races				
High school dropouts	100.0	66.7	24.0	9.3
High school graduates, no college	100.0	42.7	41.2	16.1
Full-time college students	100.0	16.3	31.7	52.0
White				
High school dropouts	100.0	62.4	26.4	11.3
High school graduates, no college	100.0	38.8	44.4	16.9
Full-time college students	100.0	12.6	31.5	55.9
Black				
High school dropouts	100.0	77.4	18.7	3.8
High school graduates, no college	100.0	64.3	24.8	10.8
Full-time college students	100.0	44.4	31.8	23.7
Hispanic <sup>1</sup>				
High school dropouts	100.0	83.9	12.2	4.7
High school graduates, no college	100.0	66.0	20.8	13.2
Full-time college students	100.0	54.9	18.3	25.8

<sup>1</sup> Hispanics may be of any racial group.

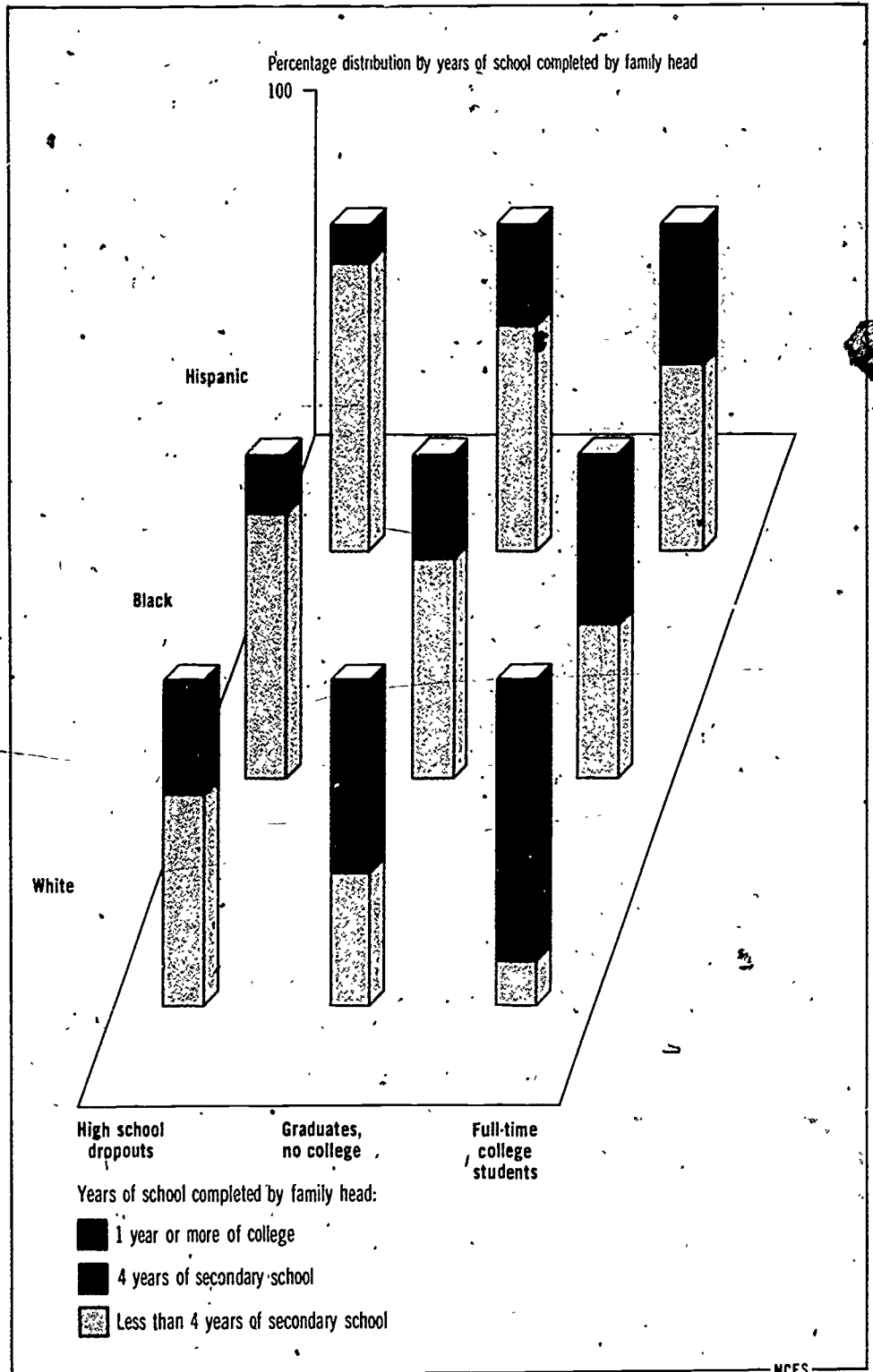
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, "School Enrollment—Social and Economic Characteristics of Students,"* P-20, forthcoming and unpublished tabulations.

**Chart 1.10**

**Family Educational Background of High School Dropouts, Graduates With no College, and Full-Time College Students**

Most high school dropouts had family heads who also did not finish high school, and a majority of full-time college students had family heads with some college experience. Black and Hispanic college students, however, were far less likely than their white classmates to have come from families with a college background; only one-fourth had family heads with college experience.



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**Table 1.11**

**Educational status and attainment of adolescents and adults, by racial/ethnic group, nativity, and language background: Spring 1976**

Characteristic	14- to 17-year-olds		18-year-olds and over	
	Enrolled 2 or more years below expected grade <sup>1</sup>	Dropped out	Functionally illiterate (Completed less than 5 years of schooling)	Completed less than 12 years of schooling
	Percent			
Total	17.5	9.6	3.1	28.0
Native born	17.5	9.4	2.4	26.7
Foreign born	18.0	16.2	11.2	44.0
Non-English language background	18.5	16.2	8.8	45.1
Other background (includes English)	17.4	8.9	2.1	25.1
White <sup>2</sup>	17.4	7.8	1.9	25.2
Native born	17.4	7.7	1.5	24.2
Foreign born	17.0	10.7	9.6	43.3
Non-English language background	19.2	8.4	6.2	44.2
Other background (includes English)	17.3	7.7	1.4	22.9
Black <sup>2</sup>	17.7	15.4	7.6	41.7
Native born	17.7	15.4	7.7	41.9
Foreign born	(3)	(3)	3.8	33.2
Non-English language background	(3)	(3)	10.2	35.8
Other background (includes English)	17.6	15.4	7.6	41.8
Hispanic	19.4	20.1	13.7	49.3
Native born	18.9	19.1	10.4	44.8
Foreign born	22.1	24.8	19.4	57.1
Non-English language background	19.2	21.6	15.3	53.0
Other background (includes English)	20.8	11.1	.3	17.2
Asian American	8.0	8.3	5.3	22.5
Native born	(3)	(3)	1.2	11.3
Foreign born	(3)	(3)	7.5	28.4
Non-English language background	(3)	(3)	6.4	26.0
Other background (includes English)	(3)	(3)	.4	6.0
American Indian	13.4	21.6	8.1	41.9
Native born	12.5	22.0	8.2	42.0
Foreign born	(3)	(3)	2.3	24.5
Non-English language background	(3)	(3)	17.8	49.3
Other background (includes English)	(3)	(3)	4.8	39.4

<sup>1</sup> Expected grade in the spring of the year is defined for 14-year-olds as 8th grade, for 15-year-olds as 9th grade, for 16-year-olds as 10th grade, etc. Thus a 14-year-old student in the 6th grade in the spring of the year would be counted as enrolled 2 years below expected grade.

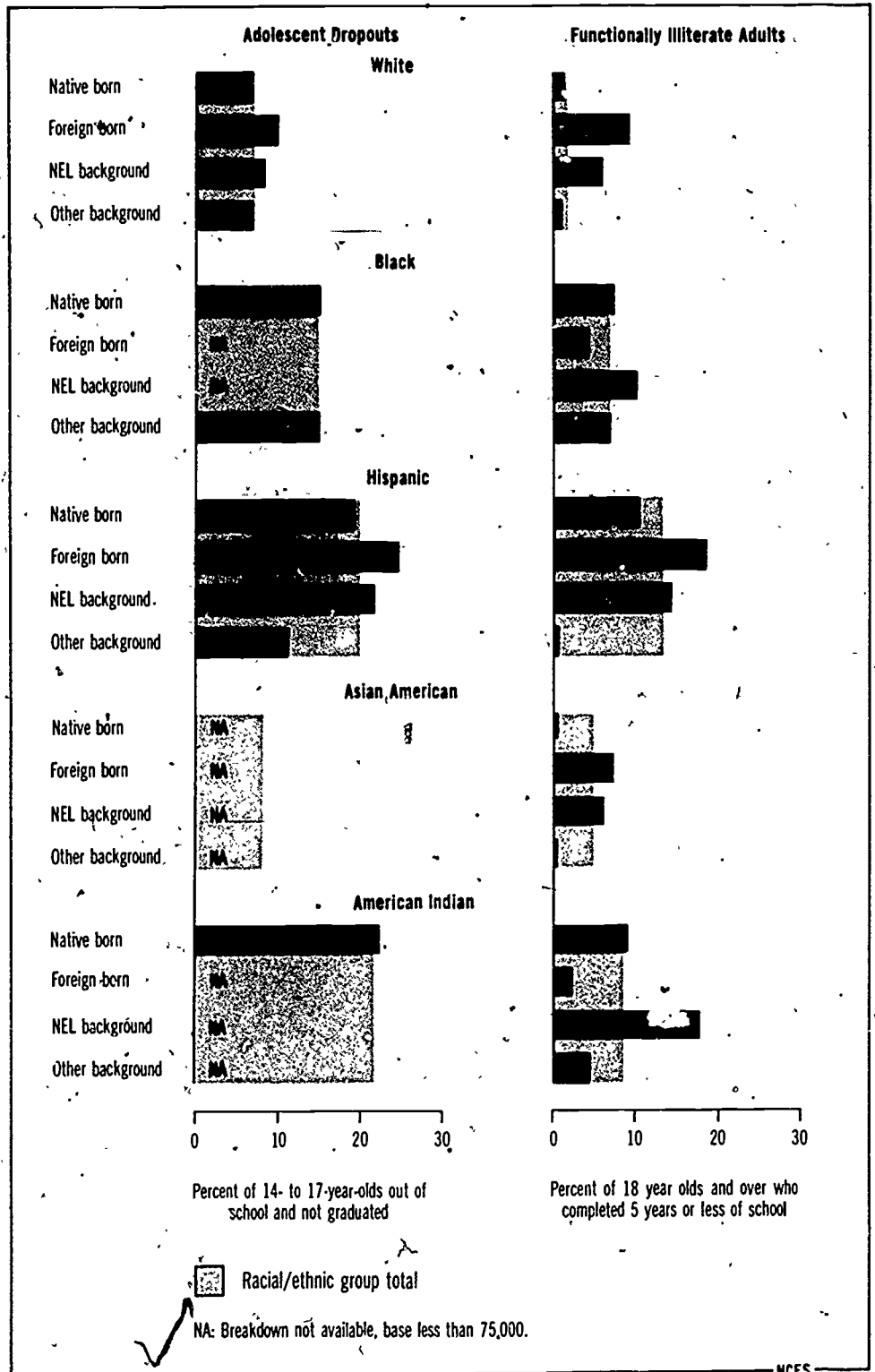
<sup>2</sup> Non-Hispanic.  
<sup>3</sup> Base less than 75,000 not shown.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Survey of Income and Education, unpublished tabulations.

**Chart 1.11**

**Adolescent Dropouts and Functionally Illiterate Adults by Racial/Ethnic Group, Nativity, and Non-English Language (NEL) Background**

Adolescent dropout rates and adult illiteracy rates among racial/ethnic groups varied appreciably by country of origin and language background. Native-born Asian Americans had illiteracy rates far below the national average yet foreign-born Asian Americans had rates at least twice as high as the Nation. Hispanic adolescents from predominately English language backgrounds had dropout rates that approximated the national average while those from non-English backgrounds exhibited rates twice as high.



**Table 1.12**  
**Years of school completed by population 25 years old and over, by region**  
**and racial/ethnic group: March 1979**

Region and racial/ethnic group	Population, in thousands	Percent, by years of school completed					Median years of school completed
		Less than 5 years of elementary school	Less than 4 years of secondary school	4 years or more of secondary school	1 year or more of college	4 years or more of college	
Total	125,295	3.5	32.3	67.7	31.1	16.4	12.5
White	110,798	2.7	30.3	69.7	32.2	17.2	12.5
Black	12,227	9.6	50.6	49.4	19.4	7.9	11.9
Hispanic <sup>1</sup>	5,367	17.6	58.0	42.0	16.4	6.7	10.3
Northeast	28,997	2.4	32.2	67.8	29.2	16.9	12.5
White	26,288	2.1	31.3	68.7	29.8	17.4	12.5
Black	2,394	4.7	42.7	57.3	20.6	9.2	12.2
Hispanic <sup>1</sup>	1,032	12.6	58.7	41.3	15.6	7.9	10.4
North Central	32,786	2.1	31.5	68.5	28.8	14.9	12.5
White	29,985	1.8	30.3	69.7	29.2	15.4	12.5
Black	2,499	5.3	45.1	54.9	21.8	7.4	12.1
Hispanic <sup>1</sup>	424	17.5	58.5	41.5	16.3	6.3	10.4
South	40,574	5.6	37.5	62.5	28.9	15.2	12.4
White	33,913	4.1	33.8	66.2	31.1	16.6	12.5
Black	6,348	14.0	57.8	42.2	16.1	7.5	11.0
Hispanic <sup>1</sup>	1,795	20.9	59.1	40.9	15.8	7.0	9.5
West	22,939	2.9	24.2	75.8	40.8	20.1	12.7
White	20,612	2.4	23.1	76.9	41.3	20.5	12.8
Black	1,031	4.5	37.7	62.3	30.6	8.3	12.4
Hispanic <sup>1</sup>	2,116	17.3	56.5	43.5	17.4	5.9	10.7

<sup>1</sup> Hispanics may be of any racial group.

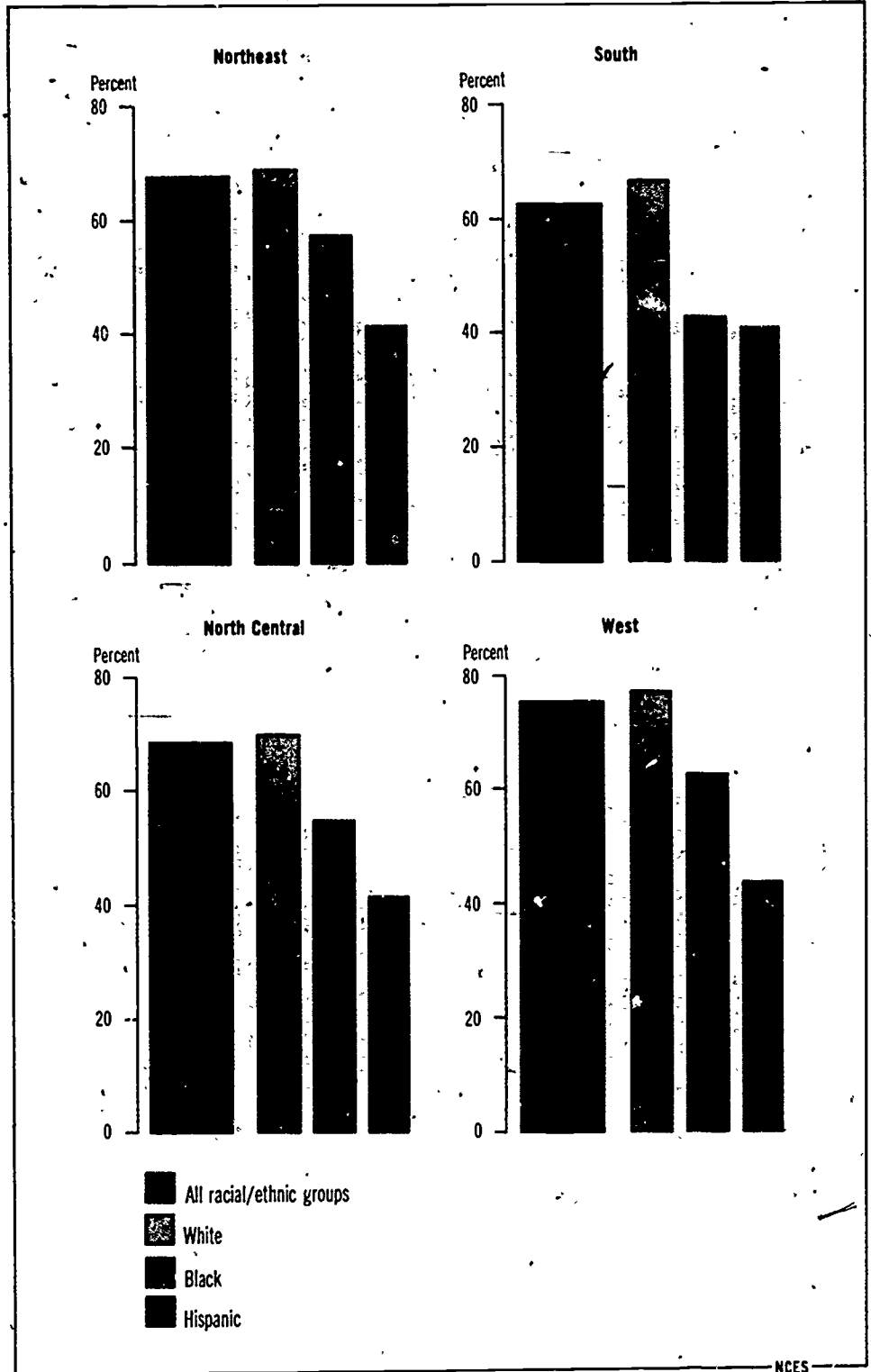
SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, "Educational Attainment in the United States, March 1979 and 1978," Series P-20, No. 356, 1980.



**Chart 1.12**

**High School Graduates Among Population 25 Years Old and Over by Region and Racial/Ethnic Group**

More than three-fourths of adults in the West have graduated from high school compared to less than two-thirds of adults in the South. Within each region, including the West, Hispanic adults had far lower completion rates than the general population; only 42 percent were high school graduates.



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**Table 1.13**

**Percent of 14- to 34-year-olds not enrolled in school and not high school graduates, by racial/ethnic group, age group, and metropolitan status: October 1979**

Age group and metropolitan status	Population, in thousands				Percent not enrolled in school and not high school graduates			
	Total	White	Black	Hispanic <sup>1</sup>	Total	White	Black	Hispanic <sup>1</sup>
Total, 14- to 34-year-olds	78,359	67,121	9,571	4,826	13.3	12.3	20.4	35.2
Metropolitan	53,884	45,112	7,429	4,034	12.5	11.4	19.1	24.3
Central city	22,516	16,519	5,304	2,434	15.5	14.0	20.6	36.4
Outside central city	31,367	28,593	2,124	1,661	10.4	10.0	15.4	31.0
Nonmetropolitan	24,475	22,009	2,141	790	15.2	14.2	24.8	39.9
14- to 17-year-olds	15,996	13,382	2,309	1,015	5.3	5.3	5.2	9.0
Metropolitan	10,574	8,580	1,766	830	4.9	5.0	4.8	8.8
Central city	4,080	2,727	1,237	478	6.5	7.1	5.6	9.6
Outside central city	6,494	5,853	529	352	3.9	4.0	3.0	7.7
Nonmetropolitan	5,422	4,802	542	184	6.0	5.9	6.8	9.8
18- to 21-year-olds	16,314	13,899	2,092	1,011	16.8	15.5	25.5	35.0
Metropolitan	11,196	9,346	1,591	837	16.1	14.6	25.1	33.9
Central city	4,663	3,338	1,183	509	19.5	16.8	27.6	33.2
Outside central city	6,533	6,007	407	328	13.7	13.4	17.7	34.8
Nonmetropolitan	5,118	4,553	501	174	18.2	17.2	26.7	39.7
22- to 34-year-olds	46,049	39,840	5,170	2,800	14.9	13.6	25.0	44.8
Metropolitan	32,114	27,186	4,072	2,367	13.7	12.4	22.9	43.4
Central city	13,773	10,454	2,884	1,427	16.8	14.9	24.1	46.4
Outside central city	18,340	16,733	1,188	921	11.5	10.9	20.2	38.7
Nonmetropolitan	13,935	12,654	1,098	432	17.7	16.2	32.9	52.5

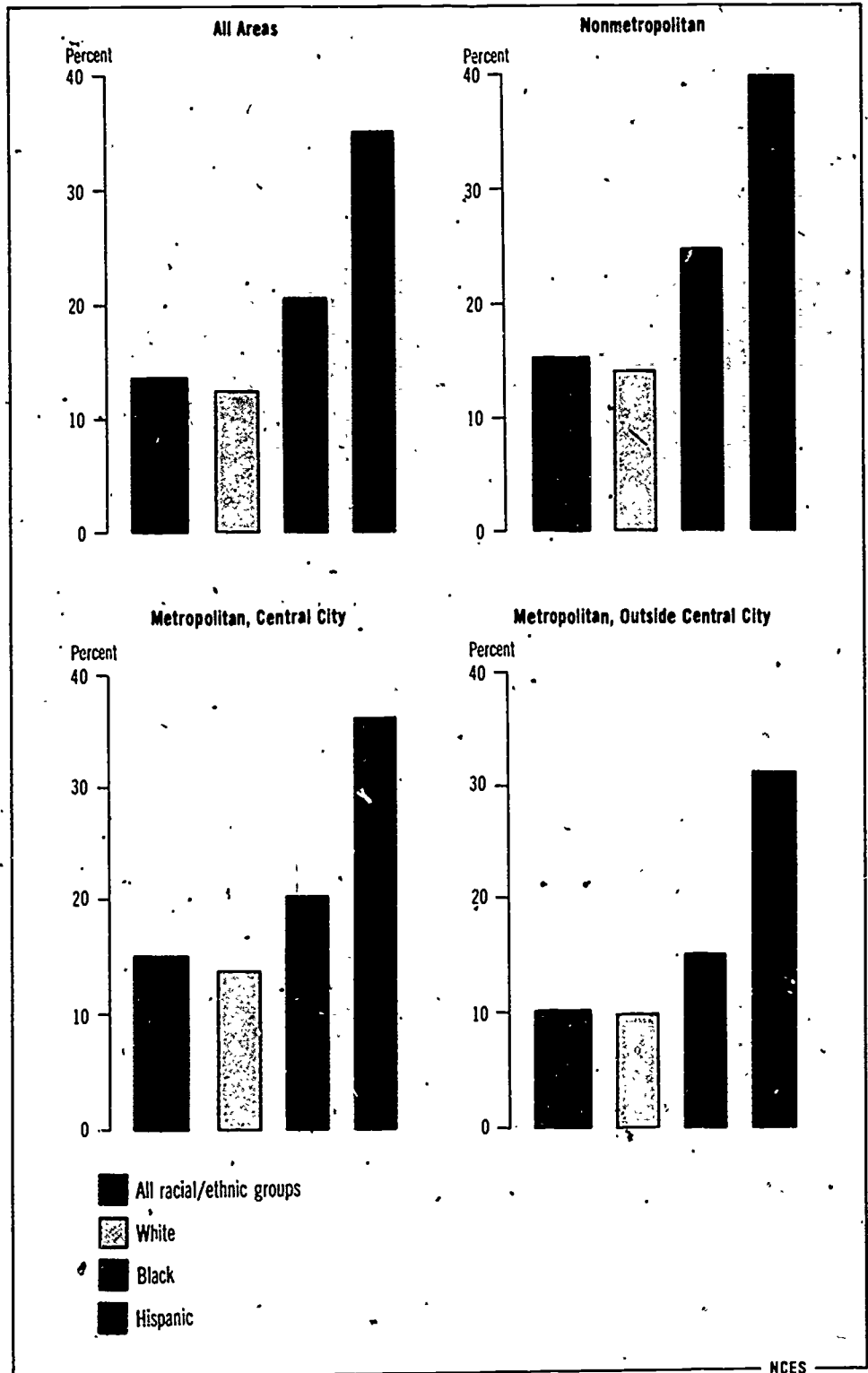
<sup>1</sup> Hispanics may be of any racial group.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports* Series P-20, "School Enrollment—Social and Economic Characteristics of Students: October 1979," forthcoming.

**Chart 1.13**

**Dropouts Among 14- to 34-Year-Olds by Metropolitan Status and Racial/Ethnic Group**

Metropolitan central cities and nonmetropolitan areas exhibited appreciably higher dropout rates than the rest of the country. Hispanic 14- to 34-year-olds showed the highest rates, about 40 percent in nonmetropolitan areas.



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**Table 1.14**

**Educational attainment of population 17 years old and over, and of participants in adult education: Year ending May 1978**

Highest level of education completed	Total population	Participants in adult education	Total population	Participants in adult education
	Number, in thousands		Percentage distribution	
Total	154,496	18,197	100.0	100.0
Less than 9th grade	24,502	432	15.9	2.4
9th to 11th grade	27,589	1,371	17.9	7.5
4 years of high school	56,847	6,087	36.8	33.5
1 to 3 years of college	24,046	4,363	15.6	24.0
4 years of college	13,100	3,349	8.5	18.5
5 years or more of college	8,412	2,596	5.4	14.3
Male	72,930	7,820	100.0	100.0
Less than 9th grade	11,738	184	16.1	2.4
9th to 11th grade	12,733	516	17.5	6.6
4 years of high school	24,205	2,276	33.2	29.1
1 to 3 years of college	11,848	1,837	16.2	23.5
4 years of college	6,958	1,551	9.5	19.8
5 years or more of college	5,449	1,456	7.5	18.6
Female	81,565	10,377	100.0	100.0
Less than 9th grade	12,764	248	15.6	2.4
9th to 11th grade	14,856	855	18.2	8.2
4 years of high school	32,641	3,811	40.0	36.7
1 to 3 years of college	12,199	2,527	15.0	24.4
4 years of college	6,142	1,798	7.5	17.3
5 years or more of college	2,963	1,140	3.6	11.0

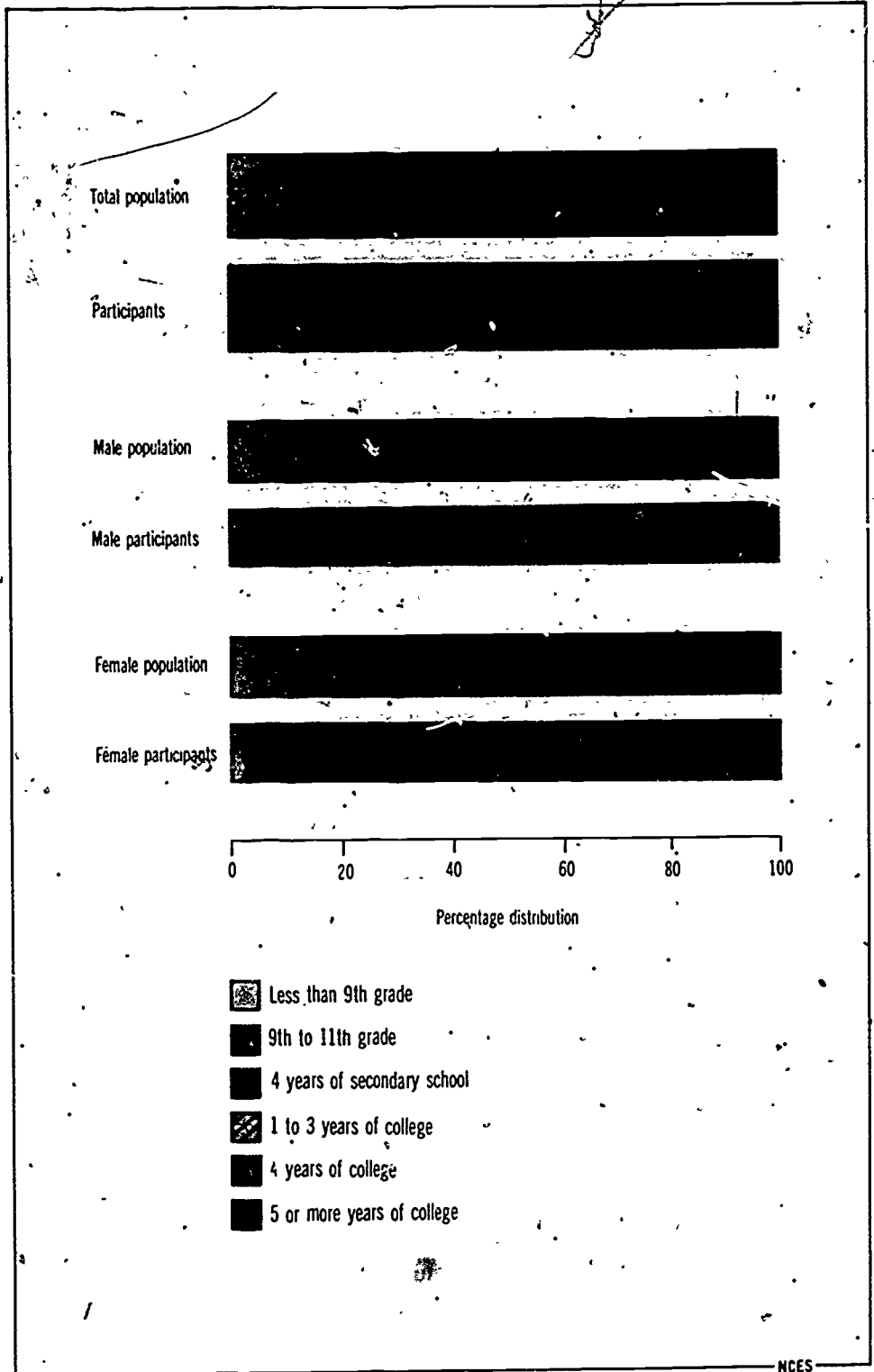
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Participation In Adult Education Survey, unpublished tabulations.

**Chart 1.14**

**Educational Attainment of Adult Population and Adult Education Participants**

Participants in adult education have higher levels of educational attainment than the general population. Over half of participants have some college experience compared to less than one-third of the adult population in general.



NCES

**Table 1.15****Opinions of parents with public school children on the quality of public schools: 1974 to 1980**

Item	1974	1975	1976	1977	1978	1979	1980
<p>"Students are often given the grades A,B,C,D, and F (Fail) to denote the quality of their work. Suppose the public schools themselves, in this community, were graded in the same way. What grade would you give the public schools here—A,B,C,D, or F?"</p> <p style="text-align: center;">Percentage distribution of parents with public school children</p>							
Total	100	100	100	100	100	100	100
A rating	22	17	16	18	15	12	13
B rating	42	36	34	36	36	37	33
C rating	24	29	30	26	32	31	31
D rating	4	8	10	9	10	10	12
F (Fail) rating	3	7	5	4	5	7	4
Don't know/no response	5	3	5	7	2	3	7
Mean rating	2.80	2.49	2.48	2.59	2.47	2.38	2.42

\* Calculated on a 5 point scale with 4=A, 3=B, 2=C, 1=D, 0=F.

SOURCE: Phi Delta Kappa, Inc., *A Decade of Gallup Polls of Attitudes Toward Education 1969-1978, 1978*, "Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," *Phi Delta Kappan*, 1979, and unpublished tabulations.

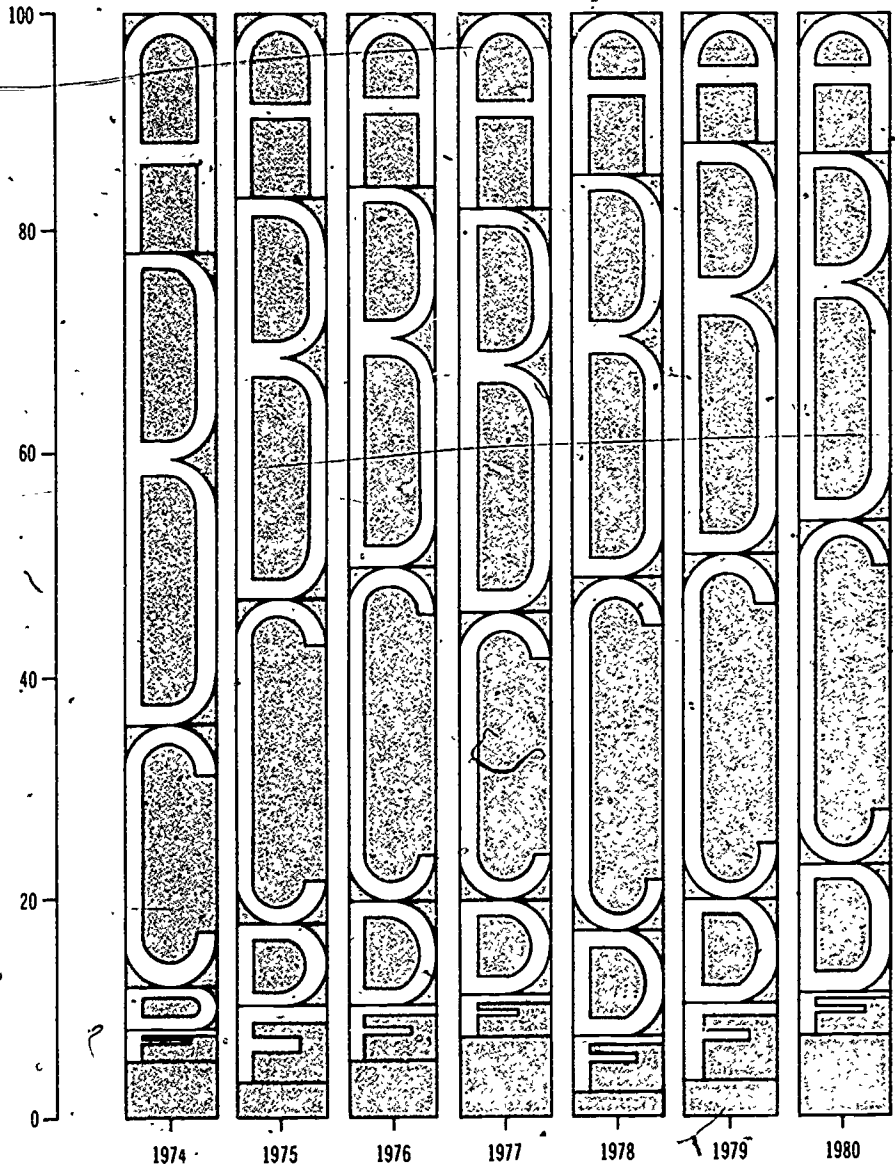
**Chart 1.15**

**Quality of the Public Schools: Opinions of Parents with Public School Children**

Parents rating their public schools have given generally declining marks since 1974, although in 1980 the average grade, about a C+, was slightly, though not significantly, higher than in 1979.

"Students are often given the grades A, B, C, D, and F (FAIL) to denote the quality of their work. Suppose the public schools themselves, in this community, were graded in the same way. What grade would you give the public school here—A, B, C, D, or F?"

Percentage distribution of responses



HCES

**Table 1.16**  
**Public opinion of major problems with which public schools must deal: 1969 to 1980**

Problems, by rank order in 1980	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
	Percent of respondents citing problem											
Lack of discipline	26	18	14	23	22	23	23	22	26	25	24	26
Use of dope/drugs	NA	11	12	4	10	13	9	11	7	13	13	14
Poor curriculum	4	6	3	5	7	3	5	14	10	12	11	11
Integration/segregation/busing	13	17	21	18	18	16	15	12	13	13	9	10
Lack of proper financial support	14	17	23	19	16	13	14	14	12	13	12	10
Size of school/classes	NA	NA	NA	10	9	6	10	5	5	5	4	7
Difficulty of getting "good" teachers	17	12	11	14	13	11	11	11	11	9	10	6
Parents' lack of interest	7	3	4	6	4	6	2	5	5	4	3	6
Pupils' lack of interest	3	(1)	2	NA	3	2	3	3	3	4	4	5
Crime/vandalism/stealing	NA	NA	2	NA	NA	NA	4	2	2	4	4	4
Lack of proper facilities	22	11	13	5	4	3	3	2	2	2	2	2
School board policies	NA	2	1	NA	4	4	1	3	1	1	2	1
There are no problems	4	5	4	2	4	3	5	3	4	4	3	3
Miscellaneous	8	3	6	9	4	4	12	8	5	6	5	2
Don't know/no answer	13	18	12	12	13	17	10	12	16	12	16	17

NA: Not available.

(1) Less than 1 percent.

NOTE: Totals add to more than 100 percent because of multiple answers.

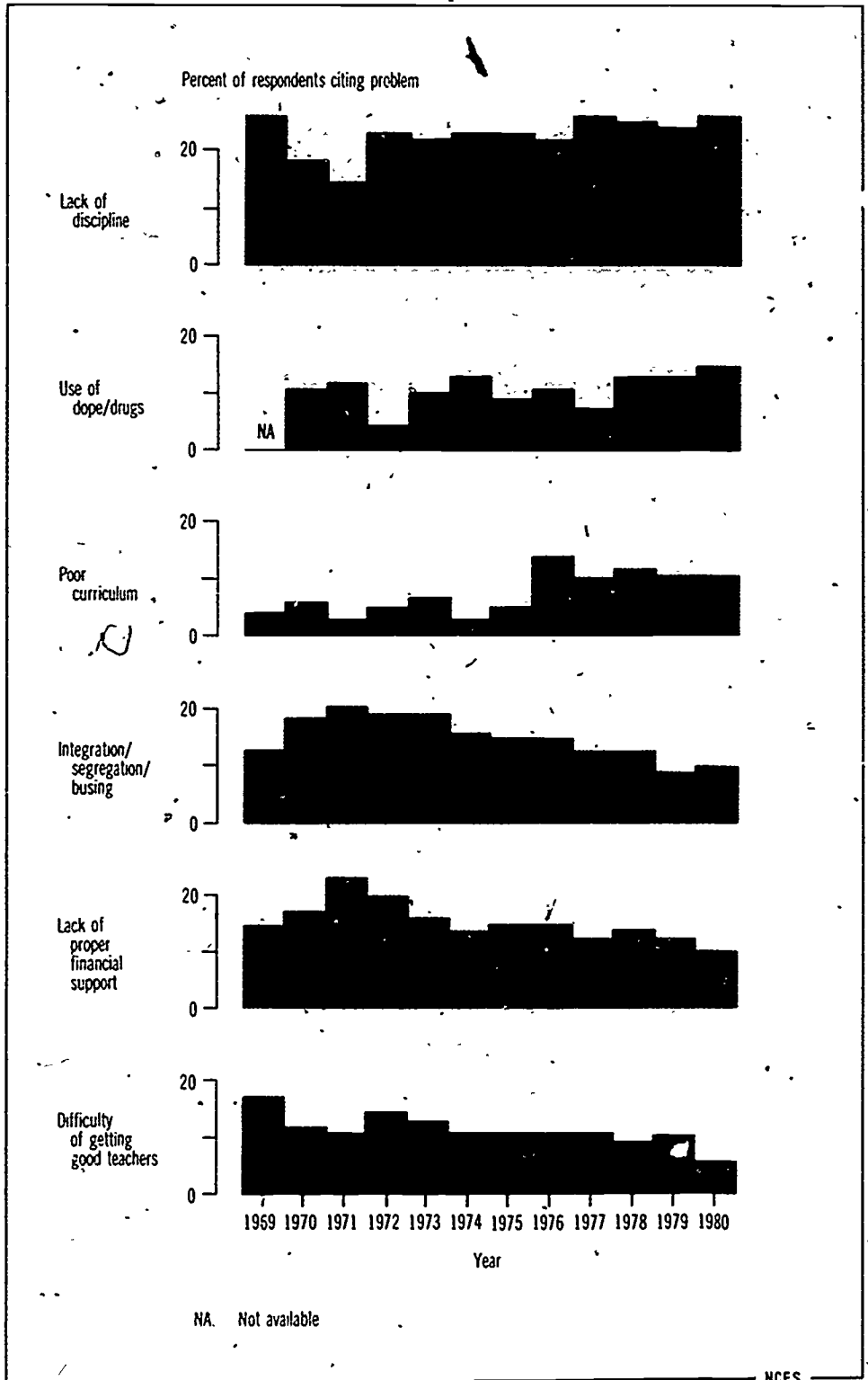
SOURCE: Phi Delta Kappa, Inc., *A Decade of Gallup Polls of Attitudes Toward Education 1969-78* and Annual Gallup Poll of the Public's Attitudes Toward the Public Schools, *Phi Delta Kappan*, 1979, 1980.

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**Chart 1.16**  
**Problems Facing the Public Schools: Public Opinion**

The public consistently cited discipline as the foremost problem facing the public schools while its concern with racial policies and inadequate funding and teachers diminished.



**Table 1.17**  
**Confidence of the public in people running institutions in the United States: 1973 to 1980**

Year and institution	Total	A great deal	Only some	Hardly any	Don't know	No answer
Percentage distribution of respondents						
1973						
Education	100.0	36.8	53.1	8.2	1.4	0.6
Executive branch, Federal Government	100.0	29.2	50.2	18.3	1.9	0.4
Congress	100.0	23.4	58.7	14.8	2.6	0.5
Medicine	100.0	53.8	39.0	5.7	.9	0.5
Scientific community	100.0	36.7	46.8	6.4	9.4	0.6
Television	100.0	18.5	58.2	21.7	1.1	0.5
1974						
Education	100.0	49.0	41.2	8.2	1.3	0.3
Executive branch, Federal Government	100.0	13.6	42.5	41.6	2.2	0.1
Congress	100.0	17.0	58.9	20.8	3.0	0.2
Medicine	100.0	60.3	33.6	4.4	1.5	0.1
Scientific community	100.0	44.9	37.6	6.7	10.6	0.2
Television	100.0	23.4	58.0	17.2	1.2	0.2
1975						
Education	100.0	30.9	54.5	12.8	1.7	0.1
Executive branch, Federal Government	100.0	13.3	54.6	29.5	2.6	0.1
Congress	100.0	13.3	58.5	25.1	2.9	0.2
Medicine	100.0	50.4	40.1	7.9	1.5	0.2
Scientific community	100.0	37.6	45.1	6.4	10.7	0.2
Television	100.0	17.8	57.2	22.4	2.4	0.3
1976						
Education	100.0	37.2	44.8	15.3	2.0	0.7
Executive branch, Federal Government	100.0	13.4	58.3	25.0	3.0	0.3
Congress	100.0	13.7	58.0	25.4	2.6	0.3
Medicine	100.0	53.8	35.2	9.2	1.3	0.5
Scientific community	100.0	42.6	37.6	7.5	11.5	0.9
Television	100.0	18.6	52.0	27.1	1.7	0.6
1977						
Education	100.0	40.5	49.5	8.8	.9	0.3
Executive branch, Federal Government	100.0	27.8	54.2	14.4	3.1	0.3
Congress	100.0	19.0	60.6	17.1	2.9	0.5
Medicine	100.0	51.4	41.1	6.1	1.1	0.3
Scientific community	100.0	40.8	45.5	5.4	7.8	0.5
Television	100.0	17.4	55.8	25.0	1.5	0.3
1978						
Education	100.0	28.4	54.9	15.1	1.4	0.3
Executive branch, Federal Government	100.0	12.5	59.3	24.8	3.2	0.3
Congress	100.0	12.9	62.9	20.8	3.1	0.3
Medicine	100.0	45.9	43.9	9.1	.8	0.3
Scientific community	100.0	36.1	48.1	7.2	8.2	0.3
Television	100.0	13.7	53.2	30.9	1.8	0.4
1980						
Education	100.0	29.8	55.5	12.5	2.0	0.1
Executive branch, Federal Government	100.0	12.1	50.2	34.2	3.3	0.2
Congress	100.0	9.3	53.1	33.6	4.0	0.1
Medicine	100.0	52.3	38.7	7.4	1.5	0.1
Scientific community	100.0	41.4	42.4	6.3	9.5	0.4
Television	100.0	16.0	54.6	27.7	1.7	0.1

NOTE: Details may not add to totals because of rounding.

SOURCE: James A. Davis, National Opinion Research Center, University of Chicago, *General Social Surveys, 1972-1980: Cumulative Codebook, 1980.*

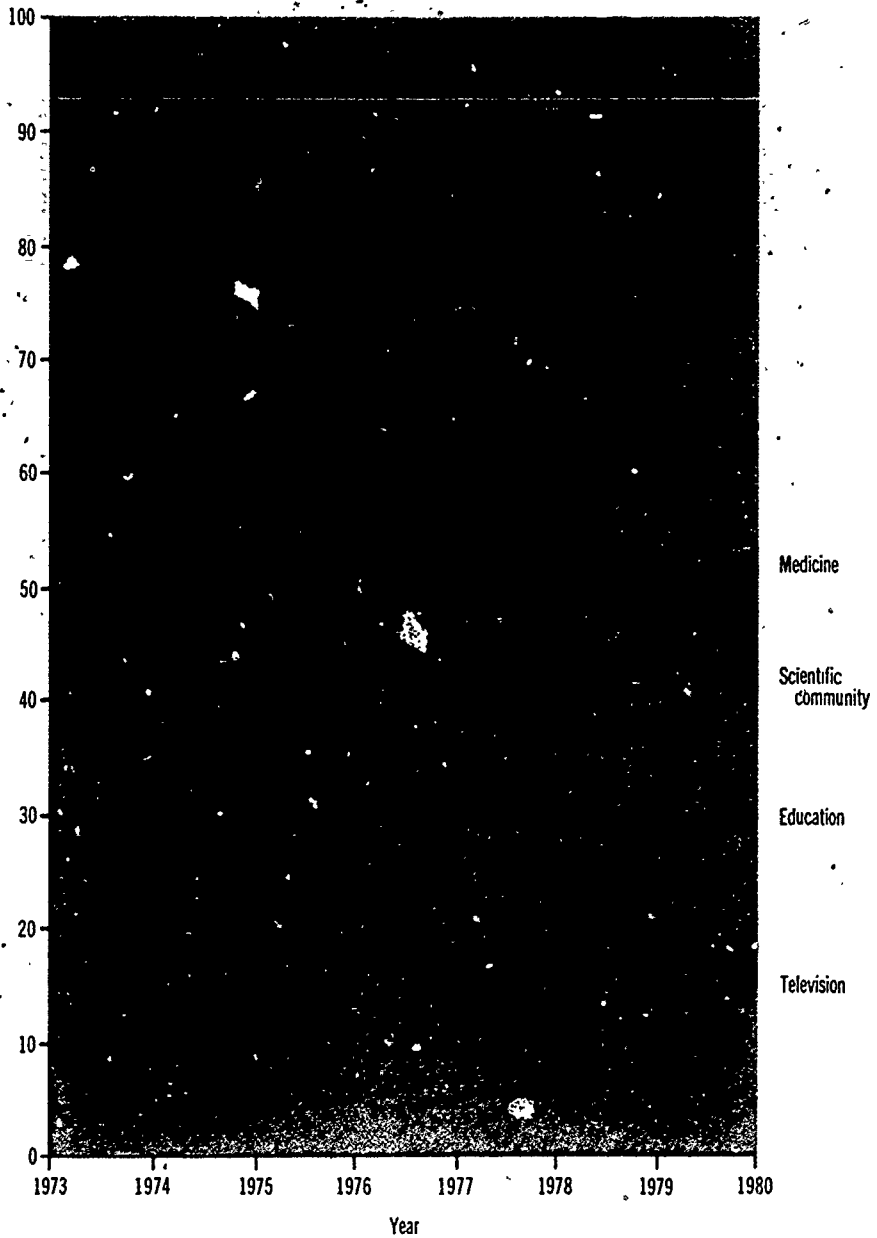
**Chart 1.17**

**Confidence in the People Running Institutions: Public Opinion**

Although public confidence in educational leaders ran higher than in representatives of government and television, it lagged behind confidence in the medical and scientific community.

"I am going to name some institutions in this country. As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?"

Percent of respondents expressing "a great deal of confidence"



NCES

**Table 1.18**  
**Public opinion on spending for national programs: 1973 to 1980**

Item	Public support index <sup>1</sup>						
	1973	1974	1975	1976	1977	1978	1980
<p>"We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'd like you to tell me whether you think we're spending too much money, too little money, or about the right amount to improve the nation's:</p>							
	Percent of respondents						
Education system	39.8	41.8	37.7	40.7	37.8	40.7	42.3
Cities	35.9	38.7	35.1	23.0	20.8	19.8	18.6
Crime prevention	59.7	61.7	60.0	57.4	59.6	58.0	47.5
Defense	-26.6	-14.1	-14.3	-3.2	.8	5.2	44.8
Environment	53.4	51.0	43.7	45.3	36.3	42.8	32.4
Health	55.9	59.1	57.4	55.3	48.7	48.5	47.1
Welfare	-31.4	-19.9	-19.3	-46.4	-47.2	-45.2	-42.9

<sup>1</sup> Public support Index computed as the percent of respondents answering that "too little money is being spent" minus the percent answering that "too much money is being spent". The index can range from a possible +100.0 percent indicating complete positive support to a possible -100.0 percent indicating a complete lack of support.

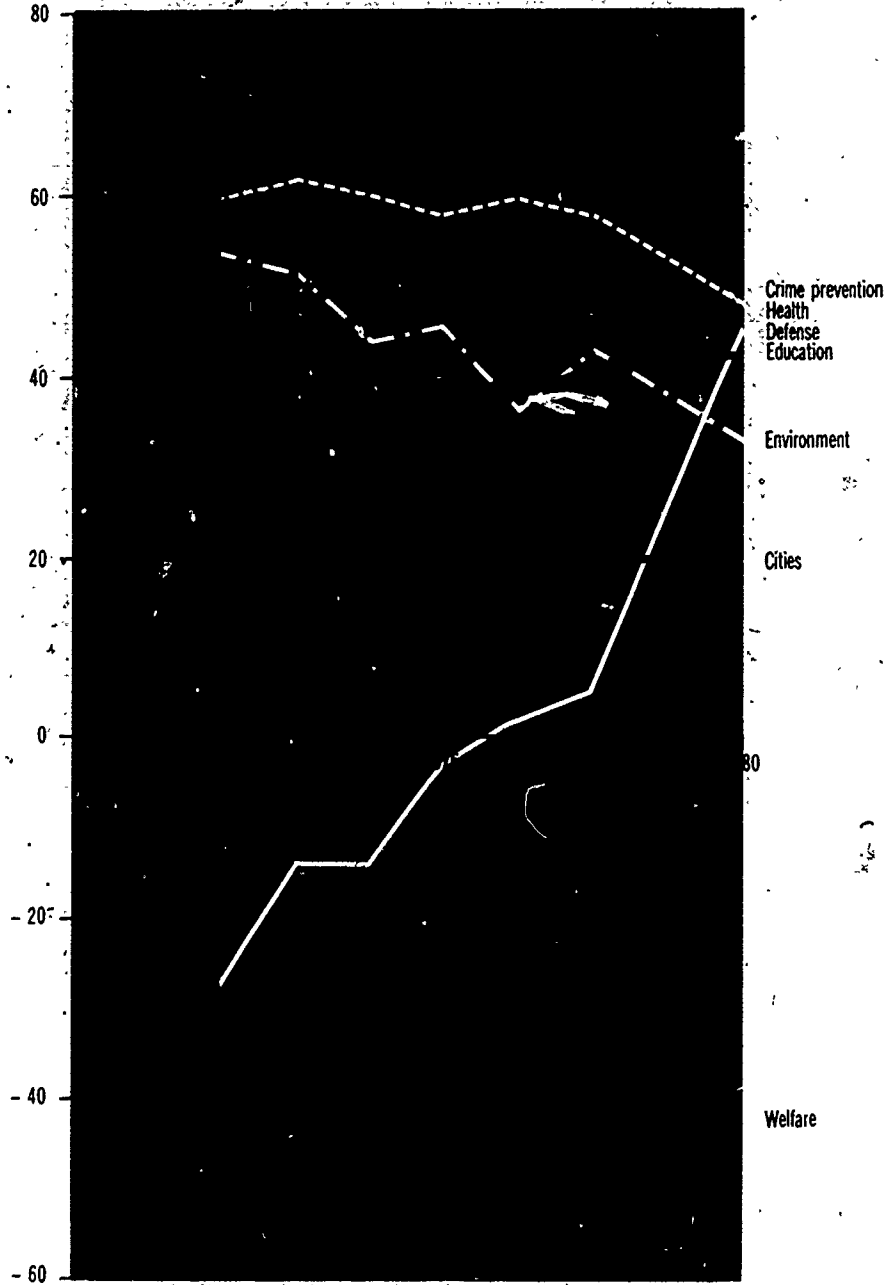
SOURCE: James A. Davis, National Opinion Research Center, University of Chicago, *General Social Surveys, 1972-1980: Cumulative Codebook*, 1980.

**Chart 1.18**  
**Spending Levels to Improve National Programs: Public Opinion**

Despite a general decline in support for spending during the 1970's, public support for educational spending remained stable. In 1980 the need for increased spending to improve crime prevention, health, and for the first time, defense outranked that for education in the public's estimation.

"We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'd like you to tell me whether you think we're spending too much money, too little money, or about the right amount to improve the nation's:

Public support index\*



\*Percent of respondents answering that "too little money is being spent" minus percent answering that "too much money is being spent."

NCES

**Table 1.19**  
**Public opinion on priorities for the U.S. Department of Education, by parental status of respondent: 1980**

Areas	Total	Public school parents	Private school parents	No children in schools
<p>"As you may know, a new federal Department of Education has been established with cabinet status. We would like to know what you think this new Department should give special attention to in the next few years. Will you choose five of the areas listed on this card which you think are most important."</p> <p style="text-align: right;">Percent of respondents</p>				
Basic education (reading, writing, arithmetic)	69	72	71	68
Vocational training (training students for jobs)	56	57	53	55
Improving teacher training and education	46	50	51	44
Helping students choose careers	46	44	44	46
Parent training to help parents become more fully involved in their children's education	45	37	48	48
Helping more students obtain a college education	35	38	34	34
Developing individual educational plans for every child	33	38	35	31
Providing more opportunities for gifted students	25	26	23	25
Pre-school education	24	21	19	26
Life-long learning (continuing education through adult life)	23	21	33	22
Better educational use of television	20	21	19	20
International education, including foreign language study	19	20	20	19
Improving opportunities for women and minorities	18	17	14	18

NOTE: Figures add to more than 100 percent due to multiple responses.

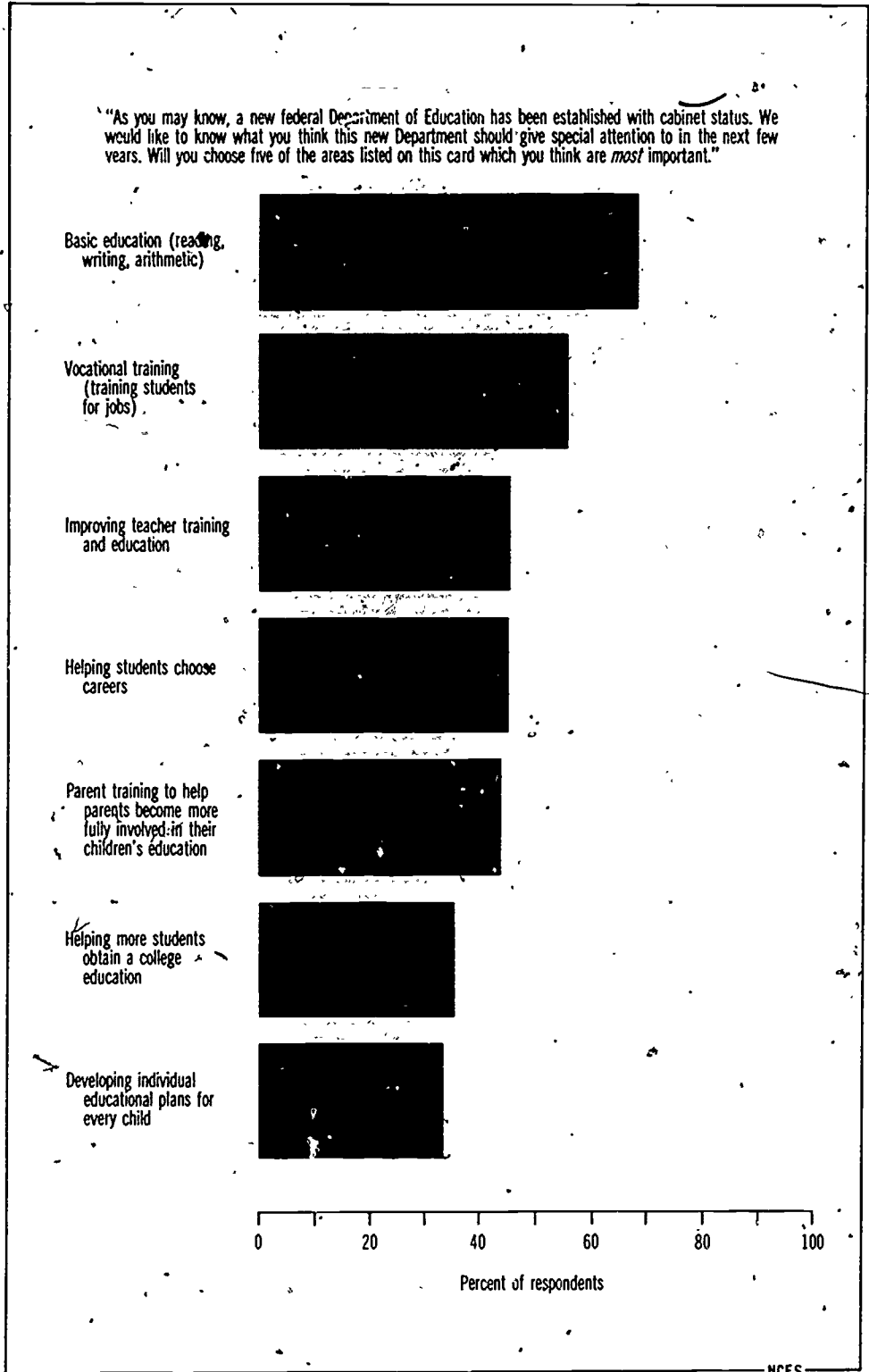
SOURCE: Phi Delta Kappa, Inc. "Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," *Phi Delta Kappan*, 1980

**Chart 1.19**

**Priorities for the U.S. Department of Education: Public Opinion**

When asked to choose among priorities for the Federal Department of Education, two-thirds of the public responded that providing a basic education should be among the top 5 areas. A majority also chose vocational training as among the most important priorities.

"As you may know, a new federal Department of Education has been established with cabinet status. We would like to know what you think this new Department should give special attention to in the next few years. Will you choose five of the areas listed on this card which you think are *most* important."



NCES

Education at the elementary/secondary level in 1980 continued to experience declines in the size of the student population begun in the previous decade. At the same time that the number of students and schools decreased, services were expanded to meet the needs of special students. Staffing may have begun to show minor adjustments to declining enrollment and recent programmatic emphases. Concern with instructional quality and accountability led several States to consider teacher competency testing. The cost of schooling and the distribution of the financial burden came under increased scrutiny. Nationwide assessments of student performance yielded mixed results, showing moderate progress or no change in some areas and significant disparities in others.

This chapter provides information on these and other developments by detailing statistically the basic components of elementary/secondary schooling. The essential features of education—enrollment, organization, programs and curriculum, finance, and student performance—are each examined in turn. Along with profiling these components, the chapter offers data to illuminate current topical concerns including special programs, teacher competency testing, private school tuition, and minority group performance.

### **Enrollment**

Total public school enrollment declined from 45.9 million students in 1970 to 41.6 million in 1979, a decrease of 9.4 percent (entry 2.1). Most of this decline was registered in the elementary grades (preprimary through 8th grade) as the size of the population entering school in the 1970's decreased. Forty-three States and the District of Columbia experienced reductions at the elementary level. In 15 States the loss of elementary students was over one-fifth of the 1970 enrollment. To a lesser extent, shrinking enrollments were felt as well at the secondary level in 13 States and the District of Columbia. In the remaining 37 States, the 1979 secondary school enrollment was higher than the 1970 enrollment but in only 8 States did the 1979 figure represent a record enrollment over all previous years. The States that showed gains in enrollment over the 1970 figures at both the elementary and secondary levels included five Mountain States, Alaska, and Florida. These States experienced significant immigration during the 1970's. Conversely, those States with the most rapid enrollment drops were located in the Middle Atlantic and North Central regions, areas that experienced significant outmigration during this period.



The racial/ethnic composition of schools and classrooms that minority students attend provides a crude index of segregation. Given that minority students represented 25 percent of the total public school enrollment, all minority students would in a totally desegregated situation attend schools where they represent about one-fourth of the student population. A look at the fall 1978 Office for Civil Rights (OCR) data indicates that this distribution has yet to be approximated; most minority students in 1978 were concentrated in schools and classrooms in which they represented the majority (entry 2.2). Nationwide 60 percent of minority students were enrolled in predominantly minority or racially isolated schools. This figure, however, was somewhat lower than the proportions reported for 1976 among blacks and Hispanics, showing less segregation than two years previously. As an indicator of classroom segregation in 1978, two-thirds of minority students attended classes where minorities made up at least 45 percent of the class roster. Fully one-third attended racially isolated classes where minorities comprised at least 90 percent of classroom enrollment. Compared to the rest of the Nation, the Western and Border State regions showed somewhat lower segregation while the Northeast was highest.

The private sector of elementary/secondary schools was responsible for educating about one-tenth of the Nation's students in 1st to 12th grade. According to the Bureau of the Census household survey, elementary/secondary students in privately controlled schools comprised 9.8 percent of the total enrollment from grades 1 to 12 in October of 1979 (entry 2.3). It should be noted that this figure does not include preprimary enrollment and is an undercount of the total private school enrollment reported by NCES from its survey of schools. The Bureau of the Census data indicate that private school representation of the total enrollment varied appreciably by region and by metropolitan status. The Northeast had the highest proportion of private school students, 12.5 percent, followed by the North Central region at 11.5 percent, and the West and South at 7.9 and 7.8 percent, respectively. Within each region, the metropolitan central city areas exhibited the highest private school enrollment rates. Nationwide 16 percent of metropolitan central city students were enrolled in private schools. By contrast, nonmetropolitan areas showed only 5 percent of their total enrollment in private schools. Taking region and metropolitan status together, the highest private school rates were found in Northeast central cities at 20.3 percent and the lowest in Western nonmetropolitan areas at 2.8 percent. Regardless of region or metropolitan status, the preponderance of private school students were enrolled in religiously affiliated schools.

Among students living in metropolitan areas, whites were more likely than blacks or Hispanics to attend private schools, 13.7 percent compared to 6.2 and 9.7 percent, respectively (entry 2.4). White students living in metropolitan central cities showed the highest private school enrollment; over one-fifth of all whites in central cities attended private schools. Although the proportion of black students in private schools was small, the percentage of central city black students in private schools was twice as high as that outside the central city. Hispanics had private school enrollment rates between those of whites and blacks. Hispanic private school students were enrolled almost exclusively in religiously affiliated schools, particularly in the central cities.

#### **Organization**

More than 95 percent of the 87,006 public elementary/secondary schools were organized by the grade span served in the 1978-79 school year (entry 2.5). Elementary schools, those with no grade higher than the 8th, were the most common, and at this level, schools organized from preprimary to 6th grade were the most typical form. At the junior high level, schools providing 7th to 9th grades were most prevalent, although other combinations of 6th through 9th grades were frequent. Secondary schools were generally organized from 9th to 12th grade, with schools spanning 7th to 12th grade being the second most common form. Only 1 percent of all public schools contained all grades from preprimary through the 12th grade.

The ratio of students to teachers varied slightly by the grade span of the public schools. From an average ratio of 19 students per teacher, the number of students differed by, at most, 2 students, depending on the grade span (entry 2.6). Generally, the ratio declined slightly in the later elementary grades and then rose again. Schools beginning in the lower elementary grades and ending before the 10th grade assigned 1 more student per teacher on the average than most other schools. Yet schools starting in the upper elementary grades assigned 1 fewer student per teacher than average. Schools with only secondary grades also had 1 more student assigned per teacher than average. Schools with unclassified grade spans showed the greatest variation, with ratios from 8 to 23, indicating that these facilities were special purpose schools serving different types of special students.

During the 1978-79 school year, some 5.1 million students were enrolled in 19,666 private schools (entry 2.7). Religiously affiliated schools accounted for 79.9 percent of all schools and 85.3 percent of all enrollment in the private elementary/secondary sector. Catholic schools and enrollment predominated, representing 50.1 percent of all private schools and 64.3 percent of all enrollment. Catholic schools also had higher student-teacher ratios averaging 23 students per teacher, compared to 12 students per teacher in unaffiliated schools and a student-teacher ratio of 16.2 in all other religiously affiliated schools.

Student-staff ratios in secondary schools differed by control of school and by type of staff, according to the 1980 High School and Beyond (HSB) Survey conducted by NCES. Non-Catholic private secondary schools exhibited the smallest student-staff ratios in all categories of professional and nonprofessional staff, partially as a function of their small average enrollment size (entry 2.8). Catholic secondary schools maintained ratios more similar to public schools than to other private schools perhaps because of their larger enrollment. Public secondary schools had lower ratios of students to teachers, remedial specialists, and psychologists than Catholic schools but had higher ratios to other professional staff. Public schools were more likely to employ teacher aides but less likely to use volunteers than Catholic and other private schools. Use of security guards was relatively rare in all secondary schools and almost nonexistent in Catholic schools.

Declining enrollments have generally resulted in smaller student-teacher ratios and slack demand for new teachers. In some areas, teacher layoffs have also been a consequence of declines in students and funding. Preliminary data are available for the first time that document the extent and distribution of teacher layoffs and shortages by teaching field in public and private schools combined. School districts reported 23,800 teacher layoffs, i.e., teachers whose contracts were not renewed at the end of the 1978-79 school year because of budget constraints and whose positions were not subsequently filled (entry 2.9). This represented less than 1 percent of all teachers employed in the 1979-80 school year. School districts also reported total teacher shortages, numbering 10,700 unfilled vacancies between the spring and fall of 1979. In only three fields, bilingual education, industrial arts, and special education, did the number of shortages exceed the number of layoffs. Even these numbers of unfilled positions were small. Some fields were disproportionally represented among layoffs in relation to their share of employed teachers. These fields included: art, home economics, and foreign languages. In addition, preprimary and special education were overrepresented among layoffs yet they were also overrepresented among shortages in relation to employed teachers. Other fields with relatively more shortages included: biological and physical sciences, industrial arts, and mathematics.

A further concern that has emerged in recent years is the issue of teacher qualifications. By the end of 1980, 23 States had either introduced or passed provisions governing competency-based teacher certification (entry 2.10). These provisions were usually mandated by the State legislature, but in at least five States, were established through State board of education regulations. Most of the provisions were initiated over the previous three years, indicating the recentness of this concern with enacting teacher competency. With the exception of Kentucky, the Southern States all required competency standards. Of the 15 States with enacted provisions, all specified the assessment of teaching candidates and 6 covered the testing of education majors as well. No State had yet passed provisions governing current teachers, but four States proposed such standards. Seven States administered the National Teacher Examinations (NTE) as part of their evaluation of teacher qualifications; one State, Tennessee, used the California Achievement Test in conjunction with the NTE for assessing education majors; and all others employed State-developed testing. Among the States considering provisions, one proposed using the NTE and the rest State-developed tests with Oklahoma proposing that teachers meet locally-initiated staffing development requirements in addition to State-level testing.

### Programs and Curriculum

Bilingual education assists students whose only or dominant language is not English to overcome the lack of English proficiency which impedes their educational progress. Bilingual programs utilize the native language of the student as an instructional medium until the student is able to become integrated into English language classrooms. In the fall of 1978, 925,000 public elementary/secondary school students were reported as limited-English speaking or non-English speaking (LES/NES) by the Office for Civil Rights. This represented 2 percent of the general student population. Of all Hispanics enrolled in public schools nationwide, a total of 730,000 or 26 percent were identified as LES/NES making them the largest limited-English proficient minority (entry 2.11). Relatively high proportions of Asian Americans and American Indians were also identified as LES/NES, 14 percent and 8 percent, respectively. Proportionately, the Western States had the largest concentration of LES/NES students, where 349,000 or almost 5 percent of students were so identified.

Hispanic students in the Northeast and South were somewhat more likely to be classified LES/NES than those in other regions. Nearly one-third of Hispanics in those areas were classified as limited-English proficient—31 percent in the Northeast and 33 percent in the South. Higher proportions of Asian Americans in the South and Northeast also were determined to be LES/NES. The figures were 26 percent and 19 percent respectively for Asian Americans in those regions. American Indian students in the Western States were nearly twice as likely (16.6 percent) to be classified LES/NES as those in the Nation as a whole.

Nationally, about 60 percent of all those identified as LES/NES were receiving bilingual education or equivalent services under Title VII of the Elementary and Secondary Education Act of 1965, as amended. Geographic regions varied in the extent to which members of various racial/ethnic minorities who had been identified as LES/NES were being served by bilingual education programs. Of Hispanics so identified, those in the South were least likely to receive the services of bilingual education. This pattern held true for Asian Americans as well. Ninety-seven percent in Alaska/Hawaii received such services, whereas only 47 percent in the South and Midwest were being served. Overall participation rates of American Indians were much lower, and displayed considerable variation regionally, from 5 percent in the Midwest to 56 percent in Alaska/Hawaii.

Programs for the gifted and talented have developed in recognition that students with outstanding abilities need differentiated educational services beyond those normally provided. Nationwide, 810,836 public school students, or less than 2 percent of public school enrollment, participated in gifted and talented programs in the fall of 1978 (entry 2.12). Participation was more extensive in some States than in others; in Nebraska, North Carolina, California, New York, and Pennsylvania, participants comprised at least 3 percent of public school enrollment. There were also slight distinctions in participation rates by sex; female students, except in the West, tended to participate more than their male counterparts, 2.1 percent compared to 1.8 percent nationwide (entry 2.13). Variations in participation rates were more apparent by racial/ethnic group; white students were slightly more likely to participate and Asian American students were more than twice as likely as other groups to participate. By contrast, the participation rate for American Indian students was less than half that for all students.

The availability of special programs for secondary school students varied considerably by control of school, according to the High School and Beyond (HSB) Survey. Public secondary schools were much more likely than private schools to offer credit for work experience or occupational training in the spring of 1980 (entry 2.14). In addition, they more frequently offered alternative school programs compared to private schools. Catholic schools most often provided coursework for advanced college placement, 40 percent compared to 29 percent of public schools and 33 percent of other private schools. Yet access of students to this program showed less variation between Catholic and public schools; 50 percent of Catholic school sophomores attended schools where advanced college placement was offered compared to 48 percent of public school sophomores and 42 percent of non-Catholic private school sophomores. Programs for the gifted and talented were available in about one-third of all secondary schools; 37 percent of public schools, 28 percent of Catholic schools, and 19 percent of other private schools offered such programs. Although bilingual education was infrequently available at the secondary level, it was more than three times as likely to be provided by public schools than by private schools.

Public secondary schools much more frequently had students participating in federally funded or assisted programs than private schools with a few exceptions. Seventy percent of public schools had students taking part in the largest Elementary/Secondary Education Act (ESEA) program, Title I for economically disadvantaged students, compared to 24 percent of Catholic schools and 1 percent of other private schools (entry 2.15). Only in two programs subsumed under ESEA Title IV did Catholic school participation exceed that of public schools. Participation in the Comprehensive Employment and Training Act (CETA) program was extensive among public schools, though infrequent among private schools. A majority of public schools participated in most programs provided by the Vocational Education Act, while private schools only minimally had students taking part. Participation in the Upward Bound and Talent Search programs was not extensive, although it was more frequent in public schools than in others.

A look at the curricular areas assessed in State minimum competency testing programs suggests those areas that the States consider essential. In 1979, 31 States had adopted State-level minimum competency standards. All of these States required assessments in reading and mathematics, and more than half specified testing in the language arts (entry 2.16). About one-third of the States also required that writing be assessed. Speaking skills and listening skills were included in State-level minimum competency programs in 4 and 3 States, respectively. In reading and mathematics, one-third of the States mandated testing in the lower elementary grades, and about half required assessments in either grade spans 4th to 6th, 7th to 8th, or 9th to 12th. Only 6 States out of the 31 limited testing in reading and mathematics to the 9th to 12th grades. In other curricular areas as well, testing was most often mandated above the lower elementary grades but was not restricted to the secondary grades. This suggests that States tended to regard minimum competency testing as an ongoing process and one not limited to assessing secondary school students as they prepare to graduate.

The types and level of courses offered by secondary schools varied considerably by control of school, although access of students to these courses did not differ to such a great extent. Course offerings in academic subjects were most prevalent in Catholic secondary schools, while vocational training and instruction in basic life skills were most frequently offered in public secondary schools (entry 2.17). Catholic schools most often provided higher level courses in mathematics, science, and foreign languages. Non-Catholic private schools tended to offer less higher level academic coursework compared to other schools. For example, calculus was offered by 60 percent of Catholic schools, 47 percent of public schools, and 36 percent of other private schools. In terms of access, calculus was available to 72 percent of Catholic school sophomores, 64 percent of public school sophomores, and 60 percent of non-Catholic private school sophomores. By contrast, vocational training in auto mechanics and wood or machine shop was rarely offered by Catholic schools and was much more prevalent in public schools.

The actual enrollment of secondary school students in academic and vocational courses differed not only by the control of the school that they attended but also by their residence, sex, and other background characteristics, according to the 1979 Current Population Survey (entry 2.18). Students enrolled in public schools were less likely to take college preparatory mathematics, foreign languages, and chemistry or physics than their private school counterparts but more likely to be enrolled in shop for vocational training and home economics. Participation in academic subjects varied also by region and metropolitan status being highest in the Northeast and metropolitan areas. Participation in higher level mathematics and foreign language courses generally declined from the 10th to 12th grade. One-half of 10th graders took college preparatory mathematics, while only one-third of 12th graders were enrolled. Participation in foreign language courses declined by half from the 10th to 12th grade; about 14 percent of 12th graders took a foreign language. Female students participated to a somewhat lesser extent in college preparatory mathematics and chemistry or physics, and to a greater extent in foreign languages than their male schoolmates. Single sex dominance was most pronounced in business education, shop for vocational training, and home economics with females being 3 times as likely as males to be enrolled in business education and 5 times as likely to be enrolled in home economics. Participation also varied by socioeconomic status as measured by both educational attainment of the family head and family income. Higher status was associated with greater academic participation and less vocational training.

Males and females were unevenly represented in home economics and industrial arts classes provided below the 10th grade according to the 1978 Office for Civil Rights Survey (entry 2.19). These courses, by and large, were required as part of the standard curriculum at this level and were not elective advanced courses in occupational training. Female students comprised 70.4 percent of home economics enrollment while male students made up 74.8 percent of industrial arts instruction. Of all schools that offered home economics or industrial arts, 24 percent limited their courses to one sex. Such courses enrolled 31.1 percent of female participants and 24.9 percent of male participants. Enrollments were most sharply drawn along sex lines in the South and West and courses were most often restricted to one sex in the South.

According to the 1980 HSB survey, males and females in their senior year were enrolled in about the same proportions in all three broad curricular programs: academic, general, and vocational (entry 2.20). Within the vocational (occupational preparation) curriculum, however, differences were evident; female students were disproportionately represented in business or office, health, and home economics training and male students in agricultural, technical, and trade or industrial training. Variations in the distribution of seniors across the broad curricular categories were much more marked by racial/ethnic group. The proportion of seniors enrolled in the academic curriculum varied from less than one-fourth of American Indians to over one-half of Asian Americans. Compared to white students, black, Hispanic, and American Indian students were distributed more often in general or vocational curriculums; Asian American students were distributed more often in the academic curriculum.

## Finance

The State share of total public elementary/secondary school revenues has continued to grow since the 1971-72 school year. State receipts at 45.7 percent of the total public elementary/secondary school dollar surpassed local and intermediate receipts at 44.5 percent of the school dollar for the first time in history in 1978-79 (entry 2.21). States varied widely in the proportion of the school dollar provided, from 7¢ in New Hampshire to 64¢ in Kentucky and 70¢ in Alaska. Hawaii, which has one school system for the entire State, provided 83.5 percent of the school dollar from State sources with the remaining 16.5 percent derived from the Federal Government. Nationwide, the Federal share of the public elementary/secondary school dollar remained above 9 percent for the second year. The Federal share varied by State from 5.4 percent in Wisconsin to 24.8 percent in Mississippi. The local share of the school revenue dollar also varied widely from over 86.4 percent in New Hampshire to 18.5 percent in New Mexico and 18.8 percent in Alaska.

The availability of revenues to local school districts from the different governmental sources led to variations in spending by local school districts. Of course, cost-of-living variations also contributed to differences in expenditures. In 1978-79 about 1 percent of school districts nationwide spent less than \$800 in core current expenditure per student enrolled, and over 6 percent of school districts spent \$2,600 or more per student (entry 2.22). Core current expenditures exclude food service and transportation costs and direct State or intermediate agency expenditures. Expenditures in a range from \$1,000 to \$1,800 characterized spending in most school districts. The nationwide average increased from \$1,311 in 1976-77 to \$1,584 in 1978-79, resulting in an upward shift in the distribution of school districts grouped by expenditures. Variations within States remained about the same as previously reported, with 10 States showing some school districts in each expenditure interval. In four States, Alabama, Hawaii, Mississippi, and South Carolina, all school districts fell in the bottom half of the national distribution. Only one State, Alaska, had all school districts in the top half, and all these districts spent \$2,600 or more.

The statewide average total expenditure per student, including current expenditures, capital outlays, and interest, varied from \$4,522 per student in average daily attendance in Alaska to \$1,493 in Arkansas (entry 2.23). Twenty States and the District of Columbia were above the national average expenditure of \$2,210 while 30 States fell below the average. Southern States, on the whole, spent less than the national average. Current expenditures, primarily for instruction, represented more than 91 percent of the average total expenditure. Generally, Western States with increases in student population had proportionally above average expenditures for capital outlay.

The tuitions and fees paid for private schooling varied by level of schooling and by whether or not schools were religiously affiliated, according to costs reported by families on the Bureau of the Census household survey. Regardless of whether or not the school was affiliated, tuition and fees paid for elementary schooling were less expensive than for secondary schooling (entry 2.24). In October of 1979, a majority of elementary school students paid under \$500 a year, while only 6 percent of secondary students paid this amount. The affiliation status of private schools further differentiated the costs that families incurred. Forty-seven percent of students attending religiously affiliated schools paid less than \$500 in tuition and fees while another 29 percent spent between \$500 and \$999. This meant that more than three-fourths of these students paid less than \$1,000 a year in tuition and fees. By contrast only 29 percent of students enrolled in unaffiliated schools paid under \$1,000.

Family income distinguished students enrolled in private schools from those in public schools. It further differentiated within the private sector between those attending religiously affiliated schools and those going to unaffiliated schools. Thirty-seven percent of all private school students came from families with annual incomes of at least \$25,000 compared to 21 percent of public school students. Breaking down the private school enrollment into affiliated and unaffiliated reveals additional differences; 35 percent of students in religiously affiliated schools came from the higher income category, while over 56 percent in unaffiliated schools did. The tuition and fees that families incurred did not differ appreciably among income groups except between the highest income category and all others. Not only were students from the highest income category most likely to attend private schools, they were also most likely to spend \$1,000 or more in tuition and fees. More than twice the proportion in this category spent the highest amount as students in any other category. In unaffiliated schools regardless of level, over three-fourths in this income bracket paid \$1,000 or more annually. Approximately 44 percent of these students in religiously affiliated secondary schools also paid tuition and fees of \$1,000 or more.

Tuition and fees paid by racial/ethnic groups reflected differential incomes in that whites were more than twice as likely as blacks and Hispanics to pay \$1,000 or more annually in tuition and fees (entry 2.25). As indicated previously, whites were also most likely to participate in private education. Slightly more than 7 percent of private school students were black, and slightly less than 6 percent were Hispanic, compared to 16 percent and 7 percent respectively in the public schools.

### Performance

Building upon previous assessments administered in 1969-70 and 1973-74, the National Assessment of Educational Progress (NAEP) conducted in the 1978-79 school year an extensive evaluation of writing skills among 9-, 13-, and 17-year-old students. The three assessments taken together reveal that during the decade there was no major overriding change in the writing abilities of most students (entry 2.26). The majority of students at each age demonstrated control over basic writing conventions, although a sizable minority estimated from 10 to 25 percent, appeared to have serious difficulties with writing. There were some slight shifts in the overall quality of writing performance by each age group as measured by holistic evaluations of narrative essays. Over the three assessments, scores of 9-year-olds improved somewhat, as evidenced in a 6 percentage point increase in better papers. Those of 13-year-olds declined, primarily between 1969 and 1973. Overall quality of narrative essays written by 17-year-olds evidenced minor declines from the earlier assessments. Among 9-year-olds, rhetorical skill on one narrative task declined between 1970 and 1979 but remained unchanged on both an expressive and a persuasive writing exercise between 1974 and 1979. Success in writing a routine business letter suggests that 9-year-olds had less difficulty with straightforward tasks. At ages 13 and 17, expressive writing skills improved or remained at the same level, while persuasive and descriptive skills appeared to decline.



Black students improved on one task given to 9-year-olds and almost all writing tasks given to 13- and 17-year-olds. On some exercises, they continued to perform below the national level, but not as far below as they had been in the earliest assessment; on other exercises, they performed at the national level for the first time. Nine-year-olds in the disadvantaged-urban group closed the gap between themselves and the Nation on one narrative writing task but remained below the Nation on the rest. At age 13, the group stayed below the national level or fell even farther behind. At age 17, the disadvantaged-urban group made steady gains over the decade.

Results from the High School and Beyond Survey of sophomores and seniors indicate that differences in student performance were associated with racial/ethnic membership and socioeconomic status. A battery of performance exercises were administered to the sophomores and seniors, along with the survey questionnaire, in the spring of 1980. On these exercises, standardized scores of blacks, Hispanics, and American Indians fell below the average, while those of whites and Asian Americans were higher than the norm (entry 2.27). Within the Hispanic category, Cubans, on the whole, performed best, followed by Other Hispanics, and then Mexicans and Puerto Ricans. The high performance of Asian Americans was particularly evident in the area of mathematics. Achievement scores of the various racial/ethnic groups tended to cluster about their socioeconomic composite scores. The two racial/ethnic groups with higher than average scores on the socioeconomic composite, Asian Americans and whites, performed above the norm in all assessment areas. Conversely, those groups with lower socioeconomic composite scores performed below the mean scores in vocabulary, reading, and math and in most other areas.

During the 1970's, the high school graduation rate declined slightly and then stabilized at about 74 percent of the relevant age group (entry 2.28). The rate is not expected to rise throughout the 1980's. With no change in proportion and a decline in secondary school enrollment anticipated, the number of students graduating from secondary school is projected to decrease into the late 1980's. From the peak year enrollment in 1977 to enrollment at the end of the decade, the number is expected to drop by at least half a million. Most of this drop is anticipated in the public sector. The number of female graduates is projected to continue to be slightly larger than that of male graduates throughout this period.

A look at the racial/ethnic composition of public high school graduates in relation to the composition of enrollment reveals that graduation rates differed by minority status (entry 2.29). Nationwide and in all continental regions, whites comprised a disproportional share of the high school graduating class of 1978 in comparison to their share of enrollment in 1978. Blacks and Hispanics were underrepresented in the high school graduating class in most regions.

Other outcomes also appear to be associated disproportionately with some minority groups, according to the 1978 OCR survey. Although black students comprised 16 percent of public school enrollment, they accounted for 29 percent of suspensions, 27 percent of expulsions, and 29 percent of all corporal punishment cases in the Nation's schools (entry 2.30). In the Border States and D.C., the Midwest and the West, blacks made up twice as many suspension cases as would be expected from enrollment alone. Male students, too, were inordinately involved in disciplinary actions. They represented about half of the total enrollment but over two-thirds of suspensions and more than three-fourths of expulsions and corporal punishment cases.

Table 2.1

## Public elementary/secondary school enrollment and percent change, by grade level and State: Fall 1970 and fall 1979

State	Total			Preprimary to 8th			9th to 12th		
	Enrollment		Percent change	Enrollment		Percent change	Enrollment		Percent change
	1970	1979		1970	1979		1970	1979	
Numbers in thousands									
Total 50 States and D C	45,909	41,579	-9.4	32,577	27,884	-14.4	13,332	13,694	2.7
				Increased			Increased		
Arizona	440	509	15.7	314	353	12.4	126	156	23.8
Nevada	128	148	15.6	93	98	5.4	35	50	42.9
Idaho	182	203	11.5	124	141	13.7	58	62	6.9
Alaska	80	89	11.3	61	61	0	19	28	47.4
Wyoming	87	96	10.3	60	67	11.7	27	29	7.4
Utah	304	333	9.5	213	238	11.7	91	95	4.4
Florida	1,428	1,508	5.6	1,016	1,031	1.5	412	477	13.3
				Decreased			Increased		
New Hampshire	159	171	7.5	114	112	-1.8	45	59	31.1
Texas	2,840	2,873	1.2	2,046	2,004	-2.1	794	869	9.4
Colorado	550	551	2	391	370	-5.4	159	181	13.8
New Mexico	281	276	-1.8	199	186	-6.5	82	90	9.8
Georgia	1,099	1,078	-1.9	800	746	-6.8	299	332	11.0
South Carolina	638	625	-2.0	459	429	-6.5	179	196	9.5
Arkansas	463	453	-2.2	330	312	-5.5	133	141	6.0
West Virginia	400	388	-3.0	281	265	-5.7	119	123	3.4
Tennessee	900	866	-3.8	649	610	-6.0	251	256	2.0
Virginia	1,079	1,031	-4.4	776	715	-7.9	303	316	4.3
Vermont	103	98	-4.9	74	68	-8.1	29	30	3.4
Louisiana	842	800	-5.0	615	555	-9.8	227	245	7.9
Kentucky	717	677	-5.8	513	466	-9.2	204	211	3.4
Alabama	805	754	-6.3	570	519	-9.9	235	235	0
Washington	818	765	-6.5	573	515	-11.3	245	250	2.0
Hawaii	181	169	-6.6	129	112	-13.2	52	57	9.6
Maine	245	228	-6.9	177	156	-11.9	68	72	5.9
Oklahoma	627	583	-7.0	437	398	-8.9	190	165	2.6
Mississippi	534	482	-9.7	388	326	-16.0	146	146	6.8
Massachusetts	1,168	1,036	-11.3	833	685	-17.8	335	351	4.8
Indiana	1,231	1,084	-11.9	876	723	-17.5	355	361	1.7
New Jersey	1,482	1,288	-13.1	1,063	848	-20.2	419	440	5.0
Illinois	2,357	2,043	-13.3	1,688	1,367	-19.0	669	676	1.0
Connecticut	662	567	-14.4	487	378	-22.4	175	189	8.0
New York	3,477	2,969	-14.6	2,448	1,905	-22.2	1,029	1,064	3.4
Michigan	2,181	1,860	-14.7	1,605	1,223	-23.8	576	637	10.6
Maryland	916	778	-15.1	664	510	-23.2	252	268	6.3
Missouri	1,039	873	-16.0	748	579	-22.6	291	294	1.0
Pennsylvania	2,364	1,969	-16.5	1,635	1,233	-24.4	728	736	1.2
Rhode Island	188	154	-18.1	135	99	-26.7	53	55	3.8
				Decreased			Decreased		
Oregon	480	467	-2.7	325	317	-2.5	155	150	-3.2
North Carolina	1,192	1,150	-3.5	836	796	-4.8	356	354	-.6
Montana	177	158	-10.7	121	106	-12.4	56	52	-7.1
California	4,633	4,048	-12.6	3,231	2,730	-15.5	1,402	1,318	-6.0
Nebraska	329	287	-12.8	230	190	-17.4	99	97	-2.0
Wisconsin	994	858	-13.7	679	544	-19.9	315	314	-.3
Minnesota	921	778	-15.5	631	496	-21.4	290	282	-2.8
Ohio	2,426	2,025	-16.5	1,698	1,351	-20.4	728	674	-7.4
Iowa	660	548	-17.0	465	357	-23.2	195	191	-2.1
Kansas	512	423	-17.4	357	288	-19.3	155	135	-12.9
South Dakota	166	134	-19.3	114	88	-20.2	52	46	-11.5
North Dakota	147	118	-19.7	100	76	-24.0	47	42	-10.6
Delaware	133	104	-21.8	94	65	-30.1	39	39	0
District of Columbia	1,146	106	-27.1	113	75	-33.6	33	31	-4.7

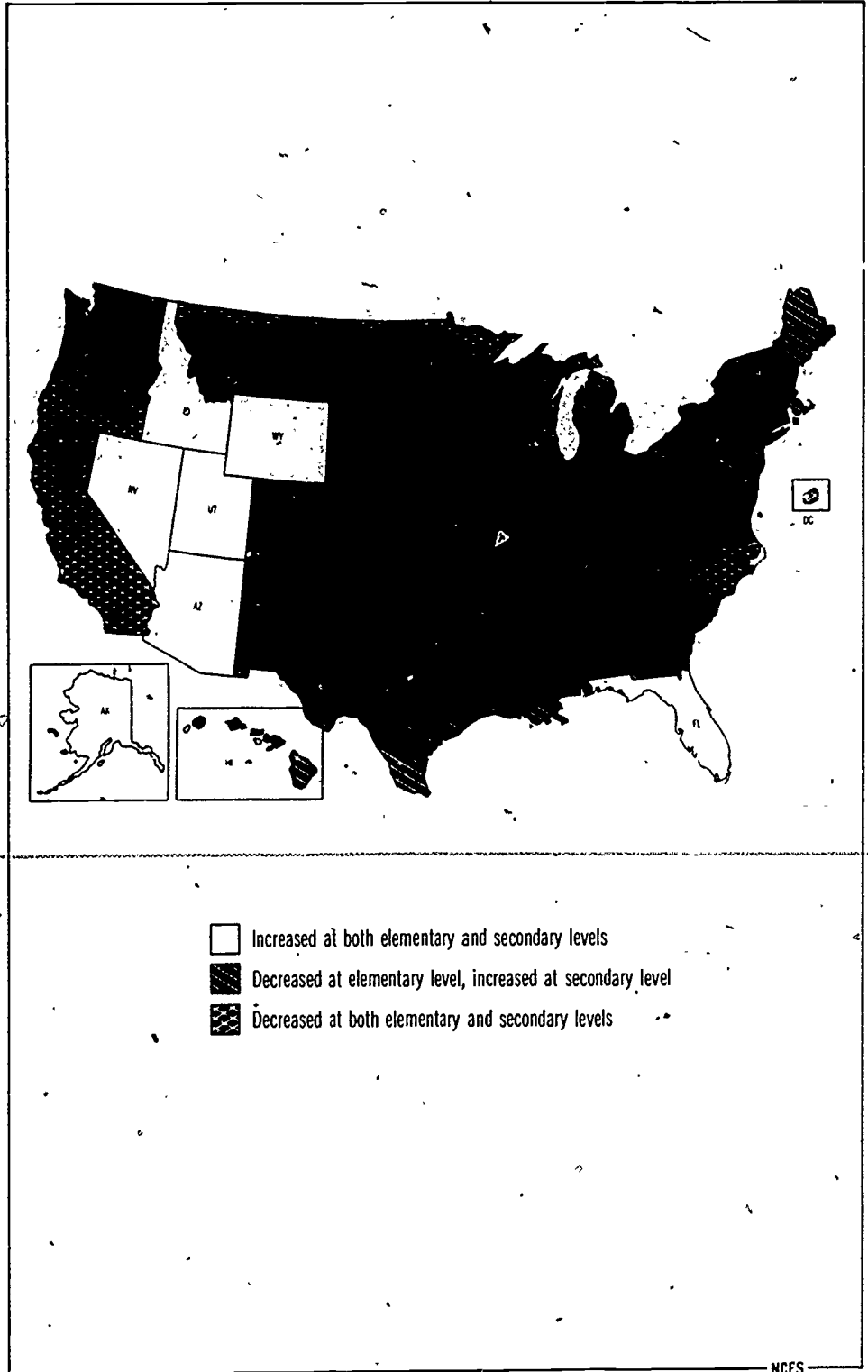
\* Less than 0.1 percent change

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Public School Enrollment Changes*, forthcoming, and unpublished tabulations.

**Chart 2.1**  
**Public Elementary/Secondary School Enrollment Changes Between 1970 and 1979**

In 7 States, public school enrollment actually increased at both the elementary and secondary levels between 1970 and 1979 while in 30 States, enrollment in 1979 was lower only at the elementary level. In the remaining 13 States and the District of Columbia, enrollment at the secondary level also fell below the numbers reached in 1970. In 12 States, total enrollment declined by over 15 percent between 1970 and 1979.



**Table 2.2**  
**Minority student enrollment by minority composition of schools and classrooms in public elementary/secondary schools, by region: Fall 1978**

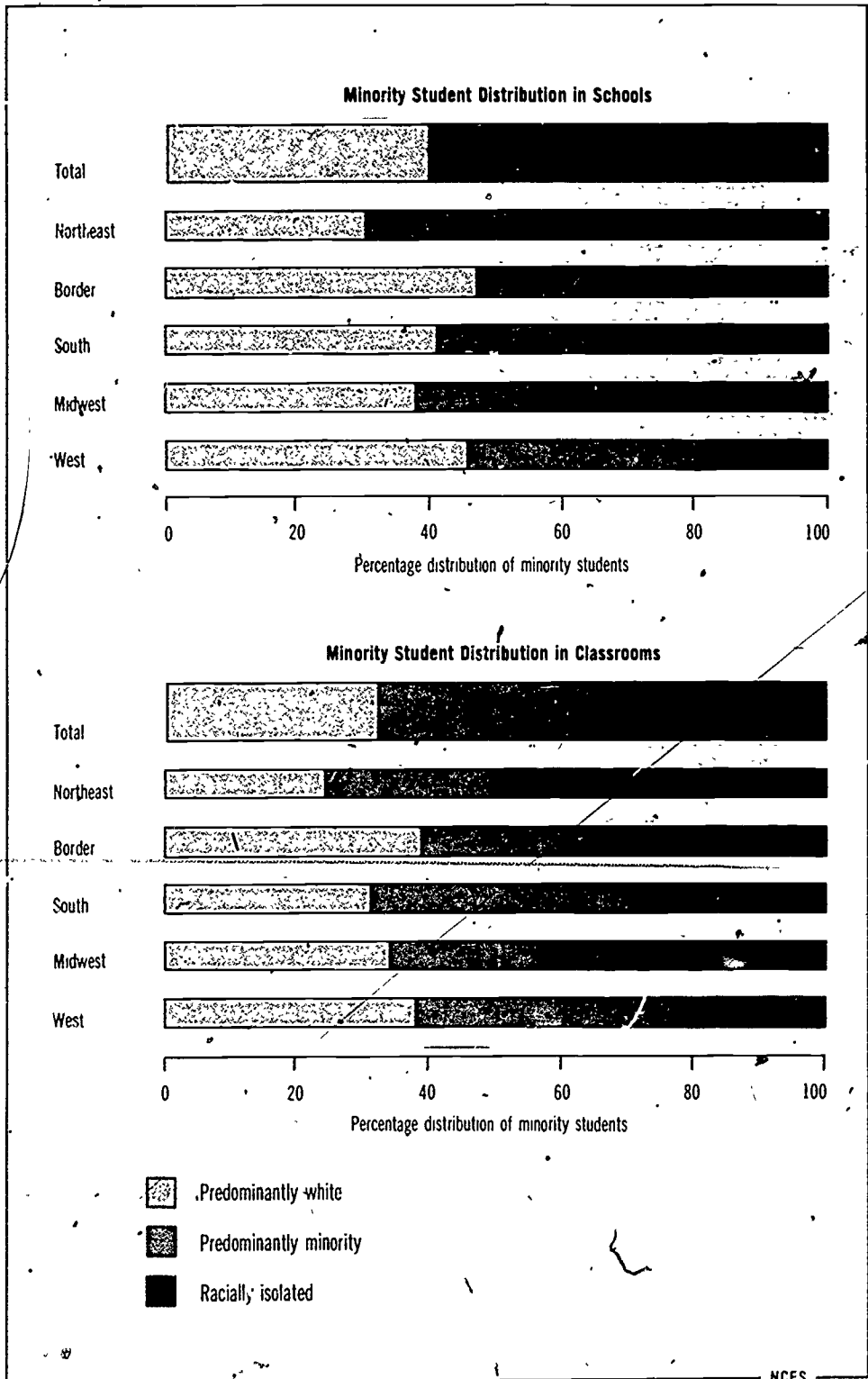
Region	Minority enrollment, in thousands	Percent of total enrollment	Composition of schools			
			Total	Predominantly white (0 to 49.9 percent of enrollment)	Predominantly minority (50 to 89.9 percent of enrollment)	Racially isolated (90 to 100 percent of enrollment)
Percentage distribution						
Total 50 States and D.C.	10,326	25	100	40	30	30
Northeast	1,772	21	100	30	25	45
Border States and D.C.	734	21	100	47	20	33
South	4,047	35	100	41	34	24
Midwest	1,517	15	100	38	19	43
West	2,099	28	100	46	36	18
Alaska/Hawaii	157	61	100	12	54	33
Composition of classrooms						
			Total	(0 to 44.9 percent of enrollment)	(45 to 89.9 percent of enrollment)	(90 to 100 percent of enrollment)
Percentage distribution						
Total 50 States and D.C.			100	32	35	33
Northeast			100	24	28	48
Border States and D.C.			100	39	26	35
South			100	31	40	29
Midwest			100	34	23	43
West			100	38	40	22
Alaska/Hawaii			100	10	49	41

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, *State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools, 1980.*

**Chart 2.2**  
**Minority Student Distributions in Schools and Classrooms**

Although racial integration of minority students varied regionally, being lowest in the Northeast, in no region was at least half of minority students enrolled in integrated schools or classrooms.



**Table 2.3**

**Public and private elementary/secondary school enrollment, by region and metropolitan status: October 1979**

Region and metropolitan status	Total enrolled, in thousands	Enrolled in public schools	Enrolled in private schools			Affiliation not reported
			Total	Religiously affiliated	Unaffiliated	
			Percentage distribution			
<b>All regions</b>						
Total, all students	42,981	90.2	9.8	8.2	1.4	0.2
Metropolitan	28,435	87.7	12.3	10.4	1.6	.3
Central city	11,106	84.0	16.0	13.5	2.1	.4
Outside central city	17,329	90.0	10.0	8.4	1.3	.2
Nonmetropolitan	14,546	95.0	5.0	4.0	.9	.1
<b>Northeast</b>						
Total, all students	9,734	87.5	12.5	11.1	1.2	.3
Metropolitan	7,476	85.8	14.2	12.6	1.2	.4
Central city	2,894	79.7	20.3	18.6	1.2	.6
Outside central city	4,582	89.7	10.3	8.9	1.2	.2
Nonmetropolitan	2,259	92.9	7.1	5.9	1.1	.1
<b>North Central</b>						
Total, all students	11,198	88.5	11.5	10.4	.9	.3
Metropolitan	7,352	85.7	14.3	12.7	1.3	.3
Central city	2,768	82.7	17.3	15.2	1.5	.5
Outside central city	4,584	87.5	12.5	11.2	1.2	.2
Nonmetropolitan	3,846	93.9	6.1	5.9	.0	.2
<b>South</b>						
Total, all students	14,482	92.2	7.8	5.7	1.9	.1
Metropolitan	7,887	89.3	10.7	8.3	2.3	.2
Central city	3,450	87.6	12.4	9.2	3.1	.1
Outside central city	4,437	90.6	9.4	7.5	1.7	.2
Nonmetropolitan	6,595	95.8	4.2	2.6	1.5	.1
<b>West</b>						
Total, all students	7,567	92.1	7.9	6.2	1.4	.3
Metropolitan	5,721	90.5	9.5	7.4	1.8	.3
Central city	1,994	86.0	14.0	10.9	2.7	.4
Outside central city	3,726	92.9	7.1	5.5	1.3	.3
Nonmetropolitan	1,846	97.2	2.8	2.4	.3	.1

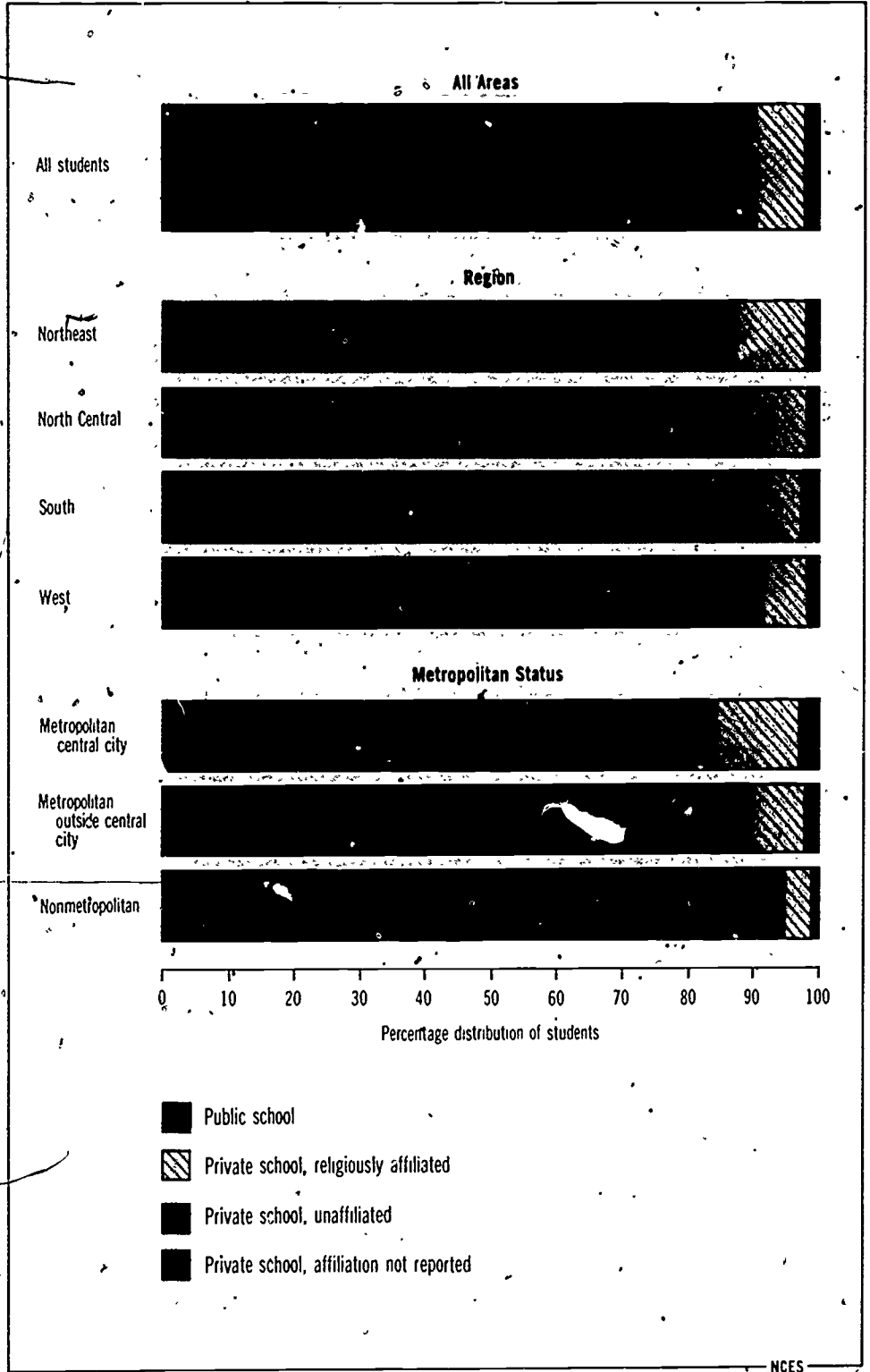
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations

**Chart 2.3**

**Public and Private Elementary/Secondary School Enrollment by Region and Metropolitan Status**

Enrollment in private schools was most prevalent in the Northeast and North Central regions and in central city areas. In Northeastern central cities, more than one-fifth of all students attended private schools.



NCES

**Table 2.4**

**Public and private elementary/secondary school enrollment, by metropolitan status and racial/ethnic group: October 1979**

Metropolitan status and racial/ethnic group	Total enrolled, in thousands	Enrolled in public schools	Enrolled in private schools			Affiliation not reported
			Total	Religiously affiliated	Unaffiliated	
				Percentage distribution		
Total, metropolitan	28,435	87.7	12.3	10.4	1.6	0.3
White	22,730	86.3	13.7	11.5	1.8	.3
Black	5,027	93.8	6.2	5.3	.7	.2
Hispanic <sup>1</sup>	2,457	90.3	9.7	8.6	.8	.3
Total, central city	11,106	84.0	16.0	13.5	2.1	.4
White	7,154	79.6	20.4	17.2	2.7	.5
Black	3,608	92.7	7.3	6.1	.9	.3
Hispanic <sup>1</sup>	1,507	89.1	10.9	10.3	.3	.3
Total, outside central city	17,329	90.0	10.0	8.4	1.3	.2
White	15,575	89.4	10.6	8.9	1.4	.3
Black	1,419	96.5	3.5	3.2	.3	.0
Hispanic <sup>1</sup>	950	92.1	7.9	6.0	1.7	.2

<sup>1</sup> Hispanics may be of any racial group.

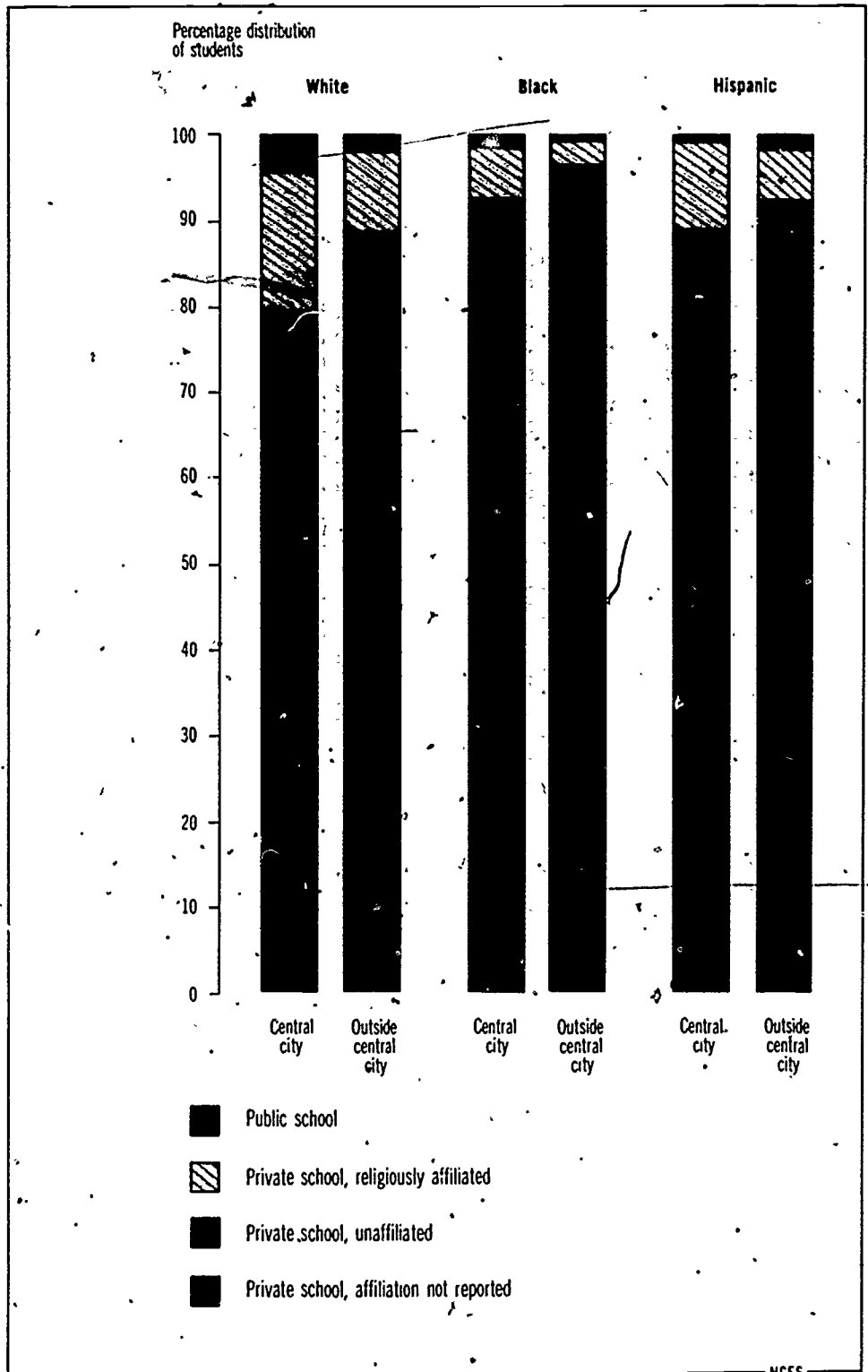
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations



**Chart 2.4**  
**Public and Private Elementary/Secondary School Enrollment in Metropolitan Areas**  
**by Racial/Ethnic Group**

White students were twice as likely as black students to be enrolled in private schools. For all racial/ethnic groups, enrollment in private schools was highest in the central cities.



**Table 2.5**

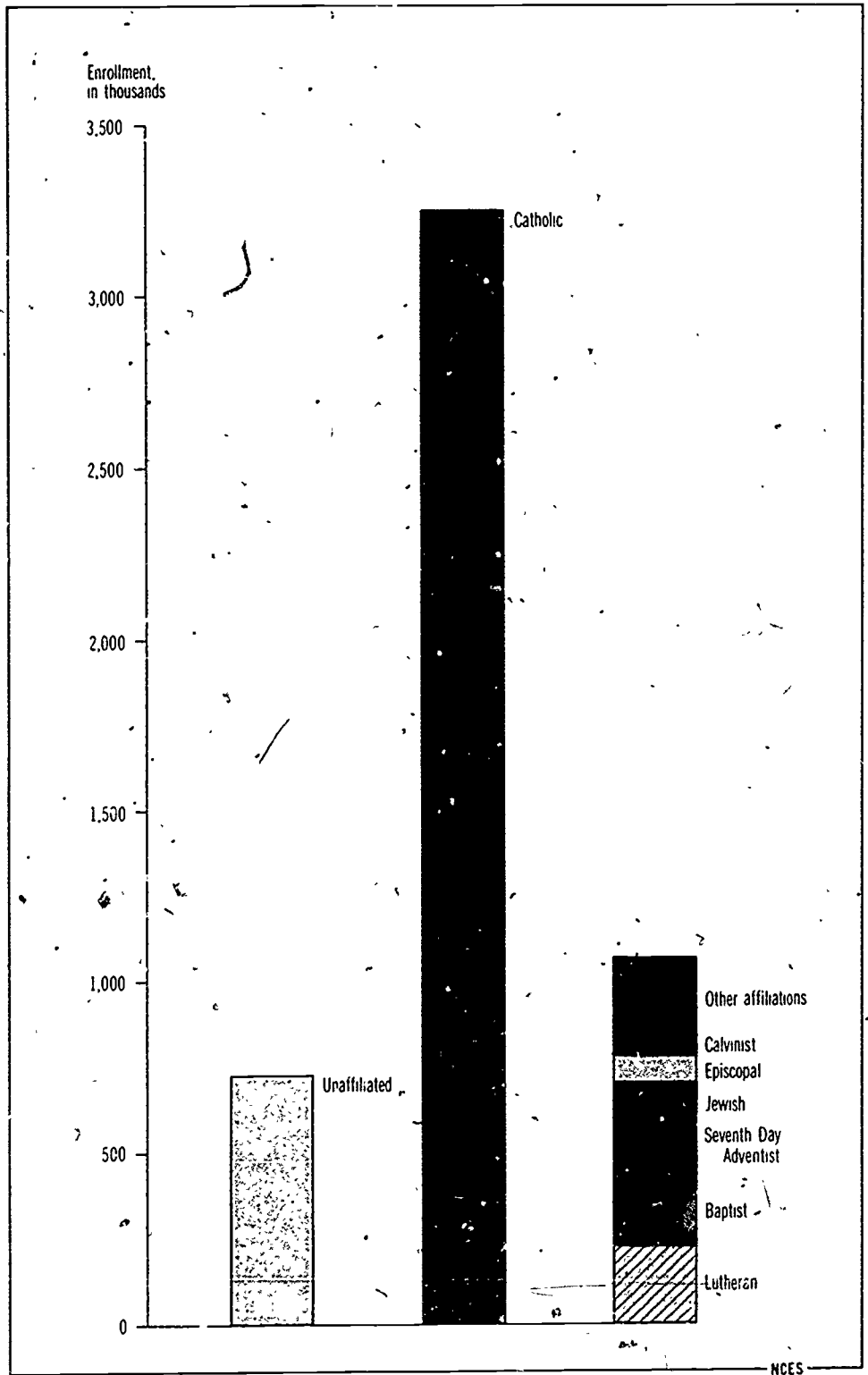
**Enrollment, average school size, teachers, and student-teacher ratios in private elementary/secondary schools, by religious affiliation: School year 1978-79**

Affiliation	Number of schools	Enrollment	Average school size	Number of teachers	Student-teacher ratios
Total	19,666	5,084,297	259	272,664	18.6
Unaffiliated	3,944	746,730	189	63,232	11.8
Religiously affiliated	15,719	4,337,567	276	209,432	20.7
Baptist	858	204,144	238	11,665	17.5
Calvinist	166	47,269	285	2,298	20.6
Catholic	9,849	3,269,761	332	143,352	22.8
Eastern Orthodox	14	2,682	192	170	15.8
Episcopal	314	76,452	243	6,159	12.4
Friends	50	14,611	292	1,373	10.6
Jewish*	406	101,758	251	7,737	13.2
Lutheran	1,485	217,406	146	10,199	21.3
Methodist	60	11,187	186	734	15.2
Presbyterian	60	12,823	214	861	14.9
Seventh Day Adventist	1,106	148,157	134	10,286	14.4
Other affiliations	1,351	231,317	171	14,598	15.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Private Schools: Their Part in America's Elementary and Secondary Education*, forthcoming.

**Chart 2.5**  
**Private Elementary/Secondary School Enrollment by Religious Affiliation**

Most private elementary/secondary school students were enrolled in Catholic schools followed by much smaller enrollments in unaffiliated, Lutheran, and Baptist schools.



NCES

**Table 2.6**

**Number of public elementary/secondary schools and estimated percentage distribution, by level of instruction and grade span served: School year 1978-79**

Level and grade span	Number	Percentage distribution
Total schools	87,006	100.0
Elementary schools	53,192	61.1
Preprimary only	902	1.0
Preprimary to 2nd	1,052	1.2
Preprimary to 3rd	2,215	2.6
Preprimary to 4th	2,920	3.4
Preprimary to 5th	8,116	9.3
Preprimary to 6th	25,618	29.4
Preprimary to 7th	790	.9
Preprimary to 8th	7,229	8.3
4th to 6th	746	.9
Other spans with highest grade preprimary to 6th	3,604	4.1
Junior high or middle schools	12,020	13.8
5th to 8th	928	1.1
6th to 8th	2,888	3.3
7th to 8th	2,132	2.4
7th to 9th	3,790	4.4
Other spans with highest grade 7th to 9th	2,282	2.6
Secondary schools including high schools	16,639	19.1
7th to 12th	4,045	4.6
8th to 12th	417	.5
9th to 12th	7,584	8.7
10th to 12th	2,813	3.2
Other spans with highest grade 10th to 12th	1,780	2.1
Combined elementary, secondary schools (preprimary to 12th)	1,145	1.3
Schools not classified by lowest and highest grade <sup>3</sup>	4,010	4.6

<sup>1</sup> Level of school is a classification by highest grade served. Elementary includes schools with no grade higher than 8th. Junior high and middle schools have no grades higher than 7th, 8th, or 9th and no grade lower than 5th, 6th, or 7th. Secondary schools have as the highest grade 10th, 11th, or 12th.

<sup>2</sup> Lowest grade of elementary schools may include prekindergarten, kindergarten, or 1st grade.

<sup>3</sup> Schools in this category have grade spans that are unspecified, ungraded, or unclassified.

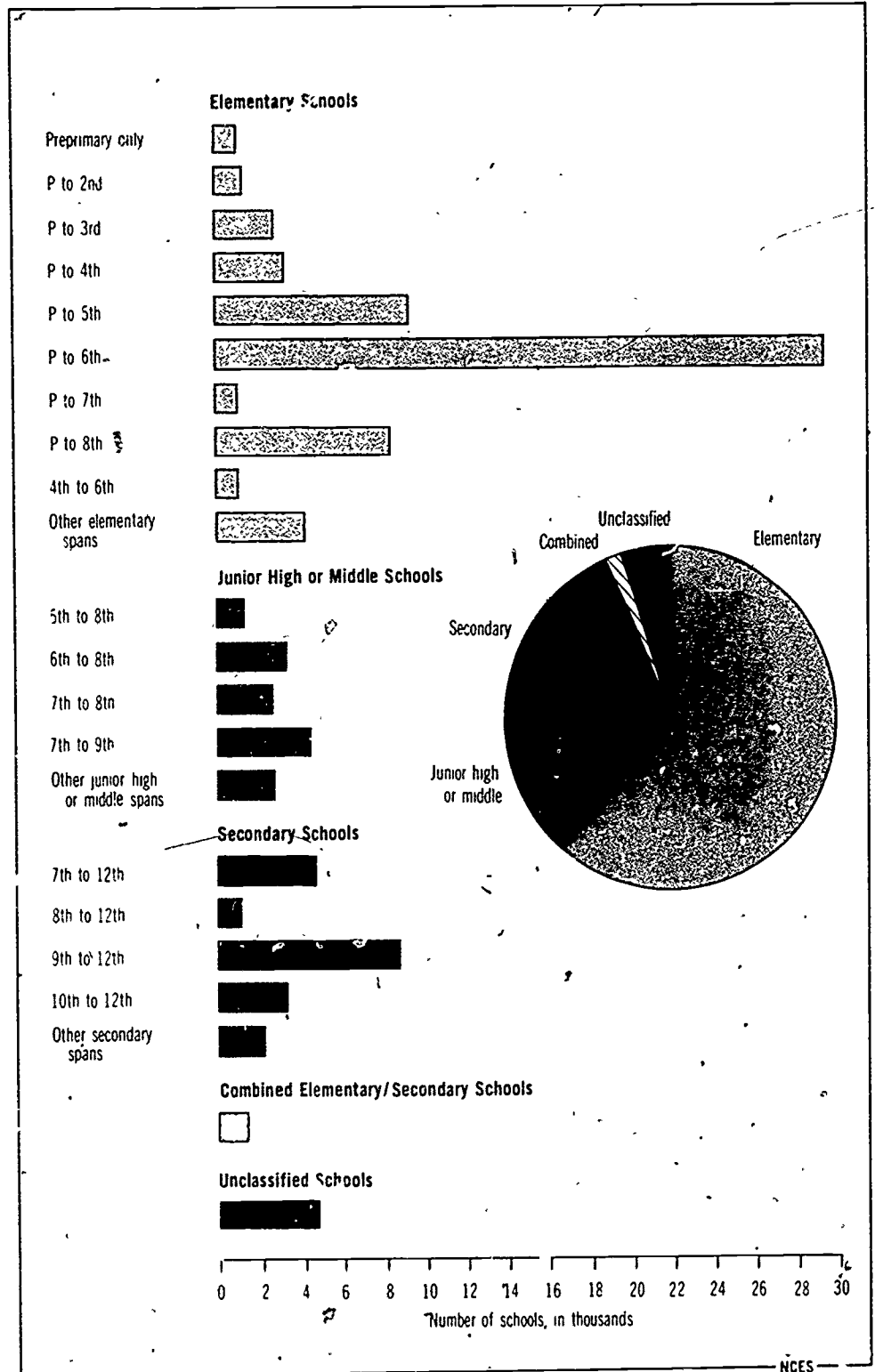
NOTE: These national estimates are based on information reported in 1978 by all States except California, Georgia, and Massachusetts. Each category was inflated equally to represent a known national total of 87,006.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD) 1978-79 Survey, unpublished tabulations.

**Chart 2.6**

**Number and Estimated Distribution of Public Elementary/Secondary Schools by Level and Grade Span**

At the elementary level, preprimary to 6th grade was the most frequent grade span, at the junior high level, 7th to 9th grade, and at the secondary level, 9th to 12th grade. Variations in grade span, however, were common at each level.



**Table 2.7****Student-teacher ratios in public elementary/secondary schools, by lowest and highest grade of school: School year 1978-79**

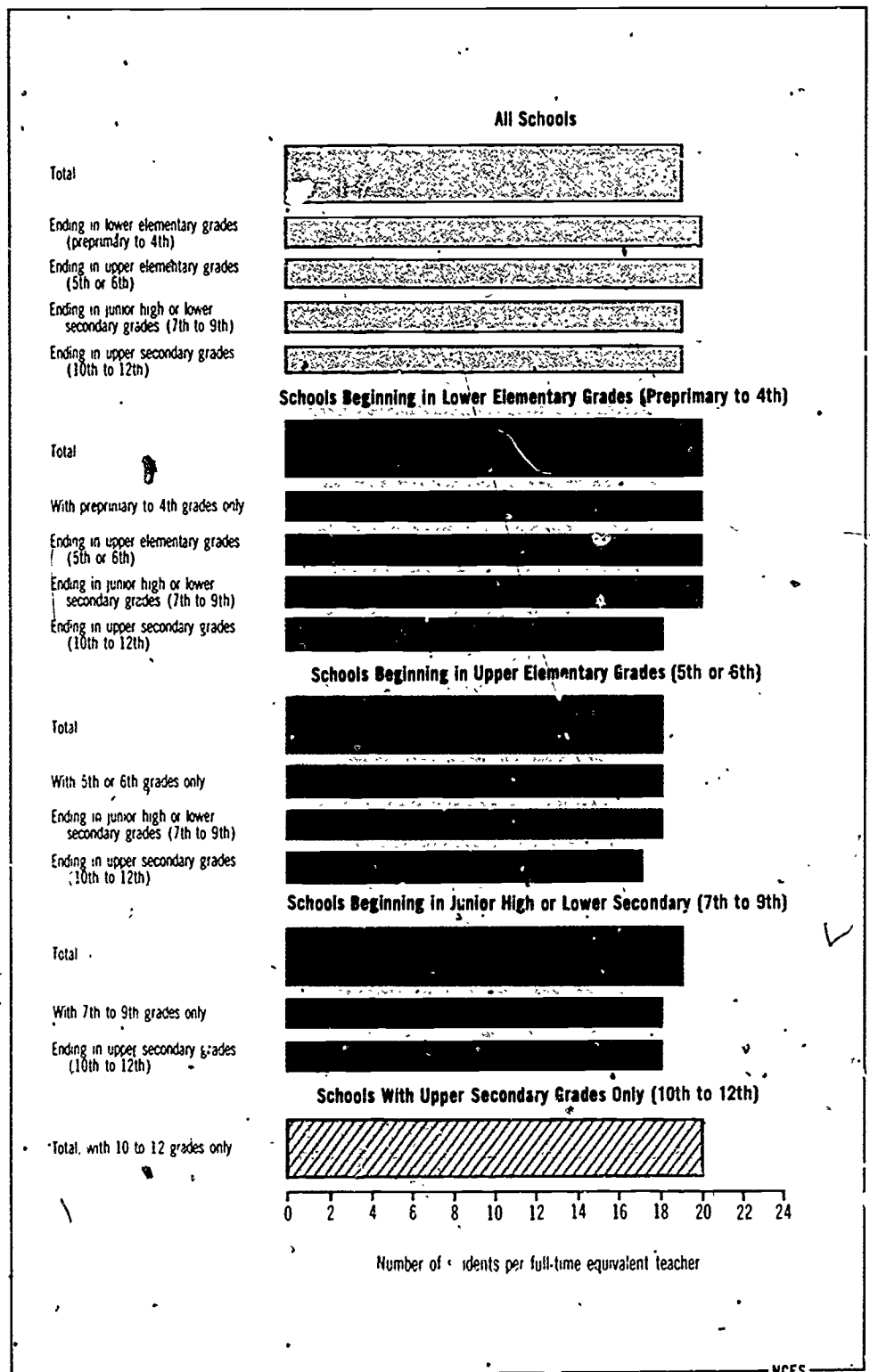
Lowest grade of school	Highest grade of school					
	Total	Preprimary to 4th	5th or 6th	7th to 9th	10th to 12th	Unclassified
	Students per 1 full-time equivalent teacher					
Total	19	20	20	19	19	19
Preprimary to 4th	20	20	20	20	18	23
5th or 6th	18	...	18	18	17	21
7th to 9th	19	...	...	18	18	22
10th to 12th	20	...	...	...	20	22
Unclassified	18	22	22	19	19	8

NOTE: These tabulations were computed from incomplete data on pupils and teachers for several States. The ratios were computed from data supplied by State education agencies for 74 percent of all students and 82 percent of all teachers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD) 1978-79 Survey, unpublished tabulations

**Chart 2.7**  
**Student-Teacher Ratios by Grade Span of Public Elementary/Secondary Schools**

Student-teacher ratios in public elementary/secondary schools differed slightly by the grade span served, averaging from 17 to 20 students per teacher in schools classified by grade span. Schools beginning in the lower elementary grades and ending before the 10th grade, assigned 1 more student per teacher on the average than most other schools, yet schools beginning in the upper elementary grades assigned at least 1 fewer student per teacher than average. Schools with only upper secondary grades also had 1 more student assigned per teacher than average.



NCS

**Table 2.8**

**Secondary school student-staff ratios, by control of school and type of staff: Spring 1980**

Staff	Public	Catholic	Other private
	Number of students per staff		
Professional staff	15	16	6
Teachers	16	19	7
Assistant deans, principals	500	410	120
Counselors	320	240	55
Librarians and media specialists	590	340	210
Remedial specialists	500	900	385
Psychologists	2,400	4,600	1,130
Nonprofessional staff			
Teacher aides	350	2,600	126
Volunteers	820	390	102
Security guards	1,800	18,200	770
Mean school enrollment	759	546	146

$$\text{Number of students per staff} = \frac{\text{Mean weighted enrollment}}{\text{Mean weighted number of full-time equivalent staff}}$$

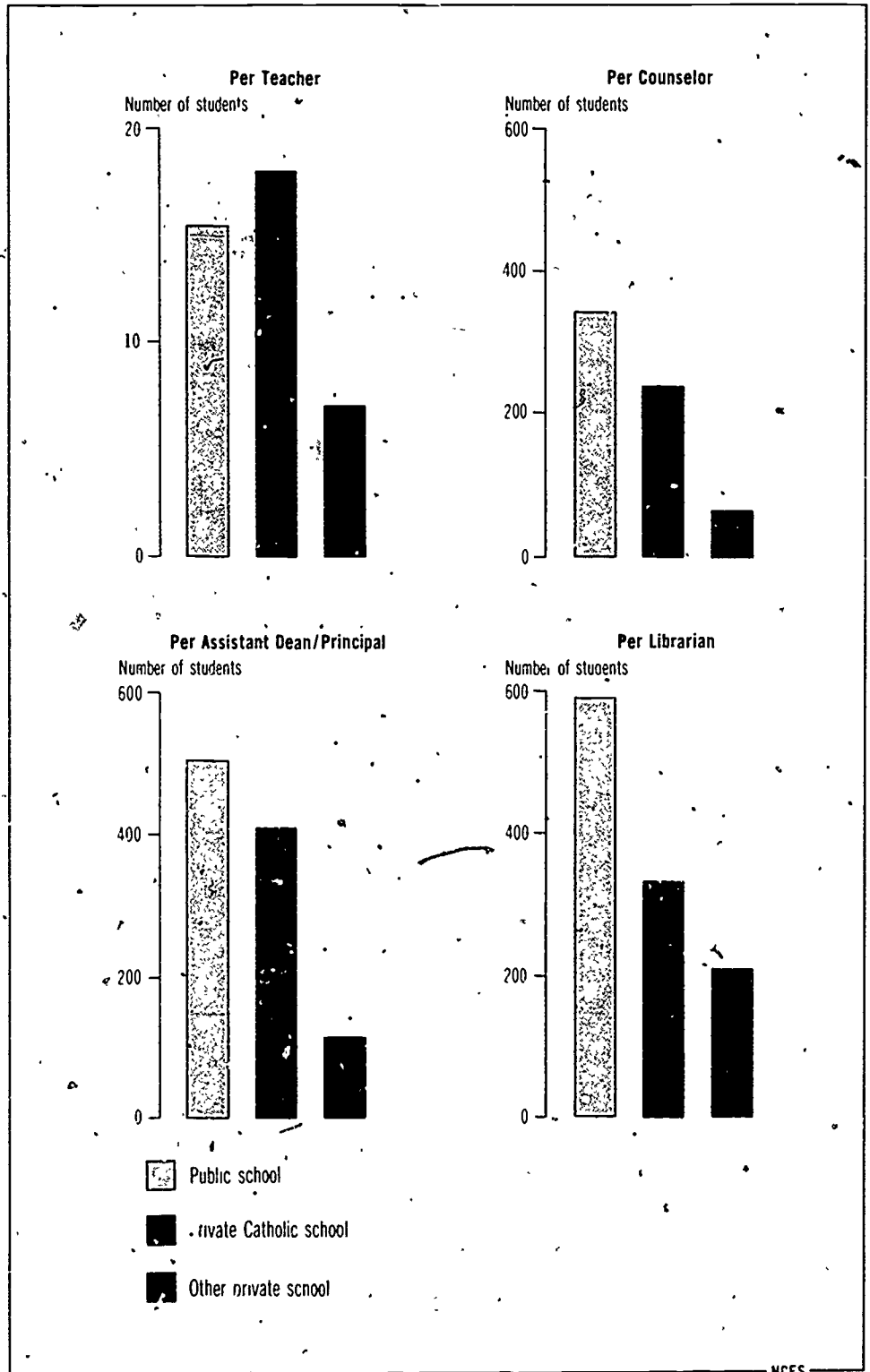
SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, *Public and Private Schools*, forthcoming.

80



**Chart 2.8**  
**Secondary School Student-Staff Ratios**

Although public secondary schools had slightly lower student-teacher ratios than Catholic schools, they averaged more students per counselors, assistant deans/principals, and librarians than private schools.



**Table 2.9**

**Public and private elementary/secondary school teacher layoffs and shortages, by field: 1979**

Field of assignment	Employed <sup>1</sup>	Layoffs <sup>2</sup>	Shortages <sup>3</sup>	Employed	Layoffs	Shortages	
	teachers	Number <sup>4</sup>		teachers			
		Percentage distribution					
Total	2,621,000	23,800	10,700	100.0	100.0	100.0	
Preprimary	97,000	1,300	700	3.6	5.5	6.5	
Primary and general elementary	909,000	7,800	2,600	33.5	32.8	24.3	
Art	59,000	1,100	100	2.2	4.6	.9	
Basic skills and remedial education	15,000	100	( <sup>5</sup> )	.6	.4	...	
Bilingual education	27,000	200	400	1.0	.8	3.7	
Biological and physical sciences	135,000	1,100	900	5.0	4.6	8.4	
Business	46,000	400	200	1.7	1.7	1.9	
English language arts	190,000	1,800	200	7.0	7.6	1.9	
Foreign languages	54,000	800	100	2.0	3.4	.9	
Gifted and talented	10,000	( <sup>5</sup> )	100	.4	...	.9	
Health, physical education	155,000	1,000	100	5.7	4.2	1.9	
Home economics	37,000	500	( <sup>5</sup> )	1.4	2.1	...	
Industrial arts	42,000	400	500	1.5	1.7	4.7	
Mathematics	153,000	1,100	900	5.6	4.6	8.4	
Music	89,000	900	200	3.3	3.7	1.9	
Reading	76,000	400	300	2.8	1.7	2.8	
Social studies/social science	146,000	1,300	100	5.4	5.5	.9	
Special education	241,000	2,800	2,900	8.9	11.8	27.1	
Vocational education	104,000	600	300	3.8	2.5	2.8	
Other	36,000	200	100	1.3	.8	.9	

includes all full-time and part-time classroom teachers in public and private elementary/secondary schools during the 1979-80 school year.

<sup>1</sup> A layoff represents a teacher whose contract was not renewed at the end of the 1978-79 school year because of budget limitations, and whose position was not subsequently filled.

<sup>2</sup> A shortage represents a teaching position opening (budgeted new position or position vacancy) occurring from spring 1979 to fall 1979 (for the 1979-80 school year) for which teachers were sought but were unable to be hired because no qualified candidate was available.

<sup>3</sup> These figures represent unduplicated counts of teachers among fields. Teachers in more than one field were reported only in the field in which they spent most of their teaching time.

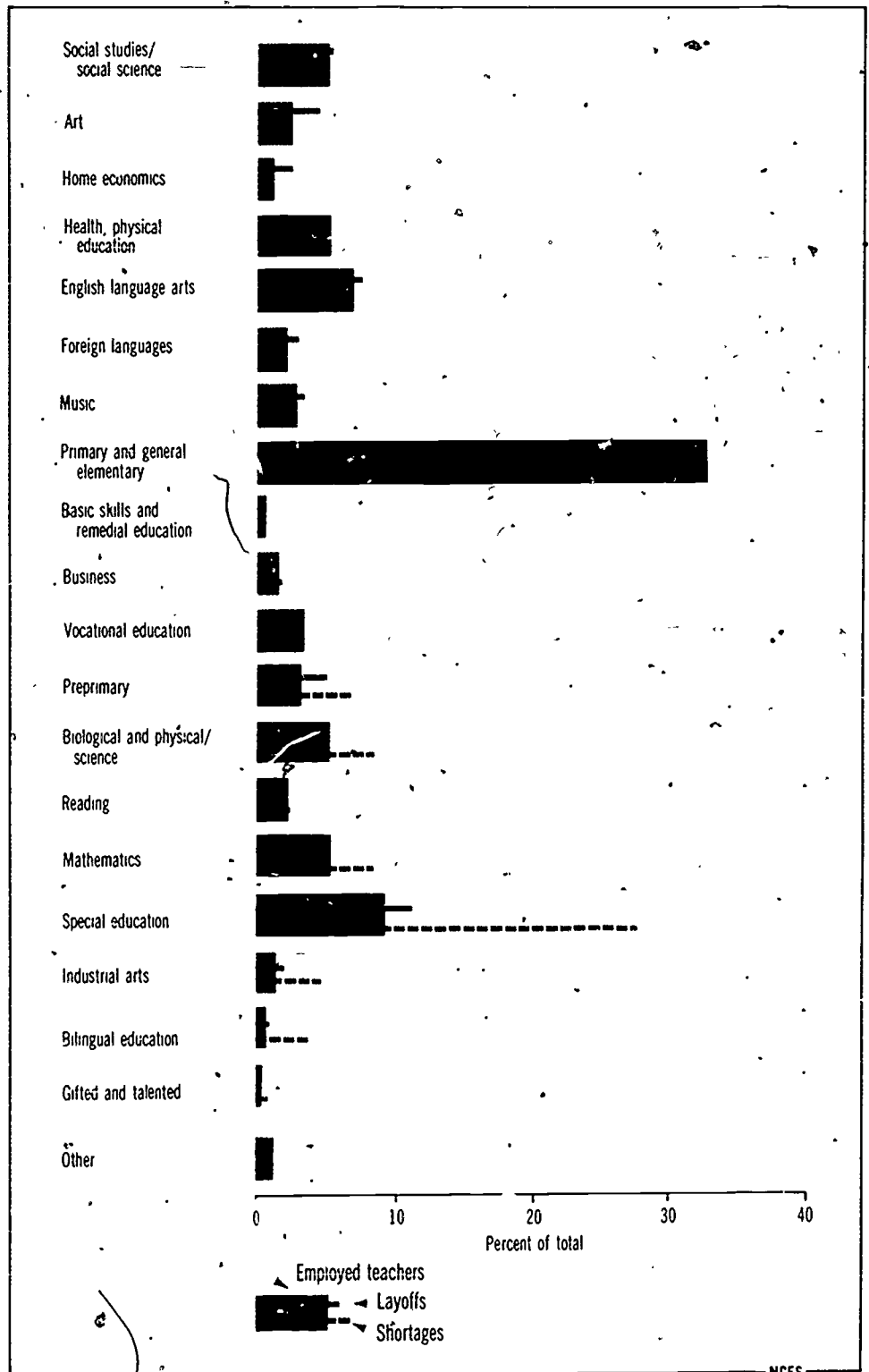
<sup>4</sup> Less than 100 positions.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Survey of Teacher Demand and Shortages, unpublished preliminary tabulations.

**Chart 2.9**  
**Teaching Field Layoffs and Shortages as Percent of all Teacher Layoffs and Shortages**

Teacher layoffs and shortages were unevenly distributed across teaching fields. Teachers in some fields such as art, home economics, and foreign languages were disproportionately represented among teacher layoffs. Other fields such as biological and physical sciences, mathematics and industrial arts had higher proportions of shortages than expected from their representation in the teaching force.



NCES

**Table 2.10**  
**Competency-based teacher certification provisions, by first year assessed, type of evaluation, and type of teachers assessed: 1980**

State	Provisions enacted				Provisions proposed			
	Year enacted	1st year assessed	Type of evaluation	Type of teacher assessed	Year proposed	1st year to be assessed	Type of evaluation	Type of teacher assessed
Alabama	1980	1981	State	TC				
Alaska								
Arizona	1980	1981	NTE	TC				
Arkansas	1979	1980	State	TC				
California								
Colorado					1979	1980	State	TC/CT
Connecticut								
Delaware								
District of Columbia								
Florida	1978	1980	State	TC				
Georgia	1979	1979	State	TC				
Hawaii								
Idaho								
Illinois					1980	1981	State	CT
Indiana								
Iowa					1980	1981	State	TC/CT
Kansas					1980	1980	State	TC
Kentucky								
Louisiana	1977	1979	NTE	EM/TC				
Maine								
Maryland								
Massachusetts								
Michigan								
Minnesota								
Mississippi		1972	NTE	TC				
Missouri					1980	1980	State	TC
Montana								
Nebraska								
Nevada								
New Hampshire								
New Jersey								
New Mexico								
New York	1980	1984	State	TC				
North Carolina	1964	1964	NTE	EM/TC	1978	1982	State	EM/TC
North Dakota								
Ohio								
Oklahoma	1980	1982	State	EM/TC	1980	1981	State/Local	TC
Oregon								
Pennsylvania								
Rhode Island					1980	1981	State	CT
South Carolina	1979	1981	NTE/State	EM/TC				
South Dakota								
Tennessee	1980	1982	CAT/NTE	EM/TC	1979	1981	NTE	TC
Texas*	1980	1981	State	EM/TC				
Utah								
Vermont					1979	1979	NTE	TC
Virginia	1980	1980	State	TC				
Washington								
West Virginia	1968	1969	NTE	TC				
Wisconsin					1979	1982	State	TC/CT
Wyoming								

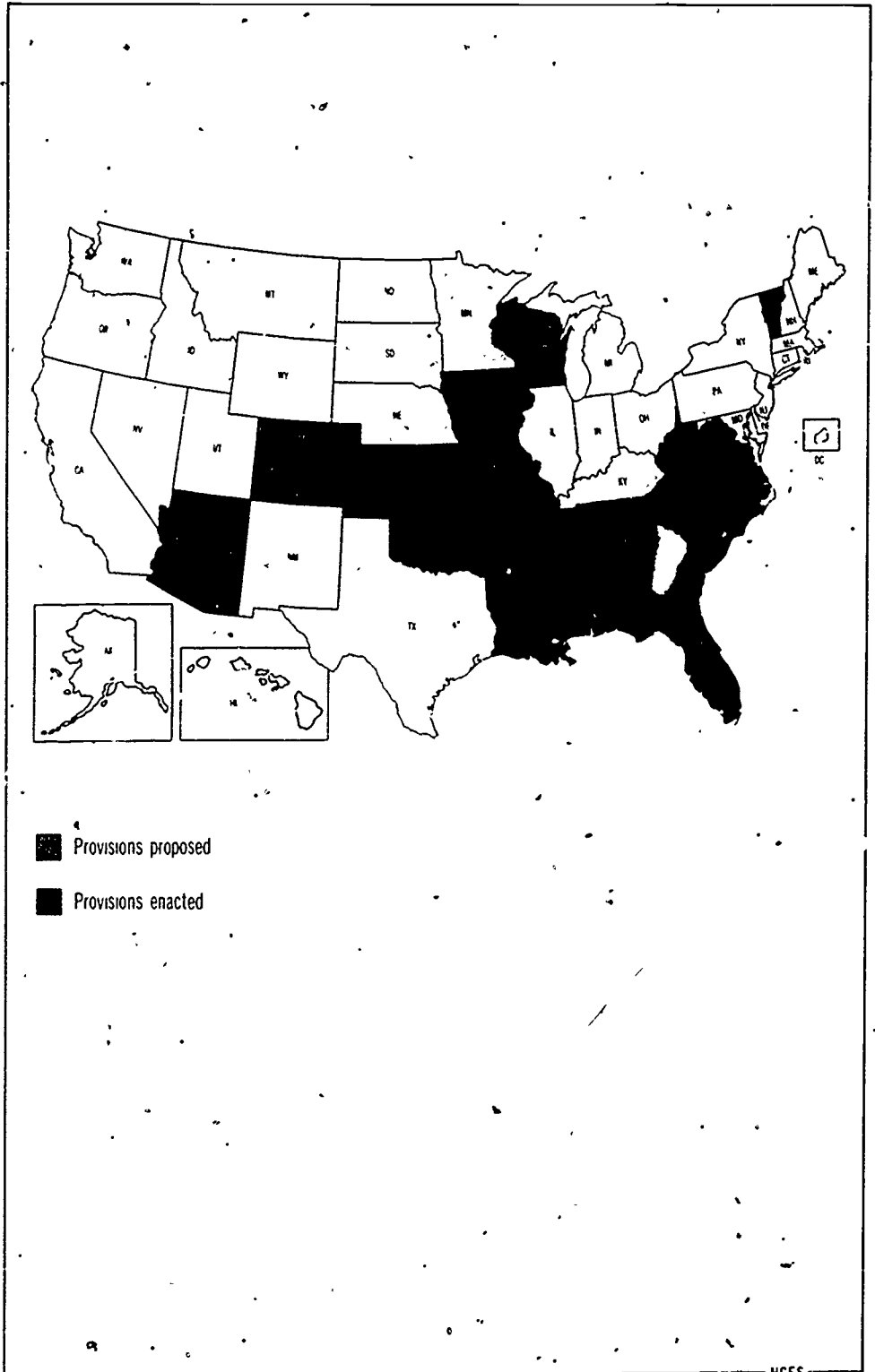
CAT = California Achievement Test  
 NTE = National Teacher Examinations  
 EM = Education majors  
 TC = Teaching candidates  
 CT = Current teachers

SOURCE: Education Commission of the States, Research and Information Department, *Trends in Competency Based Certification*, 1980 and unpublished data

**Chart 2.10**

**State Competency-Based Teacher Certification Provisions**

While several States across the country proposed competency-based certification of teachers, evaluation activity was concentrated in the South.



**Table 2.11**

**Public elementary/secondary school enrollment, students identified as limited English speaking or non-English speaking (LES/NES)<sup>1</sup>, and percent served in bilingual programs, by racial/ethnic group and region: Fall 1978**

Region and representation	Total	White <sup>2</sup>	Black <sup>2</sup>	Hispanic	Asian American <sup>3</sup>	American Indian
Numbers in thousands						
<b>Total 50 States and DC</b>						
Number enrolled	41 836	31 510	6 578	2 825	594	329
Percent of total enrollment	100.0	75.3	15.7	6.8	1.4	.8
Number identified as LES/NES	926	69	12	730	86	28
Percent identified as LES/NES	2.2	.2	.2	25.9	14.5	8.5
Percent of LES/NES served	60	47	42	63	54	39
<b>Northeast</b>						
Number enrolled	8 586	6 814	1 153	520	87	11
Percent of total enrollment	100.0	79.4	13.4	6.1	1.1	.1
Number identified as LES/NES	223	37	9	161	16	(3)
Percent identified as LES/NES	2.6	.6	.7	30.9	18.9	...
Percent of LES/NES served	62	48	42	67	56	...
<b>Border States and DC</b>						
Number enrolled	3 549	2 815	626	23	23	62
Percent of total enrollment	100.0	79.3	17.6	.6	.7	1.8
Number identified as LES/NES	10	2	(3)	4	4	1
Percent identified as LES/NES	.3	.1	...	17.3	17.4	.9
Percent of LES/NES served	61	59	...	62	67	12
<b>South</b>						
Number enrolled	11 626	7 579	3 119	841	56	31
Percent of total enrollment	100.0	65.2	26.8	7.2	.5	.3
Number identified as LES/NES	298	7	2	274	14	1
Percent identified as LES/NES	2.6	.1	.1	32.6	25.7	3.2
Percent of LES/NES served	56	32	41	57	47	13
<b>Midwest</b>						
Number enrolled	10 282	9 765	1 174	218	65	60
Percent of total enrollment	100.0	85.2	11.4	2.1	.6	.6
Number identified as LES/NES	42	9	(3)	25	8	1
Percent identified as LES/NES	.4	.1	...	11.3	12.2	.8
Percent of LES/NES served	55	50	...	60	47	5
<b>West</b>						
Number enrolled	7 138	5 438	500	1 210	244	145
Percent of total enrollment	100.0	72.1	6.6	16.1	3.2	1.9
Number identified as LES/NES	349	15	1	267	42	24
Percent identified as LES/NES	4.6	.3	.1	22.1	17.0	16.6
Percent of LES/NES served	63	46	41	68	54	41
<b>Alaska/Hawaii</b>						
Number enrolled	256	99	5	13	119	20
Percent of total enrollment	100.0	38.7	.2	5.0	46.6	7.7
Number identified as LES/NES	4	(3)	0	(3)	2	2
Percent identified as LES/NES	1.4	...	...	...	1.5	8.8
Percent of LES/NES served	76	...	...	...	97	56

<sup>1</sup> Limited English speaking or non English speaking were defined as those students who speak or use a language other than English more often than English

<sup>2</sup> Non Hispanic  
<sup>3</sup> Less than 500

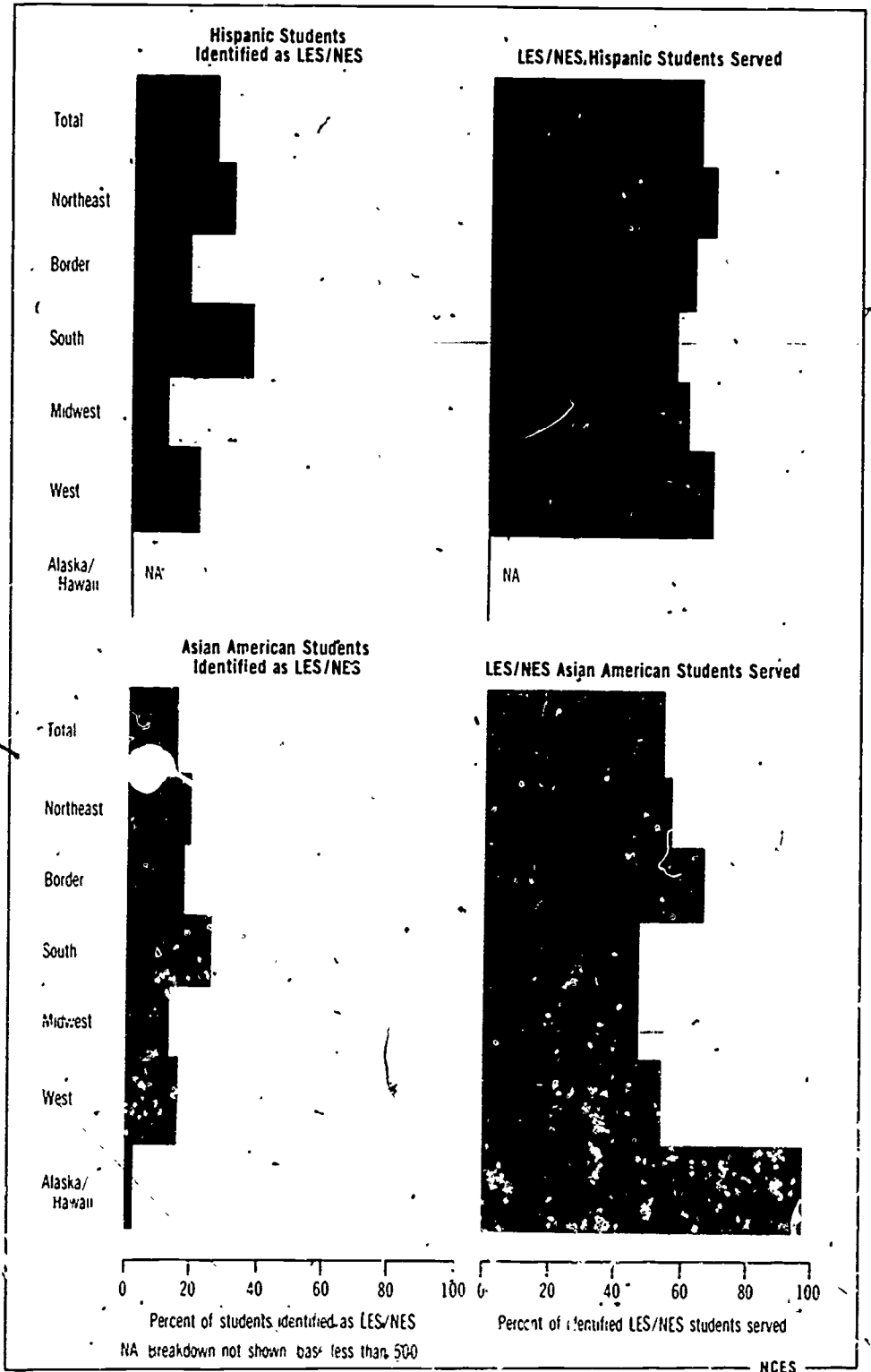
NOTE: Details may not add to totals because of rounding

SOURCE: U.S. Department of Education, Office for Civil Rights. *State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools, 1980*

**Chart 2.11**

**Hispanic and Asian American Students Identified as Limited English Speaking or Non-English Speaking (LES/NES) and Percent Served**

In the South, compared to other regions, larger percentages of Hispanic and Asian American students were identified as limited English speaking; yet smaller percentages of the LES identified students were served in bilingual programs.



**Table 2.12**  
**Participation in gifted and talented programs in public elementary/secondary**  
**schools, by State: Fall 1978**

State	Total enrollment	Program participants	Participants as percent of enrollment*
Total 50 States and D.C.	41,836,257	810,656	1.9
Alabama	761,928	5,426	.7
Alaska	86,307	2,434	2.8
Arizona	508,085	12,378	2.4
Arkansas	442,294	3,454	.8
California	4,096,371	144,262	3.5
Colorado	549,014	8,425	1.5
Connecticut	568,957	6,650	1.2
Delaware	113,564	958	.8
District of Columbia	108,903	417	.4
Florida	1,513,285	20,685	1.4
Georgia	1,067,669	28,474	2.7
Hawaii	169,602	2,750	1.6
Idaho	194,545	1,814	.9
Illinois	2,082,095	59,023	2.8
Indiana	1,106,976	10,193	.9
Iowa	553,075	4,392	.8
Kansas	423,615	3,897	.9
Kentucky	686,357	9,600	1.4
Louisiana	817,228	7,236	.9
Maine	220,653	1,152	.5
Maryland	819,327	16,655	2.0
Massachusetts	1,032,891	13,497	1.3
Michigan	1,911,394	13,857	.7
Minnesota	787,611	8,436	1.1
Mississippi	487,477	3,800	.8
Missouri	883,665	10,224	1.2
Montana	141,443	1,113	.8
Nebraska	235,438	11,270	4.4
Nevada	145,813	2,087	1.4
New Hampshire	158,820	649	.4
New Jersey	1,203,151	26,835	2.1
New Mexico	273,566	2,201	.8
New York	3,035,920	53,740	1.8
North Carolina	1,177,211	48,111	4.1
North Dakota	97,115	1,033	1.1
Ohio	2,063,951	18,600	.9
Oklahoma	539,639	4,648	.9
Oregon	451,342	4,138	.9
Pennsylvania	2,019,501	61,103	3.0
Rhode Island	166,033	2,008	1.2
South Carolina	638,574	6,728	1.1
South Dakota	125,386	560	.4
Tennessee	863,530	5,816	.7
Texas	2,808,985	61,678	2.2
Utah	320,780	6,837	2.1
Vermont	80,176	542	.7
Virginia	1,054,341	29,399	2.8
Washington	766,928	7,117	.9
West Virginia	397,620	4,410	1.1
Wisconsin	873,269	9,189	1.0
Wyoming	89,674	717	.8

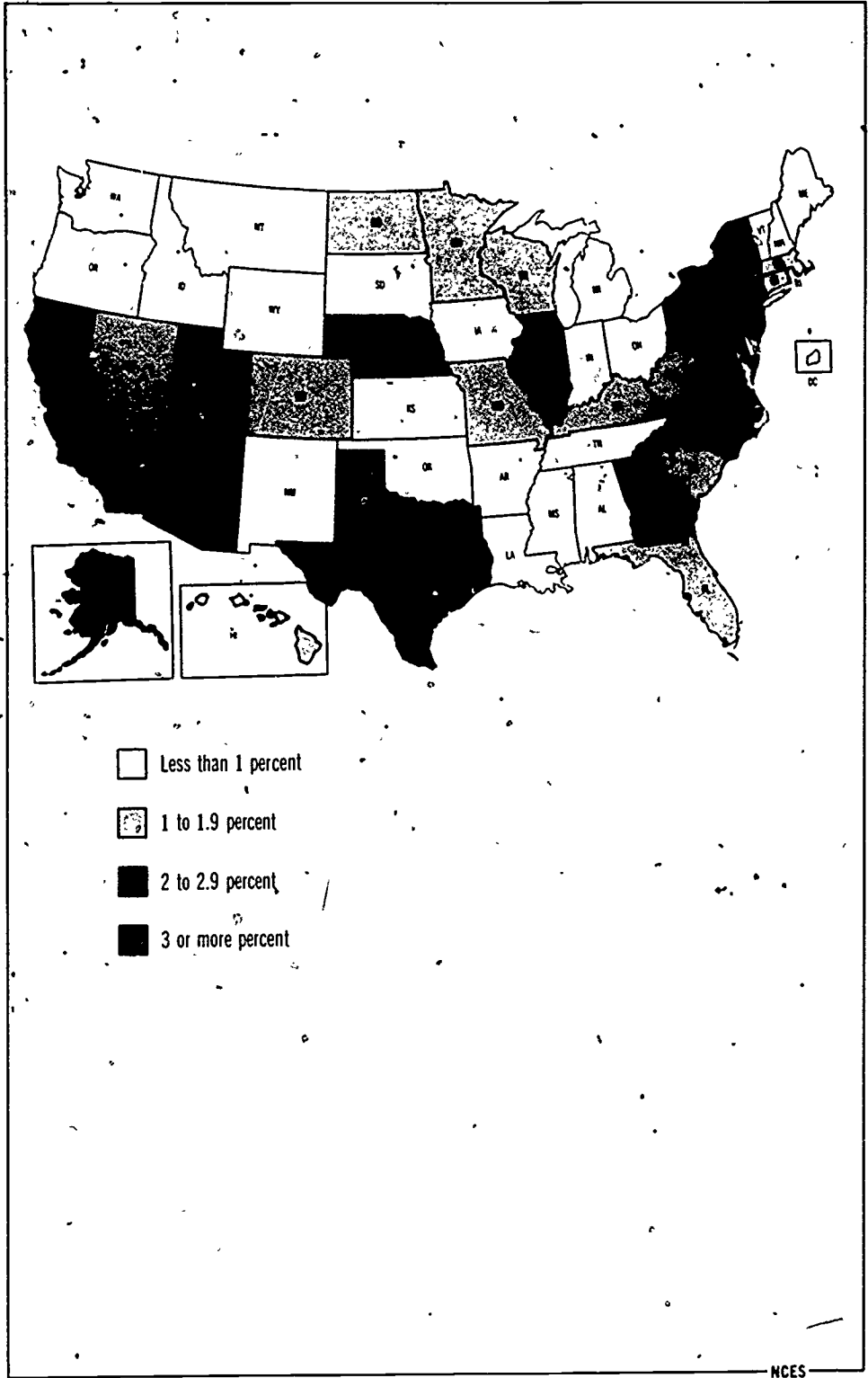
NOTE: Details may not add to totals because of rounding

SOURCE: U.S. Department of Education, Office for Civil Rights, *State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools, 1980*



**Chart 2.12**  
**Participants in Gifted and Talented Programs as Percent of Public School Enrollment**

On the average, fewer than 2 public school students out of 100 participated in gifted and talented programs. Participation was more extensive in some States than others; in Nebraska, North Carolina, California, New York, and Pennsylvania, participants comprised more than 3 percent of public school enrollment.



NCES

**Table 2.13.**

**Public elementary/secondary school students participating in gifted and talented programs, by sex, racial/ethnic group, and region: Fall 1978**

Item	Total	Male	Female	White <sup>1</sup>	Black <sup>1</sup>	Hispanic	Asian American	American Indian
Number								
Total 50 States and DC Enrollment	41,836,257	21,445,703	20,390,554	31,509,927	6,578,074	2,825,229	593,597	329,430
Participants	810,836	391,989	418,847	655,955	83,556	41,521	27,309	2,495
Participants as percent of enrollment	1.9	1.8	2.1	2.1	1.3	1.5	4.6	.8
Northeast Enrollment	8,586,107	4,386,494	4,199,613	6,814,426	1,153,157	520,228	87,118	11,168
Participants	206,176	100,789	105,387	161,015	26,026	12,116	6,914	105
Participants as percent of enrollment	2.4	2.3	2.5	2.4	2.3	2.3	7.9	.9
Border States and D.C. Enrollment	3,549,075	1,823,914	1,725,161	2,814,841	625,776	22,664	23,342	62,452
Participants	46,912	22,324	24,588	40,411	5,069	168	811	453
Participants as percent of enrollment	1.3	1.2	1.4	1.4	.8	.7	3.5	.7
South Enrollment	11,625,618	5,963,858	5,661,760	7,578,750	3,118,898	841,391	55,660	30,919
Participants	220,810	103,365	117,445	179,284	26,324	12,900	2,013	289
Participants as percent of enrollment	1.9	1.7	2.1	2.4	.8	1.5	3.6	.9
Midwest Enrollment	10,281,985	5,276,707	5,005,278	8,764,770	1,174,448	218,210	64,591	59,966
Participants	140,665	66,410	74,225	119,218	16,404	2,492	2,280	271
Participants as percent of enrollment	1.4	1.3	1.5	1.4	1.4	1.1	3.5	.5
West Enrollment	7,537,563	3,862,824	3,674,739	5,438,149	500,426	1,210,038	243,689	145,261
Participants	191,089	96,569	94,520	153,163	9,670	13,776	13,284	1,196
Participants as percent of enrollment	2.5	2.5	2.6	2.8	1.9	1.1	5.5	.8
Alaska/Hawaii Enrollment	255,909	131,906	124,003	98,991	5,359	12,698	119,197	19,664
Participants	5,184	2,532	2,652	2,864	63	69	2,007	181
Participants as percent of enrollment	2.0	1.9	2.1	2.9	1.2	.5	1.7	.9
Percentage distribution								
Total 50 States and DC Enrollment	100	51	49	75	16	7	1	1
Participants	100	48	52	81	10	5	3	0
Northeast Enrollment	100	51	49	79	13	6	1	0
Participants	100	49	51	78	13	6	3	0
Border States and DC Enrollment	100	51	49	79	18	1	1	2
Participants	100	48	52	86	11	0	2	1
South Enrollment	100	51	49	65	27	7	0	0
Participants	100	47	53	81	12	6	1	0
Midwest Enrollment	100	51	49	85	11	2	1	1
Participants	100	47	53	85	12	2	2	0
West Enrollment	100	51	49	72	7	16		2
Participants	100	51	49	80	5	7		1
Alaska/Hawaii Enrollment	100	52	48	39	2	5	47	8
Participants	100	49	51	55	1	1	39	3

<sup>1</sup> Non-Hispanic.

<sup>2</sup> Less than 0.1 percent.

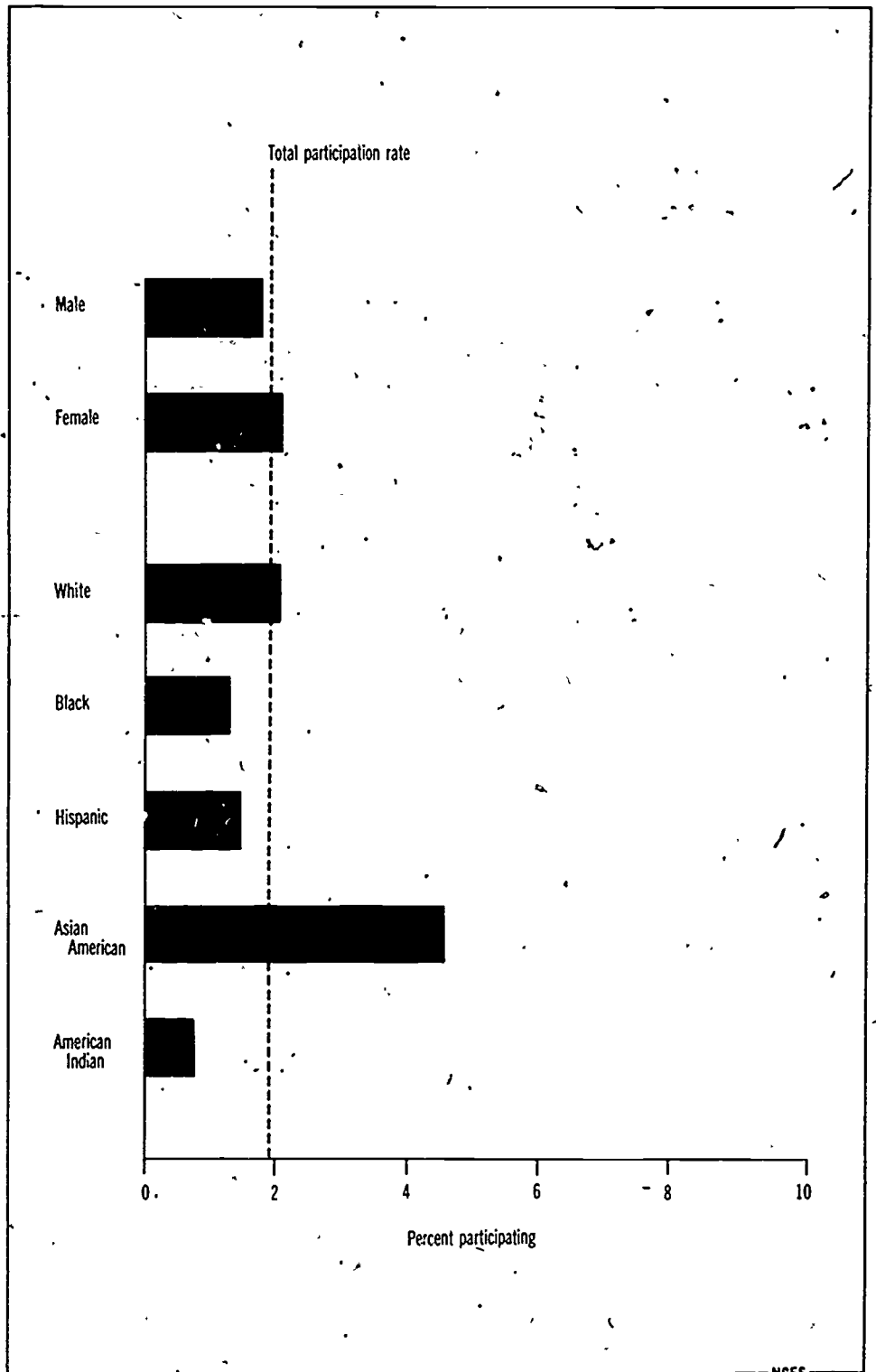
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, *State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools, 1980.*

**Chart 2.13**

**Participation in Gifted and Talented Programs by Sex and Racial/Ethnic Group**

Participation in gifted and talented programs differed somewhat by sex and, to a greater extent, by racial/ethnic group. Whites and Asian Americans were much more likely than other racial/ethnic groups to participate.



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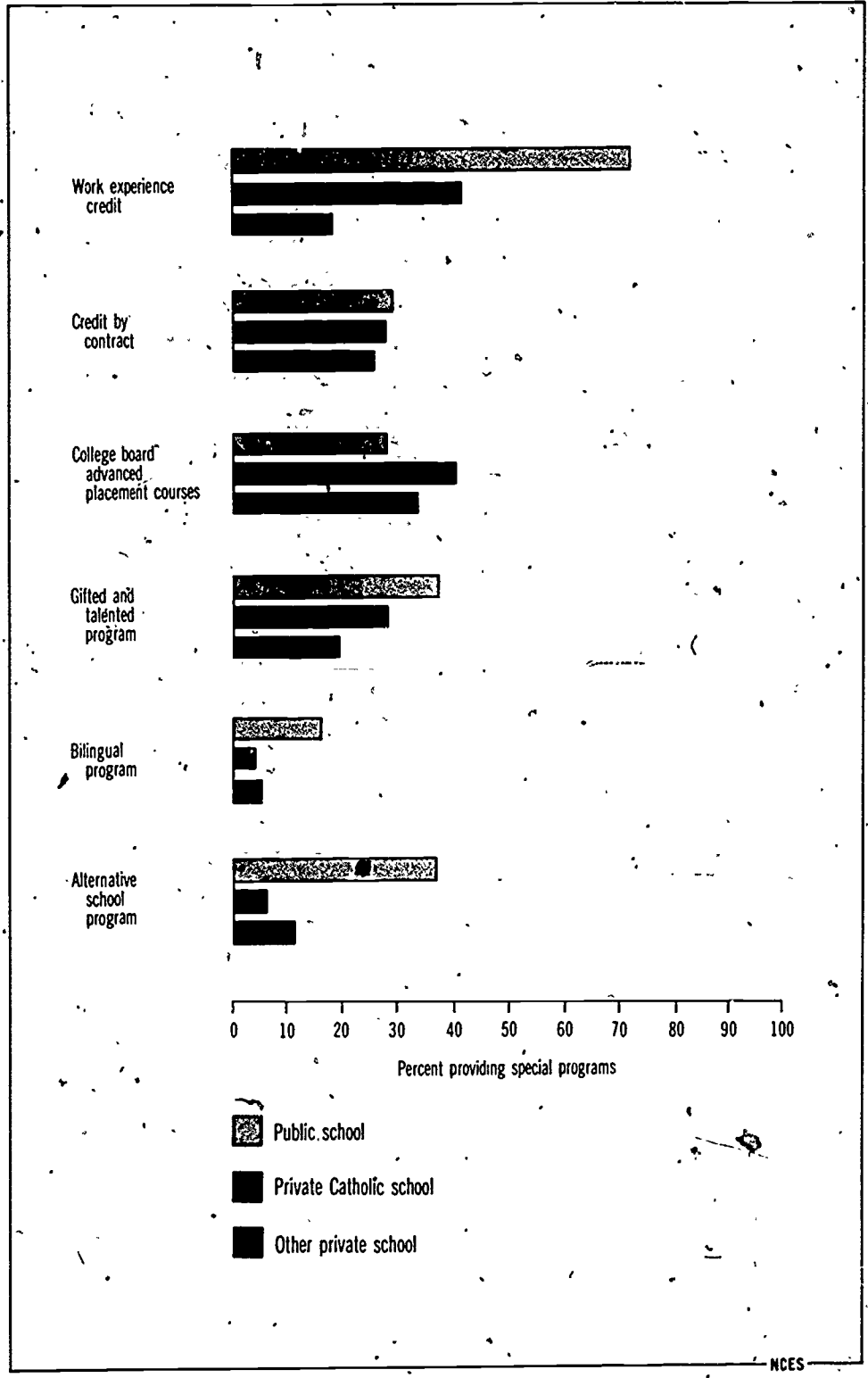
**Table 2.14**  
**Secondary schools providing special programs and secondary school sophomores attending schools where programs provided: Spring 1980**

Program	Total	Public	Catholic	Other private
		Percent of schools providing special programs		
Work experience or occupational training credit	62	72	41	22
Travel for credit	10	8	13	16
Credit by contract	29	29	28	25
College board advanced placement courses	30	29	40	33
Program for gifted or talented	34	37	28	19
Bilingual program	14	16	5	5
Alternative school program	32	38	6	11
Program for pregnant girls or mothers	29	35	21	1
Student exchange program	37	40	39	17
		Percent of sophomores attending schools where programs provided		
Work experience or occupational training credit	83	88	42	30
Travel for credit	13	13	14	8
Credit by contract	30	31	24	16
College board advanced placement courses	48	48	50	42
Program for gifted or talented	57	59	38	38
Bilingual program	28	31	5	5
Alternative school program	47	51	8	10
Program for pregnant girls or mothers	40	43	21	15
Student exchange program	55	56	37	47

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, *Public and Private Schools*, forthcoming.

**Chart 2.14**  
**Secondary Schools Providing Special Programs**

Public secondary schools differed from private schools in their greater proportions providing work experience credit, bilingual education, and alternative schooling.



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**Table 2.15**

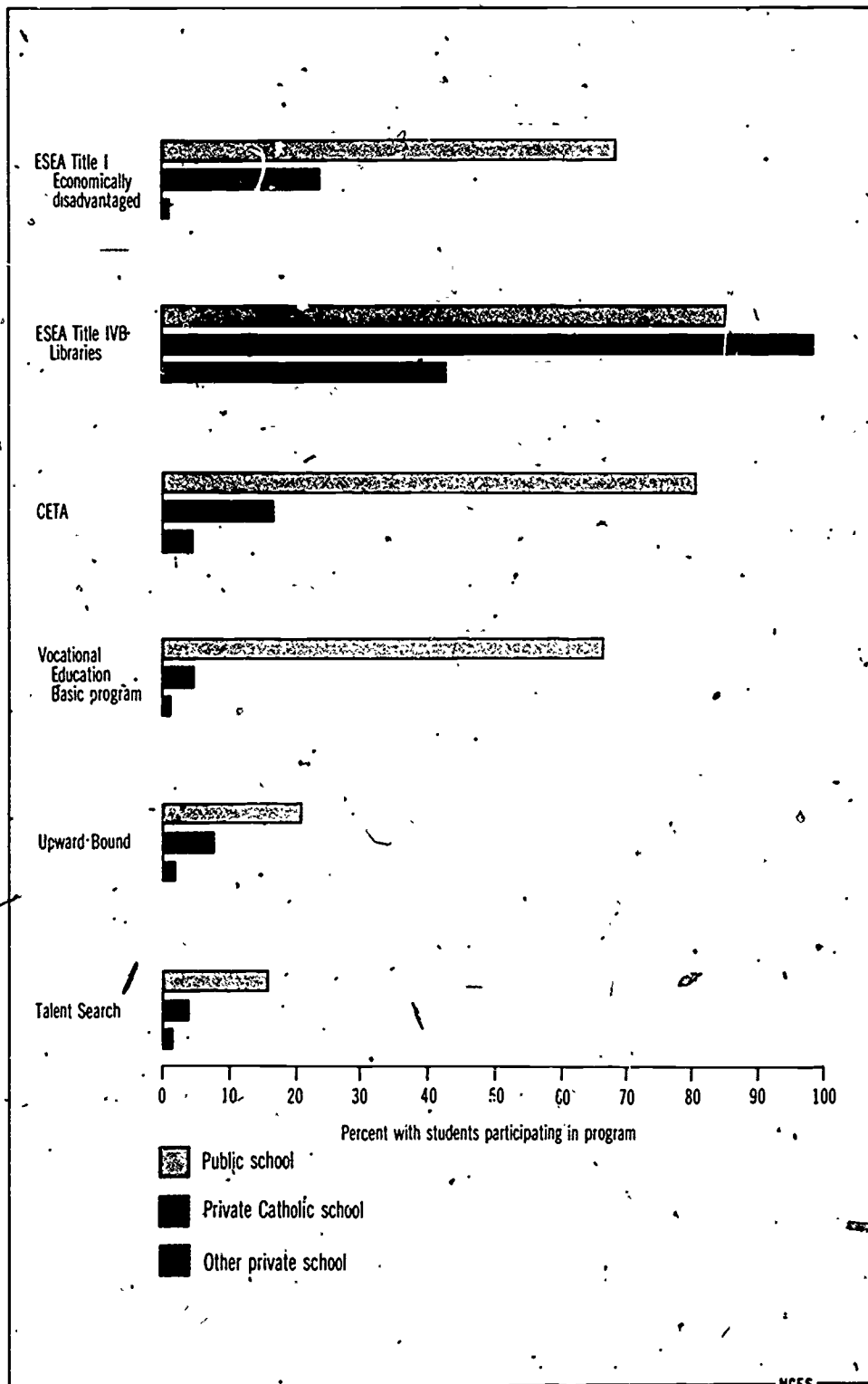
**Participation of secondary schools in Federally assisted or financed programs, by control of school and type of program: Spring 1980**

Program	Total	Public	Catholic <sup>a</sup>	Other private
Percent of schools participating				
Elementary/Secondary Education Act (ESEA) Programs				
Title I: Economically disadvantaged	56	70	24	1
Title IVB: Library	80	87	99	41
Title IVC: Educational innovation	31	38	23	0
Title IVD: Supplementary centers	22	24	31	12
Title VII: Bilingual education	11	13	0	3
Title IX: Ethnic heritage studies	7	8	13	0
Comprehensive Employment & Training Act (CETA) Program				
	65	82	17	5
Vocational Education Act of 1963 Program				
Consumer and homemaking	59	76	8	1
Basic program	53	68	5	1
Persons with special needs	38	49	5	1
Cooperative education	45	56	14	6
High school work study	44	56	6	6
Upward Bound Program	17	21	8	2
Talent Search Program	13	16	2	1

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, *Public and Private Schools*, forthcoming.

**Chart 2.15**  
**Secondary Schools Participating in Federally Funded Programs**

Except for the high proportion of Catholic schools with students participating in certain programs under ESEA Title IV, private secondary schools had students participating to a much lesser extent in federally funded programs than did public schools.



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**Table 2.16**

**Competency areas assessed in State-level minimum competency testing programs, by grade level assessed: 1979**

Competency area	Assessment required	Grade level assessed				
		Preprimary to 3rd	4th to 6th	7th to 8th	9th to 12th	Only 9th to 12th
		Number of States				
Reading	31	10	16	14	16	6
Mathematics	31	10	16	14	16	6
Language arts	17	4	8	9	9	2
Writing	10	2	3	4	3	2
Speaking	4	0	1	2	2	0
Listening	3	0	0	1	1	0
Other (e.g., consumer economics, democratic process, science)	7	0	3	5	3	0

NOTE: In five State programs, decisions regarding what grades to test are left entirely to local districts.

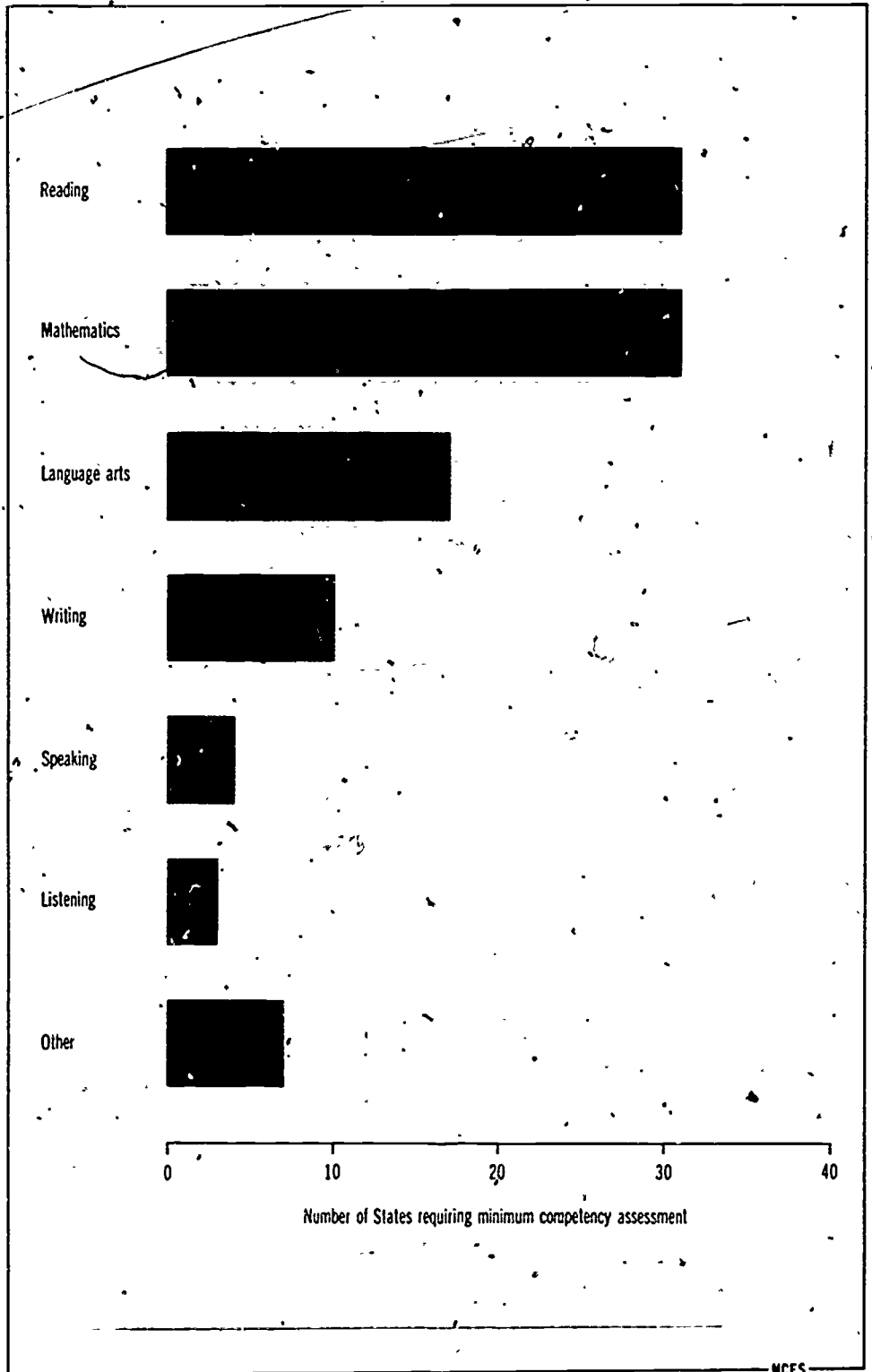
SOURCE: W.B. Gorkh and M.F. Perkins, *A Study of Minimum Competency Testing Programs, Final Summary and Analysis Report*, Amherst, MA: National Evaluation Systems, Inc., December 1979, sponsored by U.S. Department of Education, National Institute of Education.



Chart 2.16

Competency Areas Assessed in State-Level Minimum Competency Testing Programs

Among the 31 States with State-level minimum competency testing programs in 1979, all required assessments in reading and mathematics, more than half specified language arts, and about one-third indicated that writing be assessed.



**Table 2.17**  
**Secondary schools offering selected courses and secondary school sophomores attending schools where courses offered: Spring 1980**

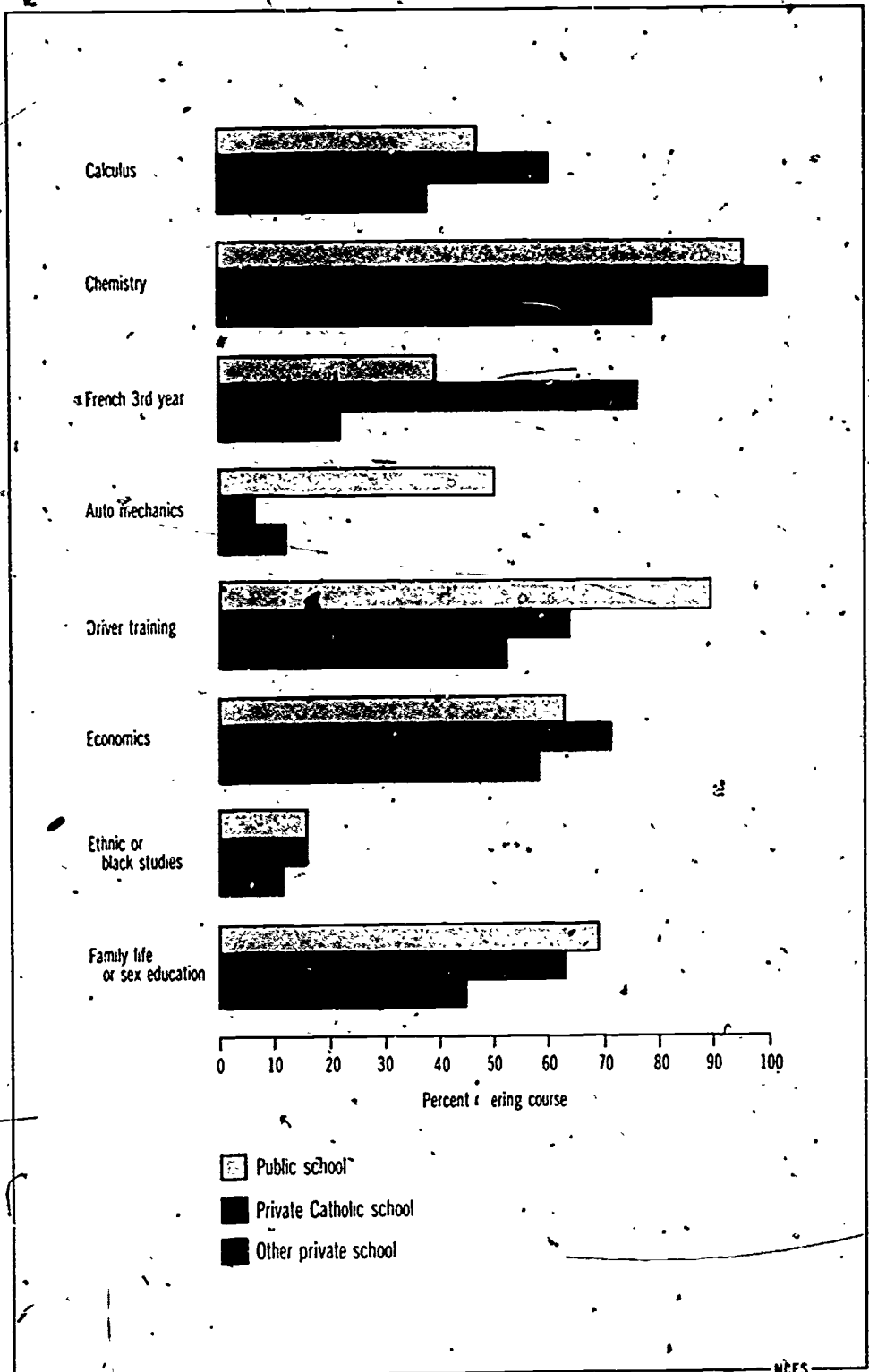
Course	Total	Public	Catholic	Other private
Percent of schools offering course				
Mathematics				
Geometry	97	97	100	95
Algebra 2nd year	97	97	98	95
Trigonometry <sup>1</sup>	76	77	89	65
Calculus	47	47	60	36
Science				
Chemistry	93	96	100	75
Physics	89	90	95	80
Language				
Spanish 3rd year	45	47	86	18
French 3rd year	39	39	76	21
German 3rd year	20	20	27	12
Other				
Auto mechanics	42	50	8	16
Driver training	81	90	63	49
Economics	63	63	71	56
Ethnic or black studies	16	17	16	11
Family life or sex education	65	69	63	43
Home economics	84	97	50	36
Psychology	59	58	56	68
Wood or machine shop	74	89	4	36
Percent of sophomores attending schools where course offered				
Mathematics				
Geometry	99	99	100	98
Algebra 2nd year	98	98	97	98
Trigonometry <sup>1</sup>	84	84	90	90
Calculus	64	64	72	61
Science				
Chemistry	98	98	100	93
Physics	96	96	96	92
Language				
Spanish 3rd year	73	73	94	46
French 3rd year	66	65	87	48
German 3rd year	40	40	40	33
Other				
Auto mechanics	61	66	11	18
Driver training	86	88	69	72
Economics	72	72	79	74
Ethnic or black studies	29	30	17	9
Family life or sex education	75	76	67	68
Home economics	92	96	61	46
Psychology	71	71	73	69
Wood or machine shop	88	94	9	52

<sup>1</sup> Possible error; may underestimate offerings in trigonometry. Trigonometry may be incorporated into another subject, such as analytical geometry, and may not be reported.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, *Public and Private Schools*, forthcoming.

**Chart 2.17**  
**Secondary Schools Offering Selected Courses**

Most secondary schools, regardless of type, offered chemistry although less than half of public and non-Catholic private schools offered calculus or 3rd year French. Public schools were more likely than other schools to offer non-academic subjects such as auto mechanics and driver training.



NCEs

107

**Table 2.18**

**Participation of 10th, 11th, and 12th grade students in selected secondary school courses, by control of school, region, and metropolitan status, grade and sex of student, educational attainment of family head and family income of dependent family members, October 1979**

Characteristic	Students in thousands	College preparatory mathematics <sup>1</sup>	Foreign language	Business education	Chemistry or physics	Shop/vocational training	Home economics	Distributive education	Percent of students participating			
All students	11,200	44.8	23.7	23.2	19.8	19.1	12.0	3.9				
Control of school												
Public	10,360	43.3	22.0	23.5	19.1	20.1	12.3	4.0				
Private	840	53.4	44.2	20.5	28.5	6.4	7.8	2.5				
Religiously affiliated	642	56.2	46.4	22.6	29.2	6.2	9.4	2.8				
Unaffiliated	152	67.6	47.4	15.9	33.2	6.1	3.2	2.0				
Region												
Northeast	2,600	53.6	34.7	24.4	28.1	18.0	10.3	3.5				
North Central	2,997	41.3	20.0	26.6	18.1	22.0	14.2	4.5				
South	3,582	43.0	18.7	21.3	17.4	16.9	12.9	4.0				
West	2,020	41.9	23.9	20.1	16.1	20.1	9.4	3.2				
Metropolitan status												
Metropolitan	7,441	47.3	26.7	21.8	21.2	17.4	10.2	4.1				
Central city	2,828	44.4	26.0	21.0	19.3	15.6	9.5	3.6				
Outside central city	4,613	49.1	27.1	22.2	22.4	18.5	10.7	4.4				
Nonmetropolitan	3,759	39.8	17.7	26.1	17.1	22.3	15.5	3.4				
Grade of student												
10th grade	3,987	50.8	31.1	20.3	12.1	18.9	12.0	1.8				
11th grade	3,667	48.3	24.9	24.4	26.7	20.3	12.2	4.2				
12th grade	3,545	34.3	14.1	25.3	21.5	18.0	11.8	5.8				
Sex of student												
Male	5,685	46.4	19.6	10.8	21.8	34.6	4.1	4.0				
Female	5,515	43.1	27.9	36.0	17.9	3.0	20.2	3.7				
Dependent family members <sup>2</sup>	10,715	45.3	24.0	23.5	20.1	19.3	12.1	3.9				
Educational attainment of family head <sup>2</sup>												
8 years or less	1,590	29.9	13.3	23.3	12.1	22.7	14.3	2.8				
9 to 11 years	1,564	31.3	14.5	25.9	11.7	21.6	14.6	3.8				
12 years	4,152	42.5	21.8	25.3	17.4	20.8	13.4	4.4				
13 to 15 years	1,479	53.2	29.1	24.7	25.5	20.0	11.4	4.4				
16 years or more	1,980	68.9	41.3	17.2	34.9	11.2	6.1	3.7				
Family income <sup>2</sup>												
Under \$10,000	1,953	31.8	13.4	24.3	11.3	22.1	14.8	2.6				
\$10,000 to \$14,999	1,612	38.7	17.8	24.8	14.2	19.3	14.0	3.7				
\$15,000 to \$19,999	1,525	42.8	24.1	26.6	17.3	21.0	12.8	3.9				
\$20,000 to \$24,999	1,718	49.1	26.9	22.4	22.4	20.0	11.1	4.3				
\$25,000 and over	2,908	58.7	33.2	22.0	29.5	17.7	9.0	4.5				

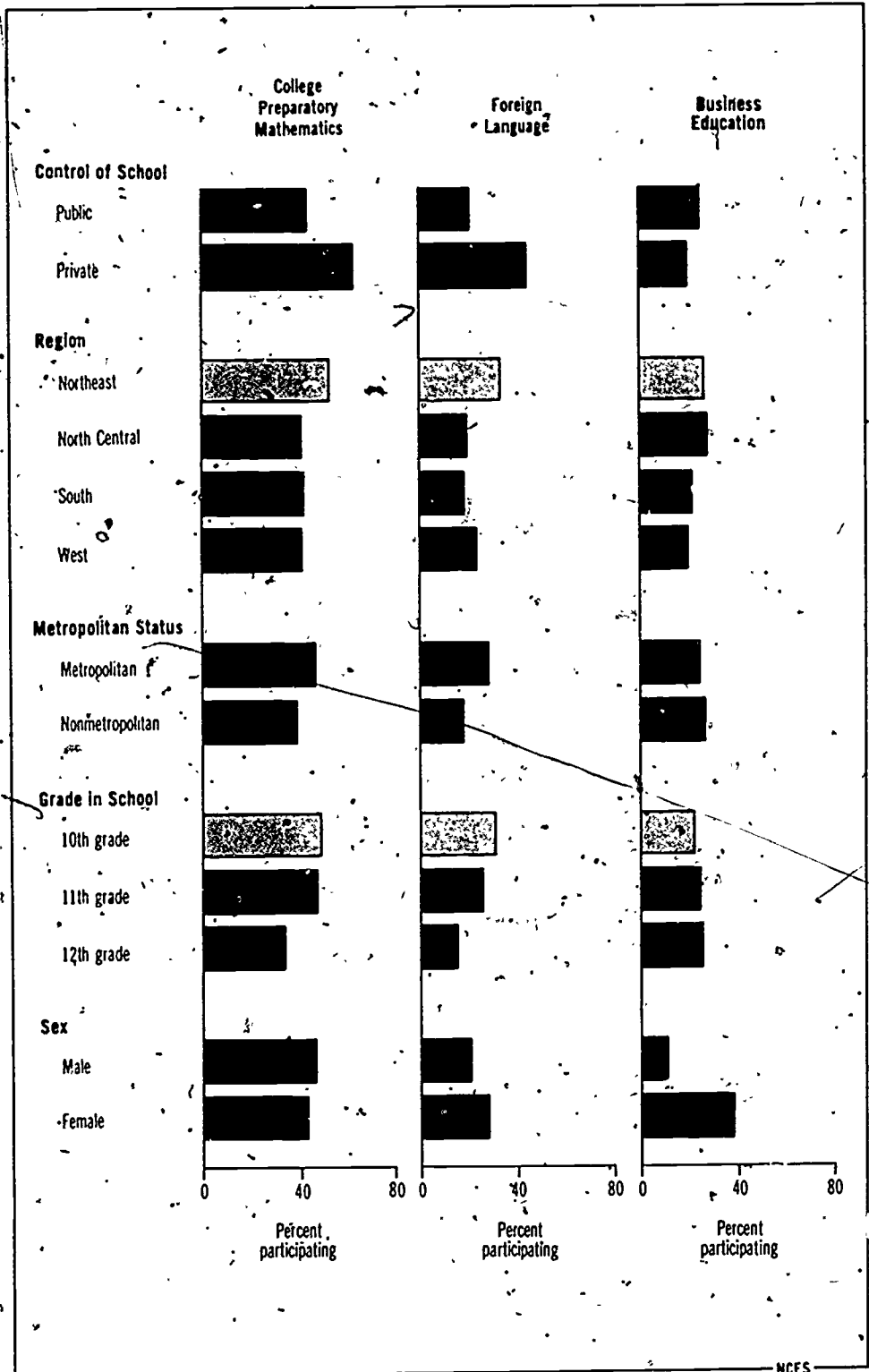
<sup>1</sup>Includes algebra 2 or 3, geometry, trigonometry, pre-calculus, and calculus.

<sup>2</sup>Data pertain only to students who are dependent family members and differ somewhat from those reported for all students.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations.

**Chart 2.18**  
**Coursework Participation of Secondary School Students**

Participation in secondary school subjects varied considerably by control of school, background of student, and grade in school. For example, participation in college preparatory mathematics and foreign language courses declined appreciably from 10th to 12th grade. One-half of 10th graders took mathematics while only one-third of 12th graders were enrolled. In language courses, participation was cut by half; about 14 percent of 12th graders took a language.



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**Table 2.19****Public elementary/secondary school enrollment in courses traditionally having disproportionate sex representation, by sex: Fall 1978**

Region	Enrollment in home economics			
	Male	Female	Females as percent of total enrollment	Percent of females enrolled in single sex course
Total 50 States and D.C.	944,150	2,244,025	70.4	31.1
Northeast	389,492	661,103	62.9	29.7
Border States and D.C.	64,549	183,636	74.0	33.7
South	112,568	425,288	79.1	37.1
Midwest	268,042	633,376	70.3	31.3
West	103,977	332,922	76.2	24.9
Alaska/Hawaii	5,522	7,700	58.2	5.2

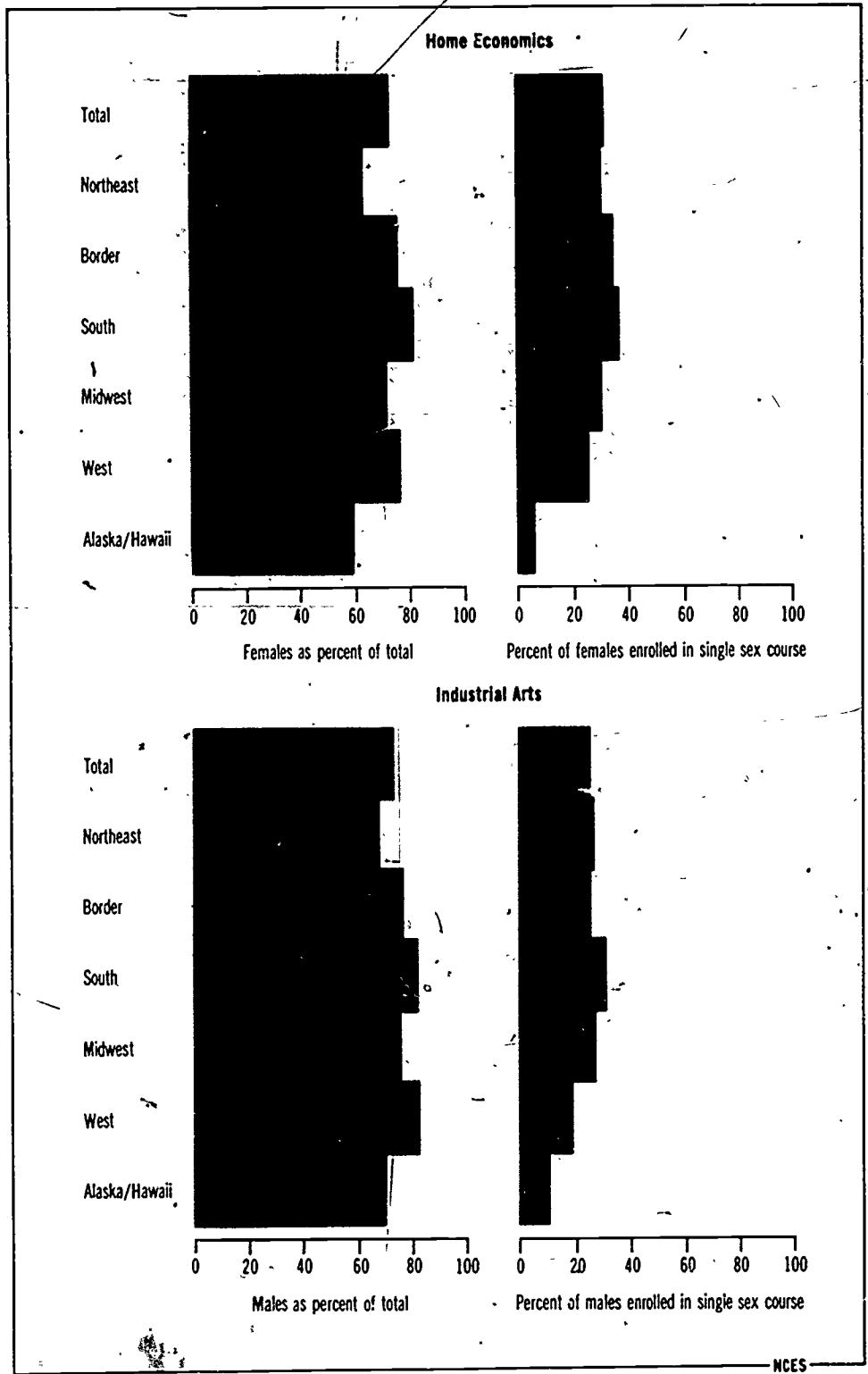
Region	Enrollment in industrial arts			
	Male	Female	Males as percent of total enrollment	Percent of males enrolled in single sex course
Total 50 States and D.C.	2,785,867	937,351	74.8	24.9
Northeast	842,536	407,548	67.4	25.5
Border States and D.C.	203,759	62,453	76.5	25.1
South	384,131	91,525	80.8	30.1
Midwest	822,388	256,559	76.2	26.3
West	521,600	114,149	82.0	18.2
Alaska/Hawaii	11,453	5,117	69.1	9.7

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, *State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools, 1980.*

**Chart 2:19**  
**Enrollment in Traditionally Single Sex Courses**

Females were disproportionately represented in home economics courses and males in industrial arts courses in all regions although sex distinctions in enrollment were most sharply drawn in the South and West.



**Table 2.20.**

**Curricular program of secondary school seniors, by sex and racial/ethnic group: Spring 1980**

Program	Total	Male	Female	White	Black	Hispanic	Asian American	American Indian
	Percentage distribution							
All programs	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Academic or college preparatory	38.2	38.5	37.9	39.3	32.4	26.2	51.8	23.7
General	36.4	37.4	35.4	36.6	34.5	40.5	28.7	44.1
Vocational (occupational preparatory)	24.0	22.8	25.2	22.8	31.1	30.6	18.3	29.0
Agricultural occupations	2.7	3.9	1.5	2.5	3.6	4.3	1.8	4.5
Business or office occupations	9.6	3.3	15.5	9.2	11.7	10.2	8.1	8.3
Distributive education	2.1	1.9	2.2	2.0	2.9	2.1	1.6	1.3
Health occupations	1.0	.4	1.6	1.0	1.6	1.4	1.2	1.3
Home economics occupations	1.3	.4	2.1	.9	3.5	2.2	1.3	.7
Technical occupations	2.0	3.5	.7	2.0	1.7	2.7	2.9	1.2
Trade or industrial occupations	5.3	9.4	1.6	5.2	6.1	7.7	1.4	11.1
No response	1.5	1.4	1.5	1.3	2.0	2.8	1.2	3.2

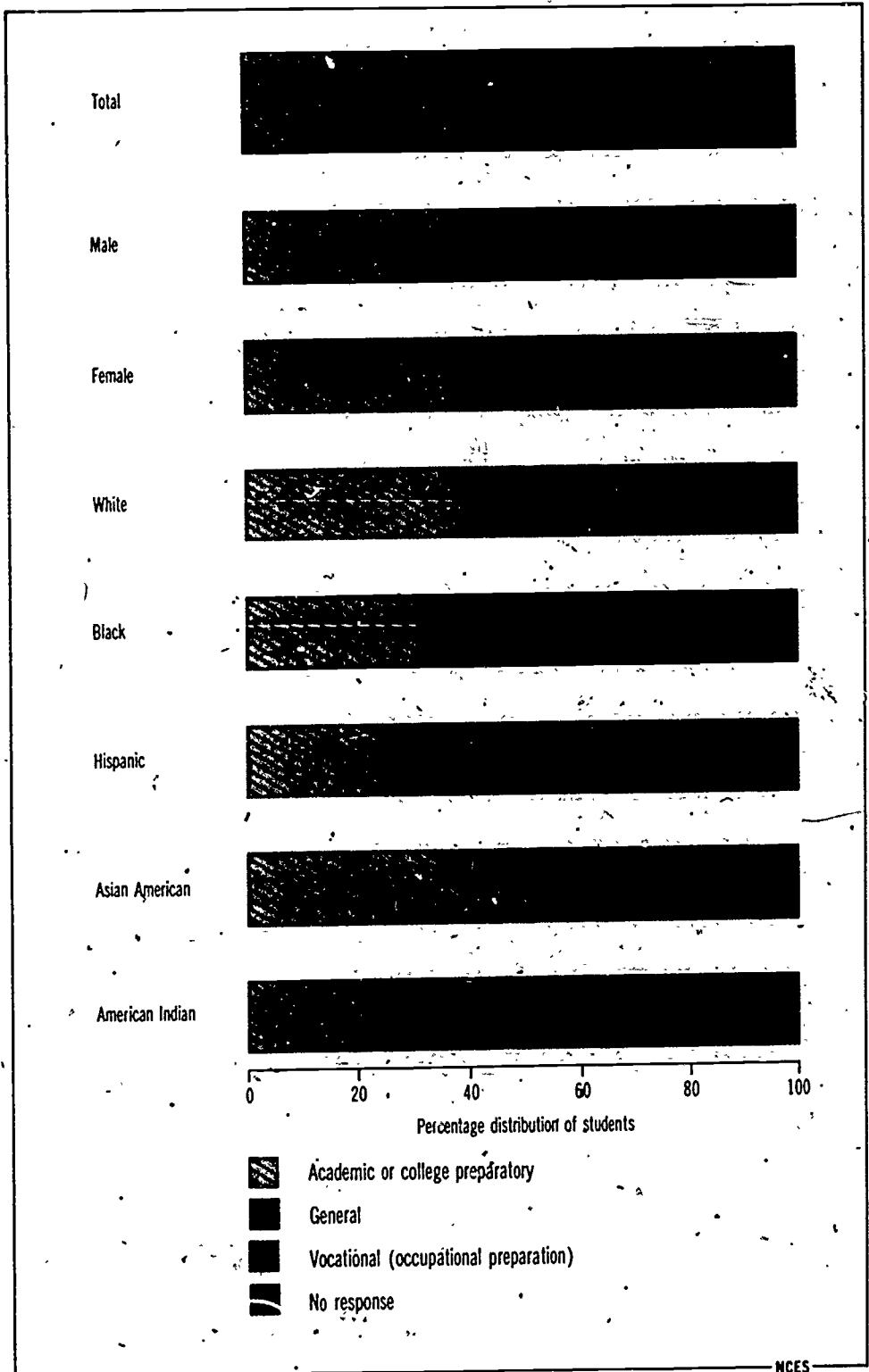
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Study, unpublished tabulations.



**Chart 2.20**  
**Curricular Program of Secondary School Seniors**

The distribution of seniors within the broad curricular categories of academic, general, and vocational education differed little by sex but markedly by racial/ethnic group. For example, less than one-fourth of American Indian seniors were enrolled in academic or college preparatory programs compared to over half of Asian American students.



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Table 2.21

## Revenue receipts of public elementary/secondary schools, by source and by State: 1978-79

State	Total	Federal	State	Local and other <sup>1</sup>	Total	Federal	State	Local and other <sup>1</sup>
	Amount, in thousands of dollars				Percentage distribution			
Total 50 States and D.C.	\$88,056,997	\$8,642,978	\$40,245,891	\$39,168,128	100.0	9.8	45.7	44.5
Alabama	1,182,547	190,642	734,216	257,688	100.0	16.1	62.1	21.8
Alaska	374,833	43,831	260,501	70,500	100.0	11.7	69.5	18.8
Arizona	1,100,964	140,937	434,819	525,208	100.0	12.8	39.5	47.7
Arkansas	593,687	97,183	285,863	210,640	100.0	16.4	48.2	35.5
California	9,165,566	976,701	5,677,619	2,511,246	100.0	10.7	61.9	27.4
Colorado	1,356,658	83,075	555,815	717,768	100.0	6.1	41.0	52.9
Connecticut	1,148,990	68,627	291,173	789,190	100.0	6.0	25.3	68.7
Delaware	271,317	34,282	173,226	63,808	100.0	12.6	63.8	23.5
District of Columbia	283,657	85,279	...	198,378	100.0	30.1	...	69.9
Florida	2,918,356	324,218	1,505,285	1,086,854	100.0	11.1	51.6	37.3
Georgia	1,687,912	250,326	833,042	604,544	100.0	14.8	49.4	35.8
Hawaii	332,717	54,914	277,803	...	100.0	16.5	83.5	...
Idaho	303,344	34,696	120,306	148,342	100.0	11.4	39.7	48.9
Illinois	4,524,422	378,048	1,700,985	2,445,390	100.0	8.4	37.6	54.0
Indiana	1,978,920	126,590	1,067,781	784,549	100.0	6.4	54.0	39.6
Iowa	1,215,340	71,190	502,506	641,644	100.0	5.9	41.3	52.8
Kansas	931,583	57,294	355,567	518,722	100.0	6.2	38.2	55.7
Kentucky	984,156	154,025	632,417	197,713	100.0	15.7	64.3	20.1
Louisiana	1,361,124	200,900	717,734	442,490	100.0	14.8	52.7	32.5
Maine	397,411	37,640	187,046	172,725	100.0	9.5	47.1	43.5
Maryland	1,883,889	156,470	716,581	1,010,838	100.0	8.3	38.1	53.7
Massachusetts	2,933,114	182,950	993,750	1,756,414	100.0	6.2	33.9	59.9
Michigan	4,428,709	336,209	1,857,879	2,234,621	100.0	7.6	42.0	50.5
Minnesota	1,962,262	111,231	1,119,123	731,908	100.0	5.7	57.0	37.3
Mississippi	656,824	162,771	366,486	127,567	100.0	24.8	55.8	19.4
Missouri	1,610,694	170,006	568,638	872,051	100.0	10.6	35.3	54.1
Montana	361,234	39,196	182,139	139,899	100.0	10.9	50.4	38.7
Nebraska	607,583	47,420	95,110	465,053	100.0	7.8	15.7	76.5
Nevada	279,725	19,593	90,606	169,525	100.0	7.0	32.4	60.6
New Hampshire	289,192	18,774	20,593	249,824	100.0	6.5	7.1	86.4
New Jersey	3,431,142	254,899	1,343,863	1,832,380	100.0	7.4	39.2	53.4
New Mexico	556,360	36,716	356,700	102,945	100.0	17.4	64.1	18.5
New York	8,901,846	715,491	3,379,701	4,806,654	100.0	8.0	38.0	54.0
North Carolina	1,781,241	264,021	1,120,296	396,924	100.0	14.8	62.9	22.3
North Dakota	240,953	25,733	106,640	108,580	100.0	10.7	44.3	45.1
Ohio	3,764,600	248,959	1,571,317	1,944,324	100.0	6.6	41.7	51.6
Oklahoma	1,036,667	158,071	580,023	298,573	100.0	15.2	56.0	28.8
Oregon	1,119,736	109,278	362,784	647,673	100.0	9.8	32.4	57.8
Pennsylvania	4,807,625	438,708	2,074,943	2,293,973	100.0	9.1	43.2	47.7
Rhode Island	334,304	31,331	109,163	193,810	100.0	9.4	32.7	58.0
South Carolina	862,204	160,007	383,116	319,082	100.0	18.6	44.4	37.0
South Dakota	252,155	38,630	47,525	166,000	100.0	15.3	18.8	65.8
Tennessee	1,272,459	166,964	611,214	494,281	100.0	13.1	48.0	38.8
Texas	5,200,182	616,798	2,472,887	2,110,497	100.0	11.9	47.6	40.6
Utah	573,564	50,777	300,147	222,640	100.0	8.9	52.3	38.8
Vermont	199,160	15,496	57,132	126,531	100.0	7.8	28.7	63.5
Virginia	1,862,559	234,240	697,079	931,241	100.0	12.6	37.4	50.0
Washington	1,854,964	169,985	1,133,172	551,807	100.0	9.2	61.1	29.7
West Virginia	717,244	72,679	449,966	194,599	100.0	10.1	62.7	27.1
Wisconsin	1,947,163	104,573	700,955	1,141,636	100.0	5.4	36.0	58.6
Wyoming	214,139	14,603	62,656	136,880	100.0	6.8	29.3	63.9

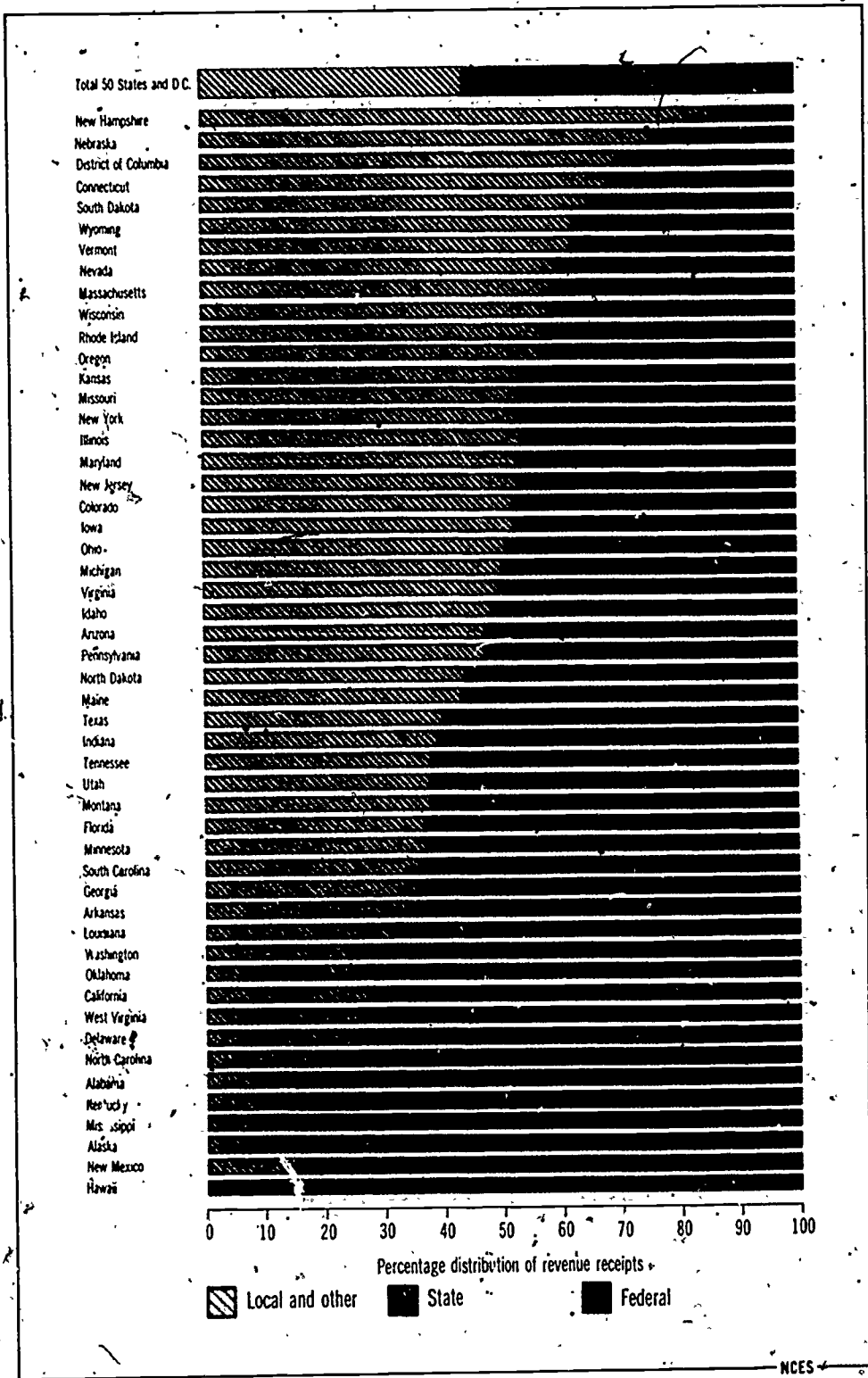
<sup>1</sup> Local and other revenue receipts include revenue receipts from local and intermediate sources, gifts, and tuition and fees from patrons.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Revenues and Expenditures for Public Elementary and Secondary Education, 1978-79*, forthcoming.

**Chart 2.21**  
**Local Share of Public Elementary/Secondary School Revenues**

The proportion of revenue generated from local sources differed appreciably by State, from over 86 percent in New Hampshire to under 19 percent in Alaska and New Mexico.



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**Table 2.22**

**Percentage distribution of school districts, by core<sup>1</sup> current expenditure per student and by State: School year ending 1979**

State	Under \$800	\$800 to \$999	\$1,000 to \$1,199	\$1,200 to \$1,399	\$1,400 to \$1,599	\$1,600 to \$1,799	\$1,800 to \$1,999	\$2,000 to \$2,299	\$2,300 to \$2,599	\$2,600 and over	Weighted mean expenditure <sup>2</sup>
Percentage distribution											
Total 50 States and D.C.	1.2	7.2	16.0	18.4	16.6	14.2	9.3	7.5	3.5	6.1	\$1,584
Alabama	...	56.7	35.2	7.1	...	...	...	...	...	...	1,006
Alaska	...	...	...	...	...	...	...	...	100.0	...	3,655
Arizona	1.8	4.1	13.1	25.8	18.1	10.0	9.5	5.4	2.3	10.0	1,417
Arkansas	8.4	44.2	31.2	8.6	4.5	2.1	...	...	3	...	1,003
California	4	...	2.5	10.5	21.5	26.7	16.5	9.1	3.6	9.3	1,870
Colorado	6	...	3.3	17.1	17.7	22.1	13.8	7.7	3.9	13.8	1,656
Connecticut	...	...	6.1	15.8	24.8	24.8	12.7	12.7	1.8	1.2	1,757
Delaware	...	...	15.4	53.8	23.1	7.7	...	...	...	...	1,594
District of Columbia	...	...	...	...	...	...	...	100.0	...	...	2,197
Florida	...	...	6.0	34.3	46.3	11.9	...	1.5	...	...	1,506
Georgia	5	33.2	50.8	9.6	3.2	1.6	5	5	...	...	1,195
Hawaii	...	...	...	...	100.0	...	...	...	...	...	1,531
Idaho	...	16.5	34.8	25.2	10.4	7.0	1.7	9	1.7	1.7	1,116
Illinois	...	2.1	13.9	26.0	25.0	13.6	7.4	6.7	2.5	2.7	1,676
Indiana	1.6	8.5	42.0	30.2	10.5	4.9	1.3	1.0	...	...	1,343
Iowa	...	...	...	...	17.7	56.4	19.0	6.0	4	4	1,736
Kansas	...	...	3.6	23.8	26.4	19.5	13.0	8.1	2.6	2.9	1,517
Kentucky	6	48.6	40.9	7.2	2.2	6	...	...	...	...	1,093
Louisiana	...	9.1	45.5	36.4	4.5	4.5	...	...	...	...	1,205
Maine	3.5	2.8	37.4	24.7	13.7	3.5	9	1.3	4	1.8	1,258
Maryland	...	...	...	20.8	37.5	25.0	12.5	...	4.2	...	1,749
Massachusetts	...	3	1.9	8.2	15.9	14.0	20.4	16.5	8.2	12.7	2,000
Michigan	2.3	2.4	5.0	34.8	28.7	11.1	7.8	5.6	1.0	1.2	1,670
Minnesota	...	...	2	23.7	45.1	21.2	6.6	1.1	...	1.1	1,635
Mississippi	3.2	33.3	48.1	13.5	1.9	...	...	...	...	...	1,068
Missouri	1.8	11.2	40.6	26.5	12.6	5.1	9	7	2	4	1,349
Montana	1.1	3.2	8.4	11.2	12.3	13.5	8.7	10.7	9.4	21.5	1,853
Nebraska	2.4	8.0	12.4	14.1	16.8	15.6	8.5	7.7	6.1	9.4	1,558
Nevada	...	...	...	5.9	35.3	23.5	23.5	...	...	11.8	1,482
New Hampshire	6.4	21.2	28.2	22.4	14.1	3.8	1.3	1.3	...	1.3	1,258
New Jersey	1.4	1.2	4.9	6.8	11.9	15.3	17.5	20.7	11.0	9.9	1,991
New Mexico	1.1	...	...	12.5	28.4	20.5	10.2	13.6	6.8	6.8	1,515
New York	1	1	1	3	7	6.6	23.6	26.6	13.3	28.5	2,265
North Carolina	...	...	28.3	54.5	15.2	2.1	...	...	...	...	1,281
North Dakota	...	1.3	5.1	19.6	23.4	24.4	13.8	7.7	2.9	1.9	1,542
Ohio	...	5.6	33.9	27.3	12.2	6.0	5.7	4.1	3.2	2.1	1,488
Oklahoma	1.0	6.9	37.0	25.3	11.3	6.4	4.0	4.3	2.1	1.6	1,812
Oregon	...	3	1.9	7.1	12.3	18.4	20.0	21.9	7.7	10.3	1,976
Pennsylvania	...	1.4	9.4	46.1	23.4	12.8	6.4	5.0	1.1	4	1,583
Rhode Island	...	...	...	2.5	20.0	30.0	17.5	22.5	2.5	5.0	1,873
South Carolina	2.2	42.4	45.7	8.7	1.1	...	...	...	...	...	1,047
South Dakota	...	1.1	10.3	25.4	30.3	18.9	7.0	4.3	1.1	1.6	1,471
Tennessee	16.3	55.8	17.7	4.8	3.4	1.4	...	...	7	...	1,090
Texas	2	9.5	27.5	23.2	15.1	7.7	4.9	7.5	2.1	5.2	1,743
Utah	...	...	12.5	40.0	30.0	5.0	7.5	2.5	...	2.5	1,603
Vermont	5.7	15.9	27.3	26.5	8.6	9.0	3.7	2.4	8	...	1,445
Virginia	...	5.2	45.2	31.1	11.9	2.2	2.2	...	1.5	7	1,374
Washington	...	7	1.3	8.0	15.0	27.7	15.3	11.7	7.7	12.7	1,817
West Virginia	...	...	29.1	56.4	9.1	5.5	...	...	...	...	1,295
Wisconsin	...	...	2	5.9	24.7	38.4	19.5	8.7	1.6	9	1,832
Wyoming	...	...	2.0	...	6.1	28.5	18.4	18.4	16.3	10.2	1,864

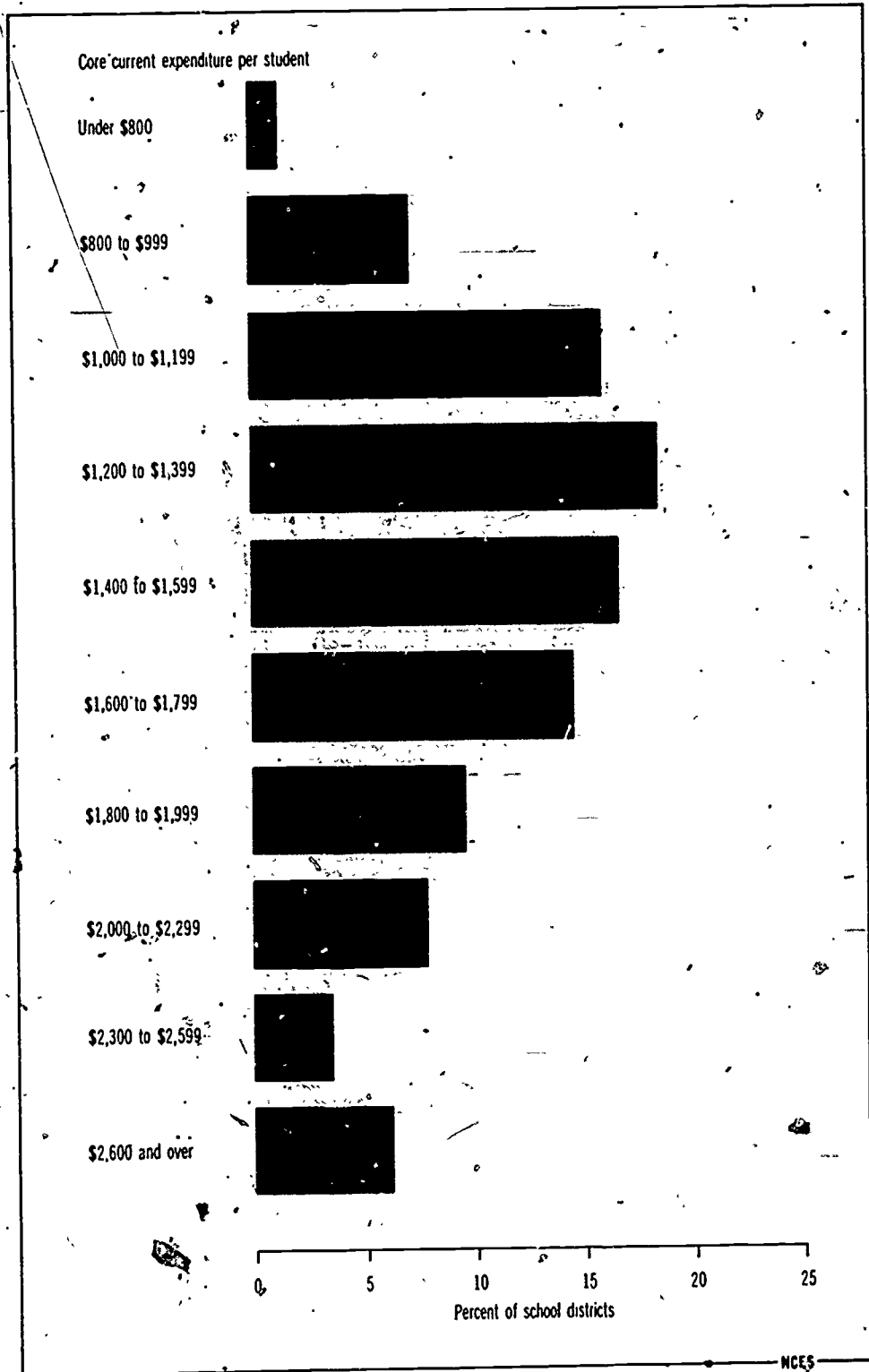
<sup>1</sup> Core current expenditures are calculated by subtracting food services and transportation costs from total current expenditures. Data pertain to outlays made by local school districts and exclude direct expenditures by State and intermediate agencies at the local level.  
<sup>2</sup> Total core current expenditure divided by total enrollment.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Governments Division, Survey of Local Governments Finances: School Systems, unpublished preliminary data.

Chart 2.22

Distribution of School Districts by Core Current Expenditure per Student

Core current expenditures per student ranged from under \$800 spent by 1 percent of school districts to \$2,600 and over spent by 6 percent of school districts, with expenditures of \$1,000 to \$1,800 categorizing most districts,



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Table 2.23

Expenditure per student in average daily attendance in public elementary/secondary schools, by State: 1978-79

State	Expenditure per student			Interest on school debt
	Total <sup>1</sup>	Current <sup>2</sup>	Capital outlay <sup>3</sup>	
Total 50 States and D.C.	\$2,210	\$2,021	\$139	\$50
Alabama	1,700	1,563	124	14
Alaska	4,522	4,112	148	261
Arizona	2,064	1,720	284	60
Arkansas	1,493	1,348	112	32
California	2,173	2,052	99	22
Colorado	2,517	2,205	246	66
Connecticut <sup>4</sup>	2,231	2,136	47	47
Delaware	2,570	2,368	104	97
District of Columbia	2,951	2,841	110	...
Florida	1,847	1,657	153	36
Georgia	1,683	1,485	149	49
Hawaii	2,276	2,133	140	3
Idaho	1,739	1,517	188	35
Illinois	3,399	2,202	139	57
Indiana	1,859	1,690	122	47
Iowa	2,264	2,107	123	34
Kansas	2,137	1,978	124	36
Kentucky	1,643	1,502	94	47
Louisiana	1,771	1,604	125	42
Maine	1,731	1,609	78	43
Maryland	2,550	2,349	160	41
Massachusetts	2,629	2,553	63	13
Michigan	2,682	2,446	161	75
Minnesota	2,368	2,147	151	61
Mississippi	1,610	1,507	102	1
Missouri	1,856	1,725	96	35
Montana	2,215	2,178	...	37
Nebraska	2,198	1,967	176	56
Nevada	2,124	1,811	219	94
New Hampshire	1,860	1,671	123	67
New Jersey	2,818	2,728	45	47
New Mexico	1,942	1,796	126	20
New York	3,180	3,025	70	84
North Carolina	1,712	1,591	108	12
North Dakota	1,977	1,805	150	22
Ohio	1,917	1,789	92	36
Oklahoma	1,941	1,729	194	18
Oregon	2,487	2,418	12	56
Pennsylvania	3,524	2,250	113	161
Rhode Island	2,450	2,387	8	54
South Carolina	1,692	1,508	151	33
South Dakota	1,699	1,677	2	20
Tennessee	1,548	1,383	154	11
Texas	2,073	1,691	315	68
Utah	2,114	1,676	390	48
Vermont	1,976	1,820	130	26
Virginia	1,870	1,671	148	51
Washington	2,575	2,173	358	44
West Virginia	1,905	1,671	214	19
Wisconsin	2,400	2,223	132	45
Wyoming	2,759	2,179	488	92

<sup>1</sup>Includes current expenditures for day schools, capital outlay, and interest on school debt.

<sup>2</sup>Includes expenditures for day schools only; excludes adult education, community colleges, and community services.

<sup>3</sup>Includes capital outlay by State and local school financing authorities.

<sup>4</sup>Data are for school year 1977-78.

<sup>5</sup>Data are for school year 1975-76.

<sup>6</sup>Estimated.

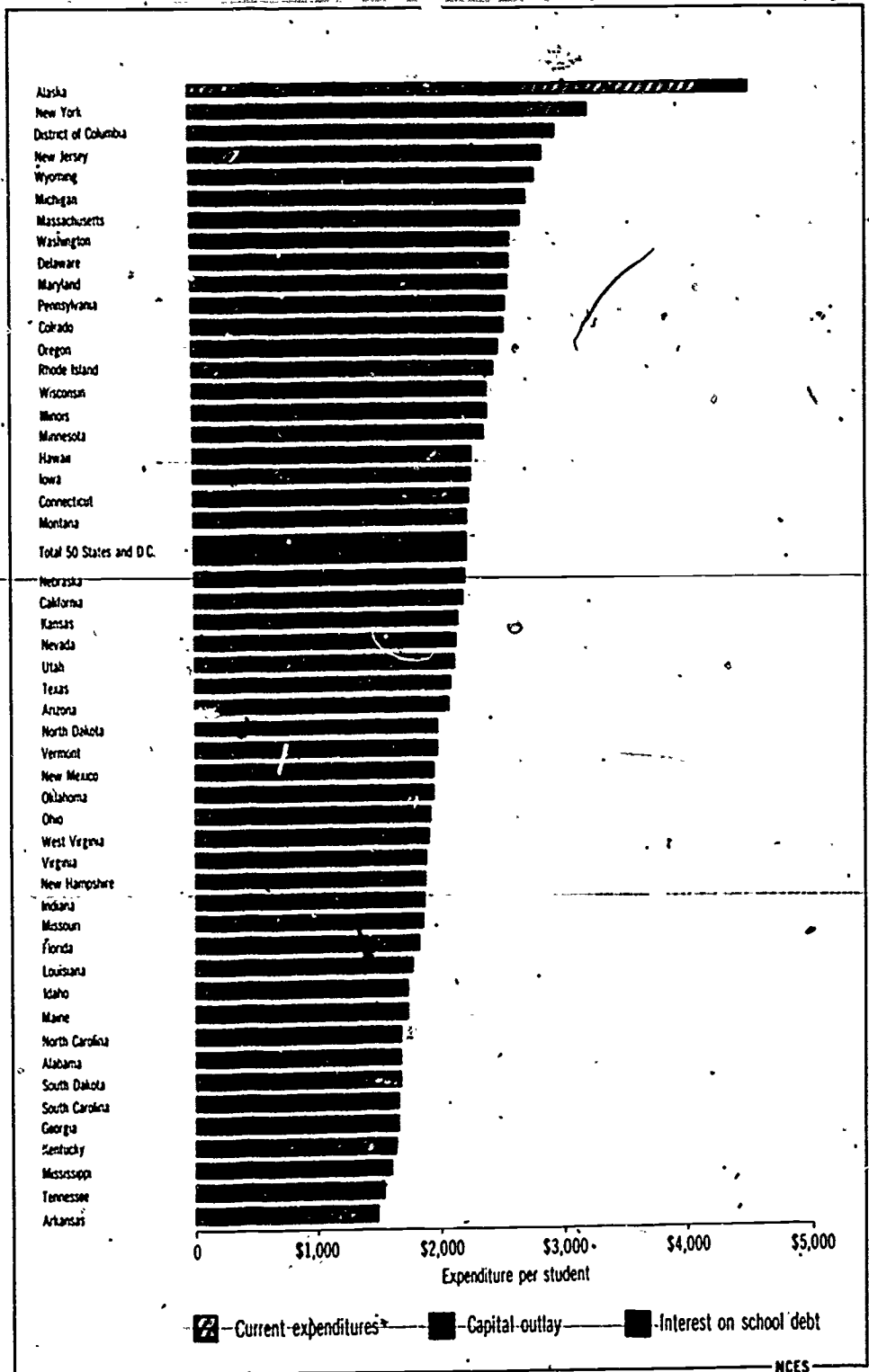
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Revenues and Expenditures for Public Elementary and Secondary Education, 1978-79*, forthcoming and unpublished data.

**Chart 2.23**

**Public Elementary/Secondary School Expenditures per Student by Function**

Public elementary/secondary school expenditures per student varied considerably from \$4,522 in Alaska to \$1,493 in Arkansas. Current expenditures accounted for the overwhelming share of expenses in all States, although in some 'growth' States such as Arizona, Utah, Nevada, Idaho, and Wyoming, expenditures for capital outlay were higher than average.



**Table 2.24**

**Annual tuition and fees in private elementary/secondary schools, by level, religious affiliation, and family income of dependent family-members: October 1979**

Level, affiliation, and family income	Number enrolled in private schools, in thousands	Tuition and fees				
		Under \$200	\$200 to \$499	\$500 to \$999	\$1 000 and over	Not reported
		Percentage distribution				
All levels, affiliated and unaffiliated	4 200	19.8	21.0	27.1	20.4	11.8
Under \$10 000	363	23.1	26.7	27.8	5.5	16.5
\$10 000 to \$14 999	526	24.3	24.9	29.8	11.4	9.7
\$15 000 to \$19 999	646	24.0	22.8	29.9	12.5	10.7
\$20 000 to \$24 999	721	21.8	23.4	28.0	15.1	11.8
\$25 000 and over	1 574	17.2	17.9	25.2	32.6	7.2
Not reported	369	19.6	14.9	23.8	19.5	31.2
All levels, religiously affiliated	3 518	22.8	24.2	29.0	14.0	10.1
Under \$10 000	297	25.3	32.0	28.6	3.4	10.8
\$10 000 to \$14 999	479	25.7	26.7	30.7	7.7	9.0
\$15 000 to \$19 999	545	26.2	24.8	29.4	10.4	9.2
\$20 000 to \$24 999	662	22.8	25.1	28.4	12.7	11.2
\$25 000 and over	1 223	21.7	21.5	28.2	21.5	7.0
Not reported	271	12.9	18.8	29.9	14.0	24.4
All levels, unaffiliated	584	3.8	4.3	20.9	62.2	8.9
Under \$10 000	84	13.1	2.4	32.1	41.7	10.7
\$10 000 to \$14 999	101	5.9	5.0	34.7	45.5	9.9
\$15 000 to \$19 999	330	6	3.9	15.8	76.4	3.6
\$20 000 to \$24 999	69					
\$25 000 and over						
Not reported						
Elementary level, affiliated and unaffiliated	3 105	26.2	26.8	21.7	13.4	15.8
Under \$10 000	286	27.6	32.2	22.4	3.5	13.6
\$10 000 to \$14 999	425	29.2	29.4	27.4	7.8	11.1
\$15 000 to \$19 999	507	30.7	28.3	25.3	6.0	10.0
\$20 000 to \$24 999	559	27.7	29.0	21.1	9.1	12.9
\$25 000 and over	1 089	24.5	24.1	20.3	24.2	7.2
Not reported	246	15.0	20.3	19.1	11.8	32.9
Elementary level, religiously affiliated	2 665	29.8	30.4	22.0	6.9	10.8
Under \$10 000	247	29.6	37.2	20.6	1.2	10.5
\$10 000 to \$14 999	389	30.6	31.5	22.4	4.9	10.5
\$15 000 to \$19 999	464	32.8	30.2	24.4	3.4	9.1
\$20 000 to \$24 999	518	29.2	31.3	20.0	6.2	12.5
\$25 000 and over	855	30.9	28.9	21.2	11.8	7.5
Not reported	191	18.3	24.1	23.6	7.3	26.2
Elementary level, unaffiliated	388	3.9	4.4	22.4	58.5	9.3
Under \$10 000	128	8.6	3.1	35.9	43.0	10.9
\$10 000 to \$14 999	223	9	4.0	18.8	72.2	4.9
\$15 000 to \$19 999	36					
\$20 000 to \$24 999						
\$25 000 and over						
Not reported						
Secondary level, affiliated and unaffiliated	1 095	1.6	4.2	42.6	40.0	11.6
Under \$10 000	77	6.5	3.9	45.5	11.7	28.6
\$10 000 to \$14 999	102	3.9	5.9	59.8	26.5	3.9
\$15 000 to \$19 999	144	7	4.2	45.8	35.4	13.2
\$20 000 to \$24 999	183	1.2	4.3	51.5	35.0	8.0
\$25 000 and over	486	6	4.3	36.4	51.9	7.2
Not reported	123	1.6	3.3	33.3	35.0	26.8
Secondary level, religiously affiliated	854	1.2	4.7	50.5	35.9	7.7
Under \$10 000	140	4.3	6.4	65.0	18.6	5.7
\$10 000 to \$14 999	121	8	5.0	47.9	36.4	9.1
\$15 000 to \$19 999	144	0	7.8	55.6	35.4	6.3
\$20 000 to \$24 999	368	8	4.6	44.8	43.8	5.7
\$25 000 and over	81	0	4.9	44.4	30.9	21.0
Not reported						
Secondary level, unaffiliated	196	3.6	3.6	16.8	67.9	8.2
Under \$10 000	58					
\$10 000 to \$14 999						
\$15 000 to \$19 999						
\$20 000 to \$24 999						
\$25 000 and over	106	0	3.8	9.4	84.9	1.9
Not reported	33					

\* Percentage distribution for base less than 75 000 not shown.

NOTE: Details may not add to totals because of rounding

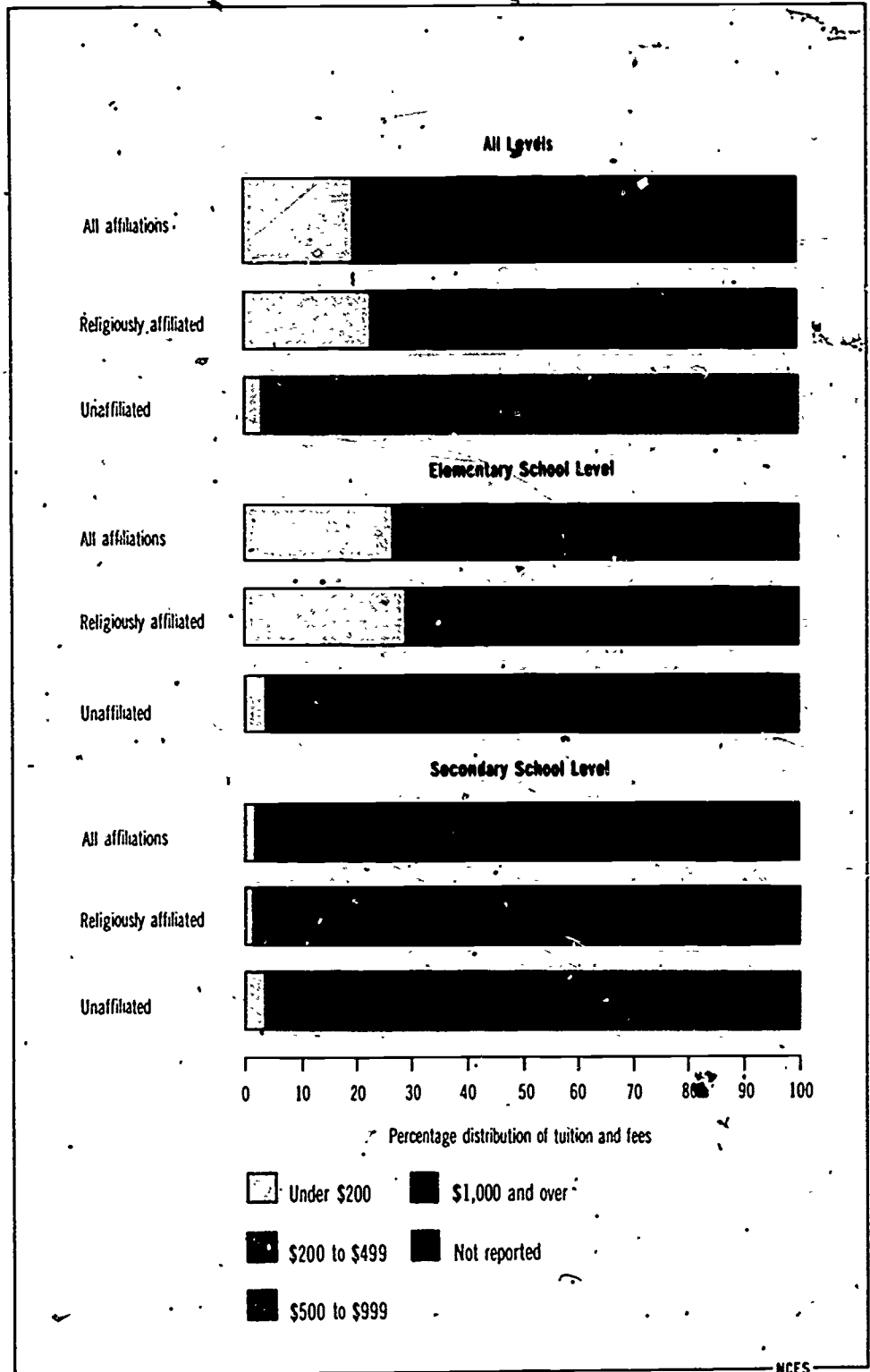
SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations



**Chart 2.24**

**Private Elementary/Secondary School Tuition and Fees by Level and Affiliation**

Tuition and fees paid for private schooling differed markedly by level of schooling and by whether the school was religiously affiliated. Affiliated elementary schools were the least expensive—more than half of the students paid under \$500 annually while unaffiliated secondary schools were the most costly—over two-thirds of the students paid at least \$1,000.



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Table 2:25

Annual tuition and fees in private elementary/secondary schools, by racial/ethnic group and family income of dependent family members: October 1979

Family income	Number enrolled in private schools, in thousands	Tuition and fees					Not reported
		Under \$200	\$200 to \$499	\$500 to \$999	\$1,000 and over		
Percentage distribution							
<b>All racial/ethnic groups</b>							
Total, all incomes	4,200	19.8	21.0	27.1	20.4	11.4	
Under \$10,000	363	23.1	26.7	27.8	5.5	16.5	
\$10,000 to \$14,999	526	24.3	24.9	29.8	11.4	9.7	
\$15,000 to \$19,999	646	24.0	22.8	29.9	12.5	10.7	
\$20,000 to \$24,999	721	21.8	23.4	28.0	15.1	11.8	
\$25,000 and over	1,574	17.2	17.9	25.2	32.6	7.2	
Not reported	369	10.6	14.9	23.8	19.5	31.2	
<b>White</b>							
Total, all incomes	3,791	20.4	20.0	27.0	21.1	11.4	
Under \$10,000	261	26.4	22.2	30.3	6.1	15.3	
\$10,000 to \$14,999	480	25.4	23.1	29.2	10.0	10.4	
\$15,000 to \$19,999	599	24.5	21.7	30.7	11.7	11.8	
\$20,000 to \$24,999	648	22.7	23.6	26.4	16.0	11.4	
\$25,000 and over	1,463	17.8	17.2	24.7	33.3	6.9	
Not reported	338	10.1	16.0	25.7	19.2	29.3	
<b>Black</b>							
Total, all incomes	313	10.5	30.4	32.3	11.2	15.3	
Under \$10,000	129	15.5	41.9	24.8	3.9	14.0	
\$10,000 to \$14,999	95	7.4	32.6	41.1	10.5	10.5	
\$15,000 to \$19,999	65	...	...	...	...	...	
\$20,000 to \$24,999	24	...	...	...	...	...	
\$25,000 and over	...	...	...	...	...	...	
Not reported	...	...	...	...	...	...	
<b>Hispanic<sup>2</sup></b>							
Total, all incomes	246	17.9	42.7	25.6	9.8	4.9	
Under \$10,000	103	17.5	48.5	23.3	5.8	4.9	
\$10,000 to \$14,999	83	16.9	37.3	26.5	8.4	3.6	
\$15,000 to \$19,999	48	...	...	...	...	...	
\$20,000 to \$24,999	12	...	...	...	...	...	
\$25,000 and over	...	...	...	...	...	...	
Not reported	...	...	...	...	...	...	

<sup>1</sup> Percentage distribution for base less than 75,000 not shown.<sup>2</sup> Hispanics may be of any racial group.

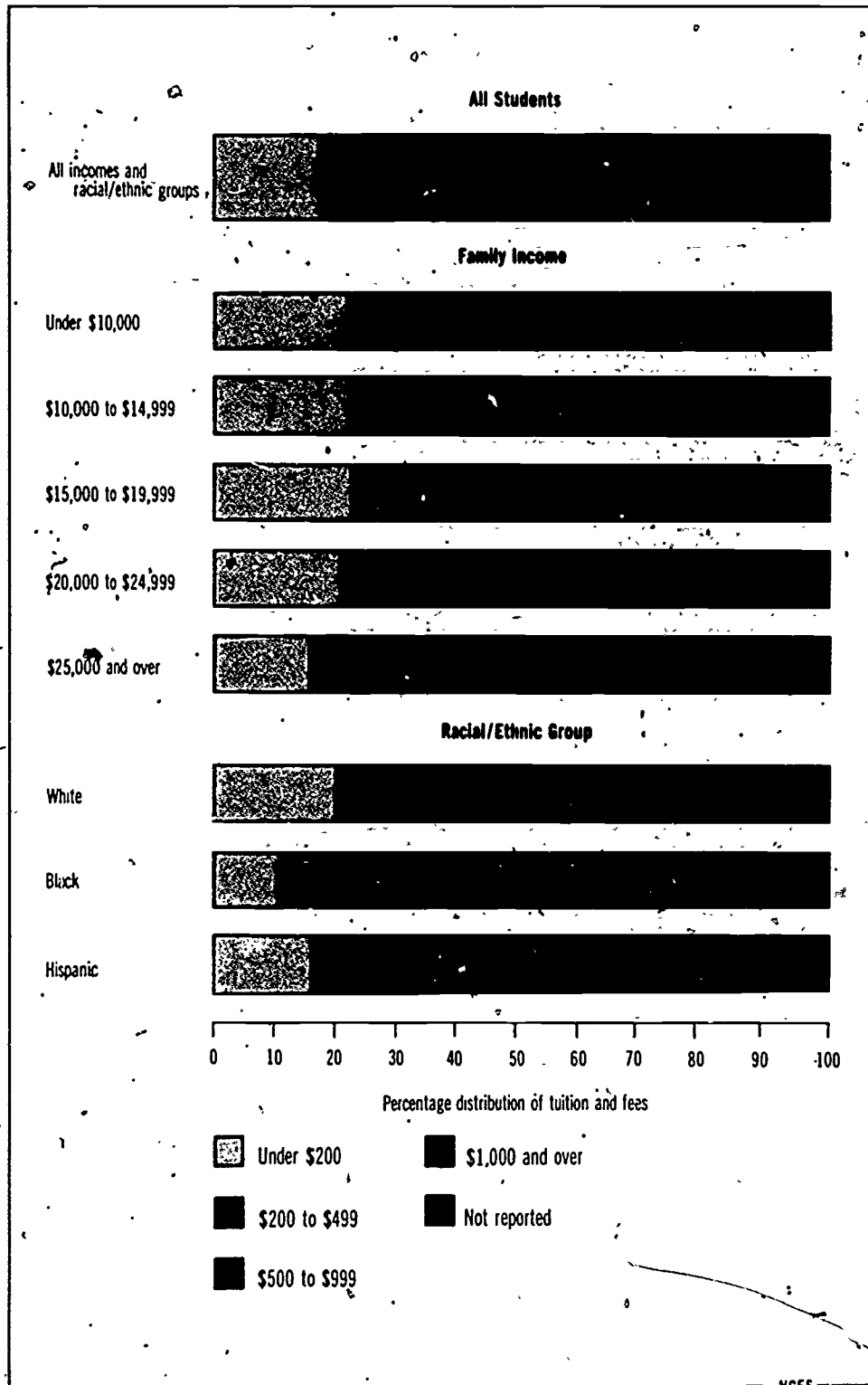
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, unpublished tabulations

**Chart 225**

**Private Elementary/Secondary School Tuition and Fees by Family Income and Racial/Ethnic Group**

Although participation in private schools was highly related to family income, the tuition and fees paid did not differ appreciably by family income except at the highest income level. Tuition and fees paid by racial/ethnic groups reflected differential incomes in that whites were more than twice as likely as blacks and Hispanics to pay \$1,000 or more annually in tuition and fees.



NCES

**Table 2.26**

**Distribution of overall quality (holistic scores) assessed in narrative/descriptive essays, by age group; 1969-70, 1973-74, and 1978-79**

Age group and year	Total	Holistic score					3 & 4	Mean
		1 Worst	2	3	4 Best			
Percentage distribution								
9-year-olds								
1970(n = 384)	100.0	12.5	45.1	32.6	9.9	42.5	2.42	
1974(n = 409)	100.0	10.0	45.2	32.0	12.7	44.7	2.51	
1979(n = 494)	100.0	10.7	40.9	36.4	11.9	48.3	2.54	
Change								
1970 to 1974		-2.5	.1	-6	2.8	2.2	.08	
1974 to 1979		.7	-4.3	4.4	-8	3.6	.04	
1970 to 1979		-1.8	-4.2	3.8	2.0	5.8	.12	
13 year-olds								
1969(n = 395)	100.0	10.6	26.6	39.2	23.5	62.7	2.84	
1973(n = 420)	100.0	10.7	32.9	41.4	15.0	56.4	2.66	
1978(n = 536)	100.0	9.7	35.6	38.1	16.6	54.7	2.63	
Change								
1969 to 1973		.1	6.3	2.2	-8.5	-6.3	*-.18	
1973 to 1978		-1.0	2.7	-3.3	1.6	-1.7	-.03	
1969 to 1978		-9	9.0	-1.1	-6.9	-8.0	*-.21	
17-year-olds								
1969(n = 365)	100.0	12.1	40.3	31.8	15.9	47.7	2.54	
1974(n = 417)	100.0	14.9	38.8	32.6	13.7	46.3	2.52	
1979(n = 538)	100.0	11.9	46.5	28.8	12.8	41.6	2.43	
Change								
1969 to 1974		2.8	-1.5	.8	-2.2	-1.4	-.02	
1974 to 1979		-3.0	7.7	-3.8	-9	-4.7	-.09	
1969 to 1979		-2	6.2	-3.0	-3.1	-6.1	-.11	

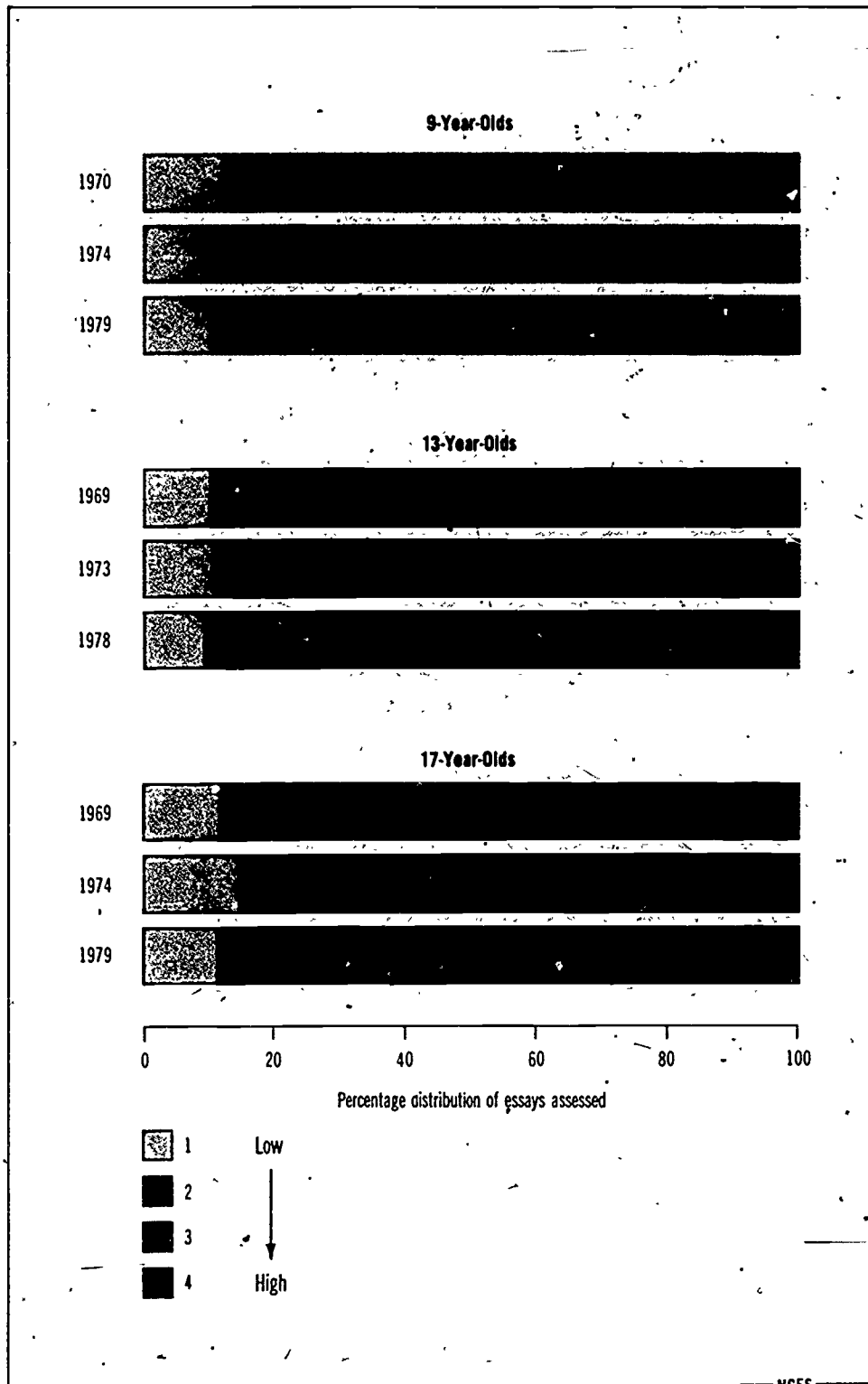
\*Statistically significant change at the .05 level.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Institute of Education, National Assessment of Educational Progress, *Writing Achievement, 1969-79: Results from the Third National Writing Assessment*, Vols. I, II, and III, 1980.

**Chart 2.26**  
**Shifts in Overall Quality Assessed in Narrative Essays by Age Group**

Holistic evaluations of students' narrative essays revealed slight shifts in writing performance during the 1970's. Scores of 9-year-olds improved somewhat, those of 13-year-olds declined, primarily between 1969 and 1973, and those of 17-year-olds evidenced minor declines.



NCES

**Table 2.27**

**Standardized scores on assessment areas and socioeconomic status of secondary school sophomores and seniors, by racial/ethnic group: Spring 1980**

Level and subject	Total	Hispanic ethnicity								
		White	Black	All Hispanic	Mexican	Puerto Rican	Cuban	Other Hispanic	Asian American	American Indian
Standardized scores <sup>1</sup>										
<b>Sophomores</b>										
Vocabulary	50.0	52.0	42.4	44.9	44.2	44.0	48.1	46.1	51.6	45.0
Reading	50.0	51.7	44.2	45.1	44.6	44.5	48.6	45.8	51.6	46.2
Math part 1	50.0	51.8	43.1	44.9	44.5	43.9	48.0	45.7	55.7	44.6
Math part 2	50.0	51.3	44.9	46.2	45.7	45.5	49.3	46.9	55.5	46.2
Science	50.0	52.1	41.6	44.5	44.0	42.9	46.3	45.7	51.5	46.1
Writing	50.0	51.8	43.3	44.9	44.8	43.3	46.8	45.5	53.7	46.0
Civics	50.0	51.3	45.7	45.9	45.7	46.0	45.6	46.5	51.0	45.5
Socioeconomic status (SES) composite <sup>2</sup>	50.0	51.3	46.1	46.0	45.0	44.2	47.3	48.8	51.7	47.2
<b>Seniors</b>										
Vocabulary part 1	50.0	51.4	43.6	44.8	44.5	44.3	48.5	44.8	50.2	45.8
Vocabulary part 2	50.0	51.3	43.9	45.2	44.8	45.4	48.3	45.2	50.5	46.6
Reading	50.0	51.5	43.4	43.7	43.6	43.7	46.4	43.4	50.3	46.6
Math part 1	50.0	51.5	42.8	44.1	43.8	43.4	48.2	44.1	54.2	45.2
Math part 2	50.0	50.9	45.4	46.1	46.2	46.0	48.4	45.5	55.4	46.0
Mosaic Comparison part 1	50.0	50.9	44.4	48.0	47.9	50.0	49.7	47.5	52.4	49.3
Mosaic Comparison part 2	50.0	51.0	43.9	47.5	47.9	48.9	48.8	46.0	54.6	48.2
Three Dimensional Visualization	50.0	51.0	43.9	46.9	47.2	46.9	49.2	45.8	55.2	50.0
Socioeconomic status (SES) composite <sup>2</sup>	50.0	51.2	45.1	45.7	44.9	41.9	47.6	48.1	51.9	47.8

<sup>1</sup> Scores are standardized to a mean of 50 points and a standard deviation of 10 points.

<sup>2</sup> Socioeconomic status (SES) composite computed from father's occupation, father's education, mother's education, family income, and a household item index.

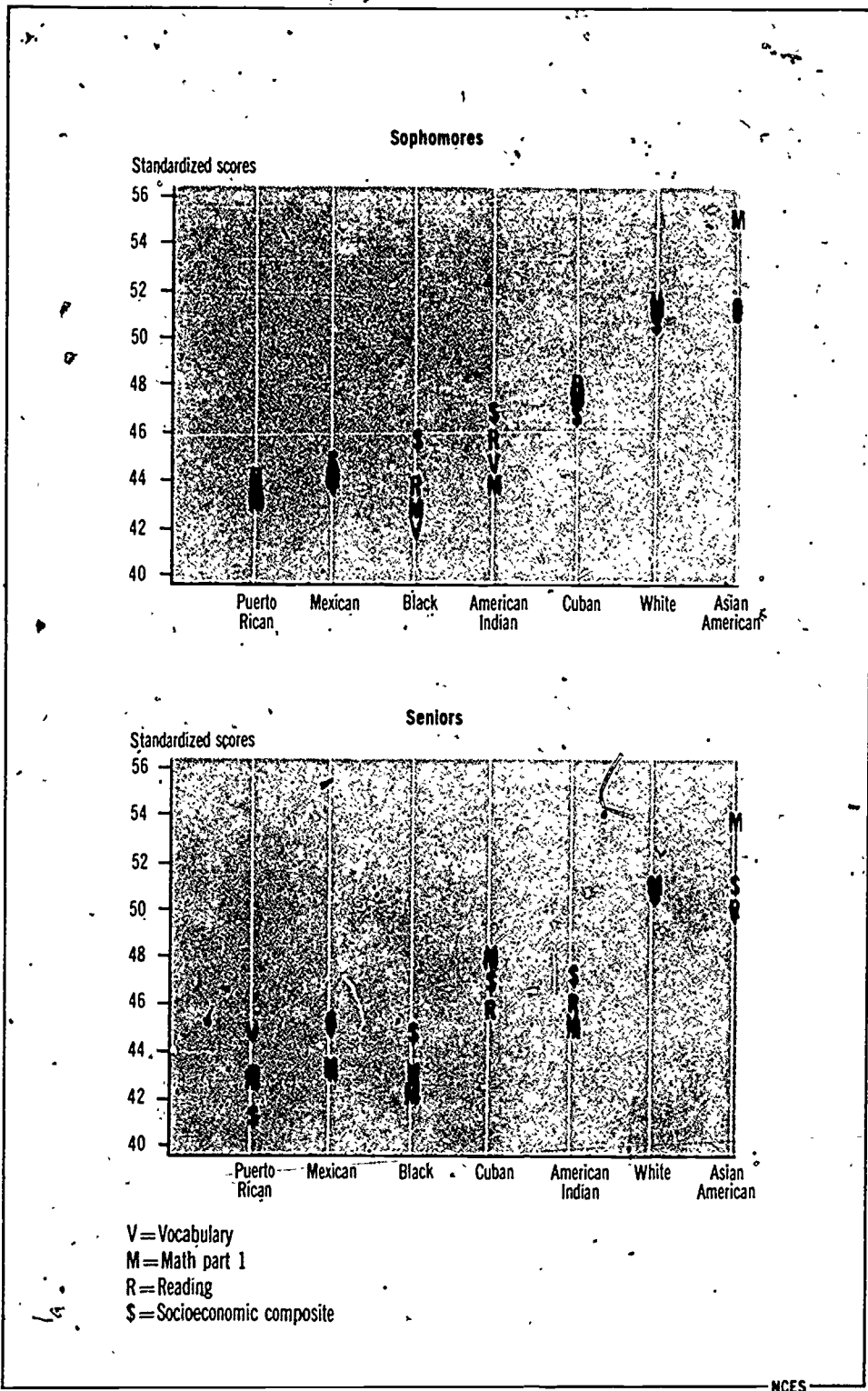
NOTE: Racial/ethnic categories are mutually exclusive.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Study, unpublished tabulations

**Chart 2.27**

**Standardized Scores of Secondary School Sophomores and Seniors by Racial/Ethnic Group**

Standardized achievement scores of sophomores and seniors tended to cluster about their socioeconomic composite scores. Scores of blacks, Hispanics, and American Indians fell below the average, while those of whites and Asian Americans were higher than the norm.



NCES

Table 2.28

High school graduates, by control of school and sex of student: School year 1968-69 to 1989-90

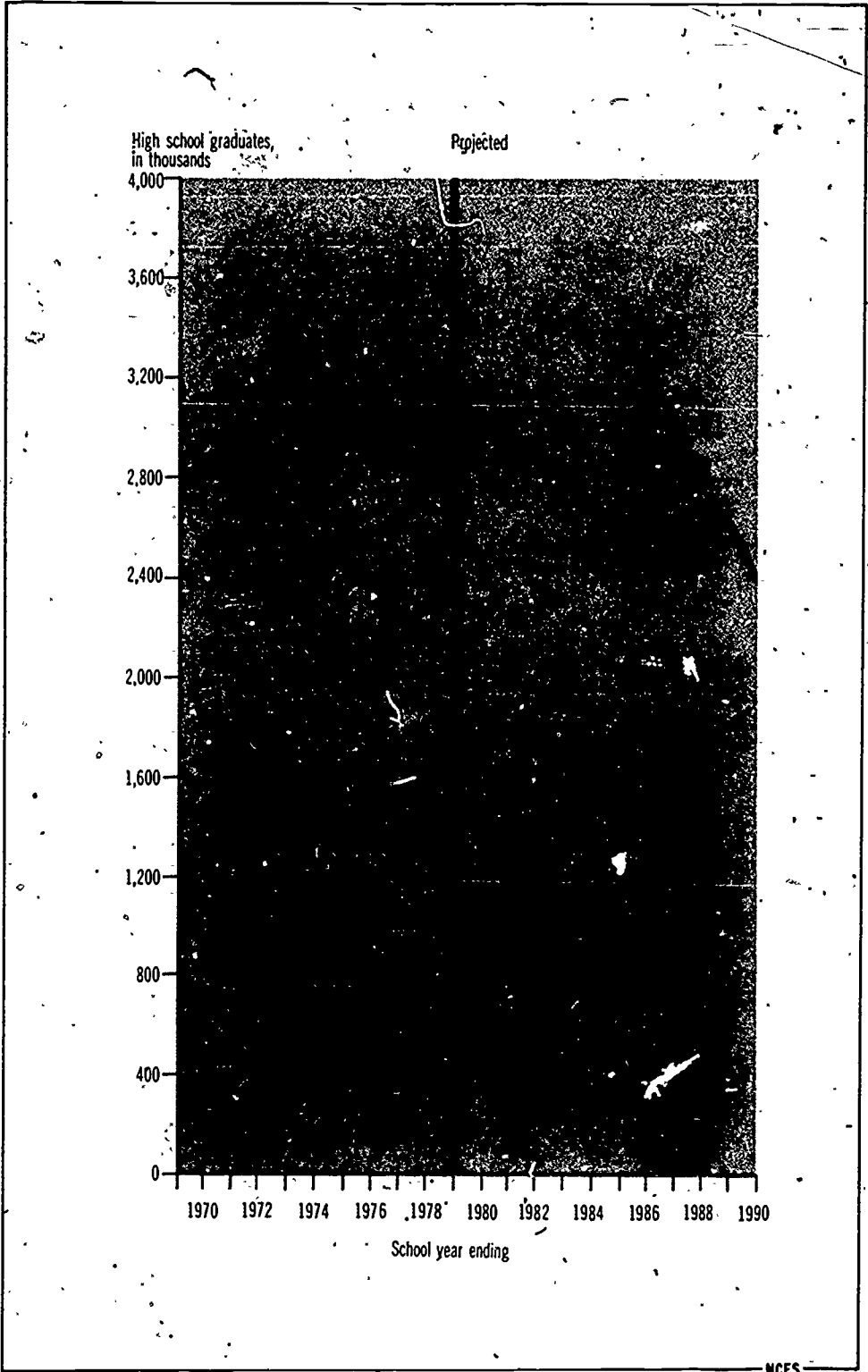
School year ending	Total high school graduates	As percent of average of 17- and 18-year-old population	Control		Sex	
			Public	Private <sup>1</sup>	Male	Female
Numbers, in thousands						
1969	2,829	76.3	2,529	300	1,402	1,427
1970	2,896	76.0	2,596	300	1,433	1,463
1971	2,944	75.3	2,644	300	1,457	1,487
1972	3,008	75.4	2,706	302	1,490	1,518
1973	3,043	75.1	2,737	306	1,503	1,540
1974	3,080	74.1	2,771	310	1,515	1,565
1975	3,140	74.2	2,830	310	1,545	1,595
1976	3,155	74.6	2,844	311	1,554	1,601
1977	3,161	74.9	2,846	315	1,550	1,611
1978	3,147	74.2	2,832	315	1,540	1,607
1979	3,134	74.0	2,824	310	1,532	1,602
Projected						
1980	3,093	74.3	2,773	320	1,519	1,574
1981	3,048	74.3	2,728	320	1,498	1,550
1982	2,963	74.3	2,653	310	1,455	1,508
1983	2,822	74.3	2,502	320	1,385	1,437
1984	2,705	74.3	2,385	320	1,328	1,377
1985	2,638	74.3	2,318	320	1,296	1,342
1986	2,625	74.3	2,315	310	1,290	1,335
1987	2,673	74.3	2,373	300	1,314	1,359
1988	2,735	74.3	2,435	300	1,346	1,389
1989	2,651	74.3	2,341	310	1,305	1,346
1990	2,467	74.3	2,157	310	1,214	1,253

<sup>1</sup> Estimated.SOURCE: U.S. Department of Education, National Center for Education Statistics, *Projections of Education Statistics to 1988-89, 1981* and unpublished tabulations.



**Chart 2.28**  
**High School Graduates**

If graduation rates remain constant as forecasted at about 74 percent, the number of high school students graduated each year is projected to continue to decline until the late 1980's.



NCES

**Table 2.29**  
**Racial/ethnic composition of public elementary/secondary school enrollment and high school**  
**graduating class of 1978, by region: Fall 1978**

Region and status	Total		White <sup>1</sup>		Black <sup>1</sup>		Hispanic		Asian American		American Indian	
	Number	Percent of total	Number	Percent of total	Number	Percent of total	Number	Percent of total	Number	Percent of total	Number	Percent of total
Total 50 States and D.C.												
Enrollment	41,836,257	100	31,509,927	75	6,578,074	16	2,825,229	7	593,597	1	329,430	1
Graduates	2,810,401	100	2,312,540	82	329,053	12	119,565	4	34,372	1	14,871	1
Northeast												
Enrollment	8,586,107	100	6,814,426	79	1,153,167	13	520,228	6	87,118	1	11,168	0
Graduates	618,319	100	544,175	88	51,770	8	47,737	3	4,135	1	508	0
Border States and D.C.												
Enrollment	3,549,075	100	2,814,841	79	625,776	18	22,664	1	23,342	1	62,452	2
Graduates	234,903	100	196,671	84	32,742	14	1,222	1	1,218	1	3,050	1
South												
Enrollment	11,625,618	100	7,578,750	65	3,118,898	27	841,391	7	55,660	0	30,919	0
Graduates	688,223	100	484,862	70	163,565	24	36,366	5	2,291	0	1,139	0
Midwest												
Enrollment	10,281,985	100	8,764,770	85	1,174,448	11	281,210	2	64,591	1	59,966	1
Graduates	752,144	100	684,549	91	53,714	7	8,442	1	2,733	0	2,706	0
West												
Enrollment	7,537,563	100	5,438,149	72	500,426	7	1,210,038	16	43,689	3	145,261	2
Graduates	500,862	100	397,028	79	27,027	5	54,888	11	15,240	3	6,679	1
Alaska/Hawaii												
Enrollment	255,909	100	98,991	39	5,359	2	12,698	5	119,197	47	19,664	8
Graduates	15,950	100	5,255	33	235	1	916	6	8,755	55	789	5

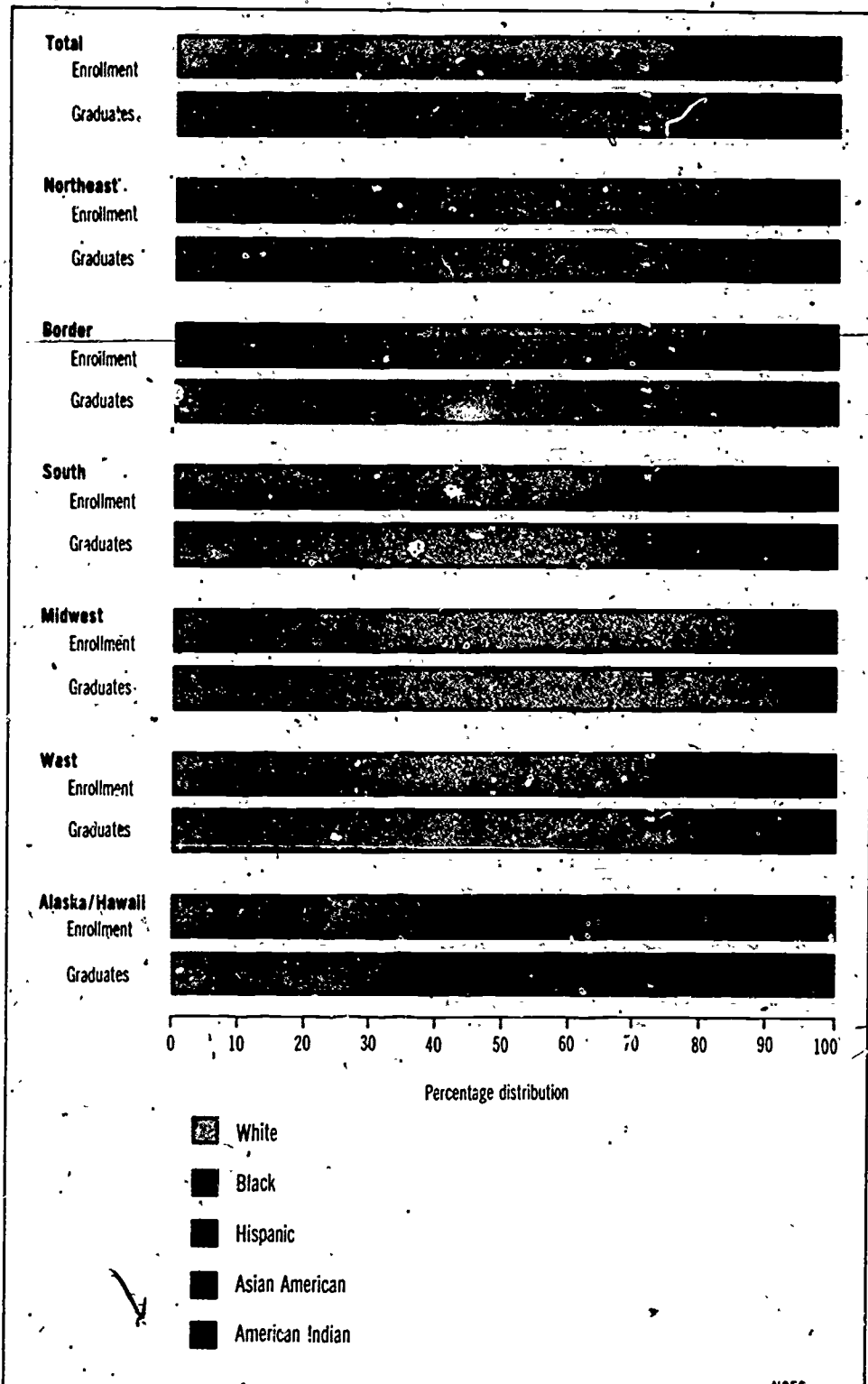
<sup>1</sup> Non-Hispanic.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, *State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools*, 1980.

**Chart 2.29**  
**Racial/Ethnic Composition of Enrollment and of the High School Graduating Class**

In most regions, blacks and Hispanics were underrepresented in the high school graduating class in relation to their share of the total enrollment.



NCES

**Table 2.30**

**Disciplinary actions reported in public elementary/secondary schools, by sex, racial/ethnic group, and region; Fall 1978**

Region and type of disciplinary action	Total	Male	Female	White <sup>1</sup>	Black <sup>1</sup>	Hispanic	Asian American	American Indian
Percentage distribution								
Total 50 States and D.C.								
Enrollment	100	51	49	75	16	7	1	1
Suspensions	100	68	32	64	29	6	1	1
Expulsions	100	78	22	65	27	6	1	1
Corporal punishment	100	81	19	65	29	5	0	1
Northeast								
Enrollment	100	51	49	79	13	6	1	0
Suspensions	100	66	34	72	24	4	0	0
Expulsions	100	77	23	85	13	2	0	0
Corporal punishment	100	87	13	84	14	2	0	0
Border States and D.C.								
Enrollment	100	51	49	79	18	1	1	2
Suspensions	100	69	31	62	37	0	0	1
Expulsions	100	76	24	77	18	1	0	4
Corporal punishment	100	80	20	79	17	1	0	3
South								
Enrollment	100	51	49	65	27	7	0	0
Suspensions	100	69	31	51	45	4	0	0
Expulsions	100	79	21	47	44	8	0	0
Corporal punishment	100	80	20	59	35	6	0	0
Midwest								
Enrollment	100	51	49	85	11	2	1	1
Suspensions	100	68	32	73	25	2	0	1
Expulsions	100	77	23	79	19	2	0	0
Corporal punishment	100	84	16	78	21	1	0	0
West								
Enrollment	100	51	49	72	7	16	3	2
Suspensions	100	70	30	62	17	18	1	2
Expulsions	100	78	22	66	16	15	1	2
Corporal punishment	100	86	14	66	9	20	1	5
Alaska/Hawaii								
Enrollment	100	52	48	39	2	5	47	8
Suspensions	100	74	26	36	3	12	43	6
Expulsions	100	81	19	35	3	4	43	15
Corporal punishment	100	82	18	76	7	1	1	15

<sup>1</sup> Non-Hispanic.

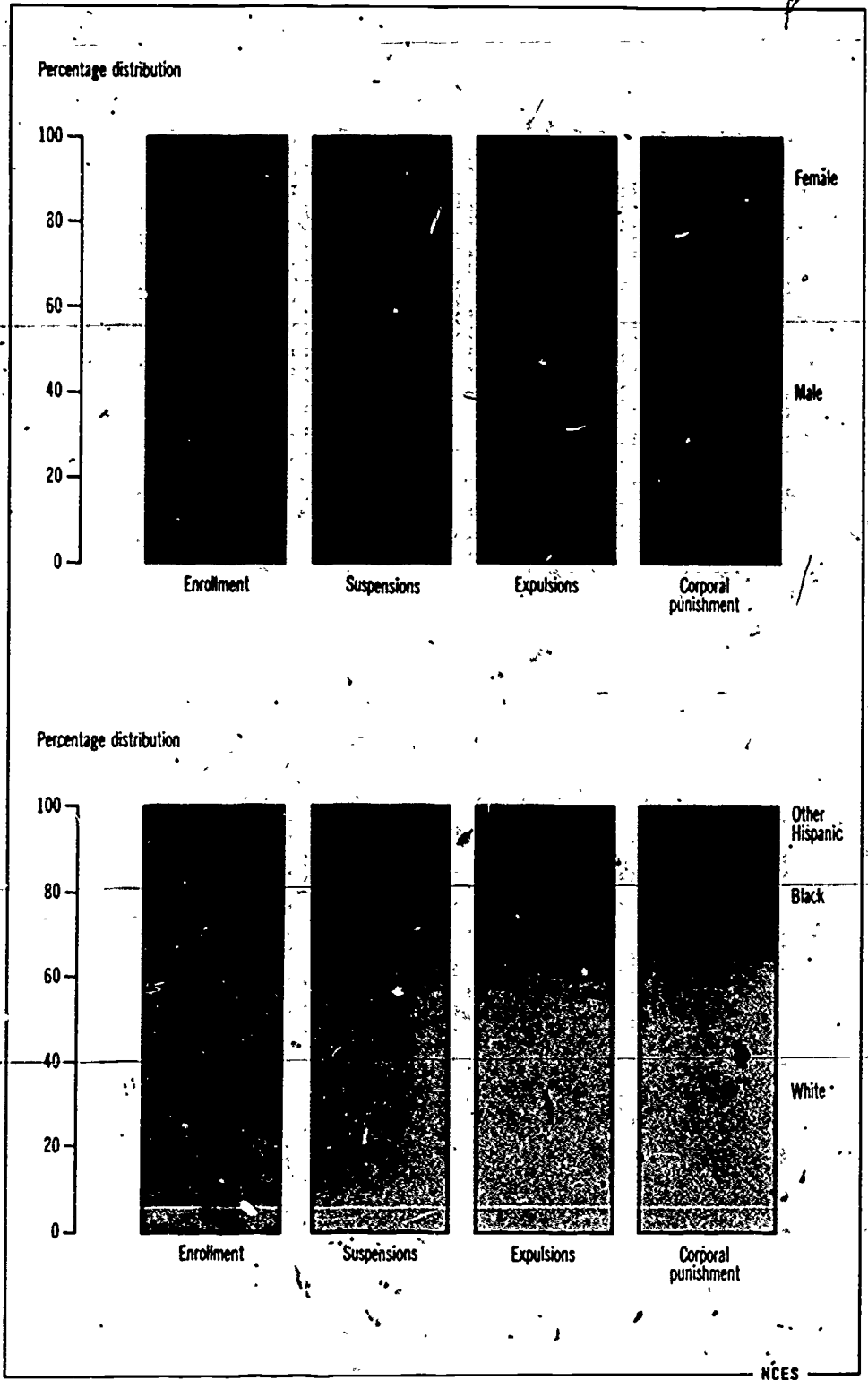
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, *State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools, 1980.*

**Chart 2.30**

**Disciplinary Actions by Sex and by Racial/Ethnic Group of Student**

Male students and black students were more likely than others to be disciplined by the public schools. Four-fifths of expulsions and corporal punishment cases involved males and more than one-fourth involved blacks.



NCES

The diversity and complexity of structure of America's educational system discussed in chapter 1 extends to postsecondary education and particularly to higher education. Postsecondary education includes not only higher education, but also adult education and a large portion of vocational education. Adult education overlaps with both elementary/secondary education (in terms of adult basic and secondary education) and higher education (in terms of part-time adult enrollment in degree-credit and non-degree-credit courses). Vocational education overlaps with secondary education and higher education in that occupational curricula are offered at these levels but includes a third component—the noncollegiate postsecondary schools with occupational programs. These components of vocational education will be discussed in the next chapter.

Higher education is the focus of this chapter, opening with an examination of access to this sector of the education system. The impact on access of student expectations, college admission practices, and ability to pay are examined. Trends in participation in higher education are discussed, focusing on changes in the characteristics of students. Measurable outcomes of higher education are also examined, with the emphasis in this chapter on degrees earned, while employment outcomes are discussed in chapter 5. The chapter closes with a look at the institutions, their finances, and the economic status of their faculty.

### Access to Higher Education

Access to higher education is usually discussed in terms of participation rates since data are more readily available on participation than on access. But since participation depends directly on access, the factors affecting access need examination in conjunction with those affecting participation. One factor must certainly be the individual's interest or expectation of attending higher education.

In 1972 and 1980 high school seniors were asked about their educational expectations. The expectations were tabulated by student characteristics known to relate to college attendance: racial/ethnic group, sex, socioeconomic status (SES), and ability (entry 3.1). In 1972 the characteristic that showed the greatest difference in expectations among students was ability (as measured by a composite of test scores from academic ability tests administered in 1972). The proportions expecting to complete a bachelor's degree or go to graduate school ranged from 19 percent for low ability students to 77 percent for high ability students. Expectations by SES also showed large differences. Just over one-quarter of low SES students, two-fifths of middle SES students, and nearly three-quarters of high SES students expected to get a bachelor's degree or higher. Differences by sex and race/ethnicity were much smaller than differences by ability or SES.

For high school seniors of 1980 the expectations among all groups were quite similar to those for comparable groups in the class of 1972, except that larger proportions expected to go to graduate school. The largest difference was the narrowing of the gap between expectations of males and females. The proportion of males expecting a bachelor's degree or higher dropped from 51 to 47 percent, while the proportion increased from 41 to 45 percent for females. The proportion of females expecting to go to graduate school doubled from 10 percent in 1972 to 20 percent in 1980.

The data on expectations of the 1972 high school seniors were compared with their attainment 7½ years later (entries 3.2 and 3.3). Among all persons, nearly two-thirds had at least some college by 1979, and one-quarter had obtained a bachelor's degree or higher.

The tables in these entries, grouped by student characteristics, show attainment as of 1979 distributed by student's expectations in 1972. These can be considered a four by four matrix with categories of expectation and attainment—"no college", "some college", "4- or 5-year degree", and "graduate school"—forming the rows and columns. Examined in this way, the diagonal of the matrix represents the proportions of those students whose attainment matched their expectations. The proportions above the diagonal represent students whose attainment exceeded their expectations while the proportions below the diagonal represent those whose attainment did not meet expectations.

Among all students about two-thirds of those expecting "no college" matched their expectations by 1979. The proportion was higher for low ability and low SES students (about three-quarters) and lower for high ability and high SES students (about half). Males and females were about equally likely to meet or exceed their expectations. Whites were more likely than blacks and Hispanics to meet or exceed their expectations. More than half of blacks and Hispanics who expected a 4- or 5-year degree had attained only some college by 1979 compared to 39 percent of whites. Among all the characteristics of students contributing to the expectation/attainment distribution, ability and SES levels showed the greatest variation. High ability and high SES students were more likely to meet or exceed their expectations than were low ability and low SES students.

Another major factor governing an individual's access to higher education is the willingness of the institution to admit the student. A variety of criteria for admission are set by institutions. The credentials colleges required of all applicants varied by type of institution and certainly within type they varied by individual institution. No one credential was required by 100 percent of the institutions. Even the most commonly required credential—a complete high school transcript—was required by only 46 percent of public 2-year institutions ranging up to 88 percent of private 4-year institutions (entry 3.4). Admission test scores were a requirement for more than half of 4-year institutions. Of those colleges requiring test scores, less than 4 percent of public 4-year institutions and fewer of other institutional types considered them the single most important factor for admission. More than half of the 4-year institutions considered them a very important factor (entry 3.5).

Private 4-year colleges were most likely (42 percent) to have a Scholastic Aptitude Test (SAT) score minimum below which applicants are generally not considered for admission, but only 4 percent of public 2-year colleges had such a requirement. Private 4-year colleges also had the highest mean SAT cut-off at 754. But an examination of SAT scores over time shows that the mean combined verbal and mathematical tests scores in 1980, which was the lowest for the previous decade, was still more than 130 points higher than the mean cut-off score for private 4-year institutions (entry 3.6). Similarly, private 4-year colleges were most likely (36 percent) to have an American College Testing program (ACT) score minimum and public 2-year colleges least likely (2 percent). The average ACT minimum composite score was lower than the mean score for any of the subject matter ACT's in 1980.

Also affecting a student's access to higher education is ability to pay. Average student charges (tuition, fees, room, and board) at private universities, the most expensive type of institution, increased by 77 percent, from \$3,163 to \$5,604, between 1970 and 1978 (entry 3.7). Charges at other types of institutions showed increases of from 55 to 68 percent. But at the same time, median family income was also increasing. Average student charges calculated as a percent of median family income show very little change over time. For private universities the proportion was 32.0 percent in 1970 and 31.8 percent in 1978. The ratio of charges to family income was lowest for public 2-year institutions, ranging around 10 percent over that period.

White families had the highest median income in 1978, \$5,802 higher than for Hispanic families and \$7,489 higher than for black families. So the ratio of student charges to family income was higher for the minority groups, as high as 52 percent for student charges at private universities compared to median income for black families in 1978.

The impact of higher education costs in terms of access could have severe effects for low income groups and thus largely for minorities were it not for the availability of various forms of financial aid. There are several types of aid: grants and scholarships which do not have to be repaid; term-time jobs; loans which must be repaid; and transfer benefits (veterans' readjustment and social security benefits). The Federal Government participates to a large extent in this effort to remove financial barriers which might otherwise deter an individual from the pursuit of education or training beyond high school. The five major Federal financial aid programs are: Pell Grants, formerly known as Basic Educational Opportunity Grants (BEOG); Supplemental Educational Opportunity Grants (SEOG); National Direct Student Loans (NDSL); College-Work Study (CWS); and Guaranteed Student Loans (GSL).

A study conducted in academic years 1978-79 and 1979-80 showed that more than two-thirds of sophomore and junior college students received of one of these forms of Federal financial aid (entry 3.8). The proportion was higher in the later year as a result of the passage of the Middle Income Students Assistant Act. This legislation, while continuing to provide financial aid for low income students, expanded the availability of aid to middle income students. The proportion of low income students who received financial aid increased, significantly for juniors receiving BEOGs, from 77 to 88 percent. The proportion of middle income students receiving BEOGs doubled from approximately one-third to nearly two-thirds. And the proportion for high income students increased from under 2 percent to one-quarter of all such students. The proportion of students receiving aid from the other programs, SEOG, NDSL, CWS, and GSL, did not change significantly except among middle income sophomores receiving SEOGs (8 percent increase), high income sophomores receiving CWS aid (10 percent increase) and high income juniors receiving GSLs (10 percent increase).

#### Participation in Higher Education

Enrollment in higher education peaked in 1980 at nearly 12 million after some fluctuations in the previous 5 years (entry 3.9). Before that period enrollments had been increasing at steady rates. Part-time enrollments grew at faster rates than full-time, with most of the increase occurring in 2-year institutions and, to a lesser extent, among post-baccalaureate students in 4-year institutions. At 2-year institutions part-time students more than doubled between 1970 and 1980 and were more than half again the number of full-time students in the latter year. Over the same period, part-time undergraduate enrollment at 4-year institutions remained between 25 and 30 percent of full-time enrollment. Post-baccalaureate enrollment increased between 1970 and 1976 to a high of nearly 1.6 million students then remained fairly steady, and the majority were enrolled part-time. Full-time enrollments are expected to decrease in the 1980's at 2- and 4-year institutions while part-time enrollments increase slightly or remain fairly constant. The result is expected to be a decline in full-time-equivalent enrollments toward the latter half of the decade.



Projections of higher education enrollment were calculated based on actual data between 1967 and 1978. Included were projections of 1979 and 1980 enrollments. The projection for 1980 was about 300,000 students short of the actual number that enrolled that year, pointing to the difficulties inherent in projecting higher education enrollment. Higher education is more sensitive to changes in society than are other sectors of the American education system. For example, economic recessions generally are accompanied by increases in enrollment when the jobless enter higher education as an alternative to employment. In 1980, the economy was in just such a recession, and enrollment jumped to a higher level than might otherwise have been expected.

Another factor that may have played a part in establishing 1980 as the peak enrollment year was increased recruitment practices among colleges and universities. The traditional college-age (18 to 24) population will peak in 1981 and after that year colleges and universities will have to compete for increasingly smaller pools of these students. Many institutions have already established practices to recruit and compete for students and have expanded services to attract non-traditional students, particularly those in older age groups.

As was discussed in the 1980 *Condition of Education*, population changes have not been and are not expected to be uniform over all regions of the country. In general, the population in the South and West has increased due to migration among States, and the population in the Northeast and North Central regions has decreased. Enrollment in higher education institutions reflect these population changes (entry 3.10). Between 1970 and 1979, among the 25 States whose percent change in higher education enrollment was below the national average, 15 were in the Northeast and North Central regions.

An examination of higher education full-time-equivalent enrollments in each State between 1970 and 1979 shows that only 2 States experienced slight decreases: Montana and South Dakota. But breakdown into the period before and after 1975 indicates that for 21 States the enrollment gains of the earlier period were partially reversed by declines between 1975 and 1979. Of the remaining States, only 7 had larger increases in the later period than in the earlier.

In addition to enrollment changes over the past decade, there were changes in the composition of the student body. 1979 was the first year in which the number of women enrolled in higher education exceeded the number of men (entry 3.11). But 3 years earlier was the first year the number of first-time female freshmen exceeded the number of first-time male freshmen, and the gap has grown wider each year, with females representing nearly 53 percent of first-time freshmen by 1979. The rate of growth for women in total enrollment was even faster than the growth rate for women among first-time freshmen, indicating that women were staying in school longer and more women were returning to school. The examination of enrollment by age shown in the 1980 *Condition of Education* indicates that the latter case is especially likely, since the fastest growth rates were for women between the ages of 30 and 34.

The racial/ethnic composition of the student body also changed significantly during the 1970's. The differences between racial/ethnic group representation in the population and representation in higher education in the early part of the decade were greater than at the end of the decade (entry 3.12). In 1971, blacks in the 18- to 24-year-old age group represented 12.1 percent of that age group's population and 8.4 percent of college enrollment; by 1979 the figures were 12.5 and 10.0 percent, respectively. For whites in 1971 the proportions were 86.8 percent of the population and 90.1 percent of college enrollment changing to 85.4 and 87.5 percent, respectively, by 1979. While comparable data for Hispanics were not available in the earlier year, changes between 1975 and 1979 show that their representation in the population among the 18- to 24-year-olds had increased (from 5.5 to 6.3 percent) but their representation among college students had not changed significantly (4.3 and 4.2 percent for 1975 and 1979, respectively).

Differences between population and college enrollment were greater than differences between proportions of 18- to 24-year-olds who were high school graduates and those who were enrolled in college. For example, by 1979, the difference between population and college representation for blacks was 2.5 percent, but the difference between high school graduates and college representation was only .5 percent. One consequence of increasing minorities' representation among high school graduates may be that their representation among college students will also increase.

Earlier studies have shown that the variable most highly correlated with an individual's educational attainment was parental educational attainment. Examination of family members enrolled in college by the educational attainment of the family head showed that in 1979, among family members enrolled in college, over one-third had a family head who had completed 4 years or more of college (entry 3.13). Over half had a family head who had completed at least some college. Among blacks and Hispanics, larger proportions of family members who were enrolled in college came from families in which the head had no college, indicating a trend toward upward mobility for these groups.

Similar comparisons can be made among racial/ethnic groups in the population and enrolled in college by family income. For all families with at least 1 member 18 to 24 years old, 28 percent had incomes of \$25,000 or more (entry 3.14). For families with at least 1 member 18 to 24 years old attending college, 42 percent had incomes at that level. Larger proportions of both black and Hispanic families had incomes at lower ends of the scale than did white families. But the proportions of those minority families at lower income levels who had members attending college were also much larger.

#### **Educational Outcomes**

The changing sex and racial/ethnic composition of enrollment was reflected in changes in the number of degrees awarded to women and minorities (entry 3.15). Even within the two year period between 1976-77 and 1978-79 these changes were significant. The number of males earning the bachelor's degree dropped by nearly 4 percent, while the increase for females was nearly 5 percent. The number of whites dropped by nearly 1 percent, and the increase for minorities ranged between 2 and 14 percent. The largest decrease was recorded for white males, while the largest increases were found for Hispanic and Asian or Pacific Islander females.

Between 1976-77 and 1978-79 the number of master's degrees awarded decreased by nearly 5 percent. White, black, and Hispanic master's degree recipients dropped by 6, 8, and 9 percent, respectively. American Indian/Alaskan Native and Asian or Pacific Islander recipients increased by 3 and 7 percent, respectively. The number of male degree recipients decreased by over 8 percent and females dropped by just over 1 percent. The largest percent decreases were found among Hispanic males and black females.

The number of doctor's degrees awarded between 1976-77 and 1978-79 decreased by 1.4 percent (entry 3.16). While women represented under one-quarter of all degree recipients in the latter year, the change from the previous 2 years was nearly a 14 percent increase. The number of men earning the doctor's degree declined by over 6 percent in the same period. Whites and Hispanics had the largest decreases and Asian or Pacific Islanders increased by 23 percent. Women of all racial/ethnic groups showed increases ranging from 4.3 percent for Hispanic females to nearly 40 percent for Asian or Pacific Islander females.

Degrees awarded in law, theology, and various areas of medicine, called first-professional degrees, increased by 7 percent—the largest increase of any degree level—between 1976-77 and 1978-79. All racial/ethnic groups showed increases ranging from 7 percent for whites to over 19 percent for Hispanics. While male recipients increased by less than 1 percent, females increased by over 35 percent.

Areas of study in which recipients were awarded degrees showed marked changes between 1970-71 and 1978-79 (entry 3.17). In the earlier year education, followed by social sciences and business and management, represented the most popular area of study at the bachelor's level. But in 1979 the most popular area was business and management. Bachelor's degrees in health professions and biological sciences were among the top five fields in 1979, showing significant increases over 1971 levels. Declines in foreign languages, letters, library sciences, social sciences and mathematics ranged between 30 and 53 percent. At the master's degree level, education and business and management were the top two fields in 1979 as they were in 1971. During that period the proportion of master's degrees awarded in letters declined 30 percent and this field dropped from fourth to seventh place. Master's degrees awarded in foreign languages, mathematics, and social sciences also decreased significantly, with the latter dropping from third to sixth place. Increases of more than 100 percent were found in health professions, public affairs, and interdisciplinary studies.

Education was the top field at the doctor's degree level at the beginning of the decade and remained so at the end. Degrees awarded in letters dropped from fifth to seventh place. Mathematics, engineering, physical sciences, and foreign languages declined by between 17 and 40 percent while increases of more than 100 percent were found in architecture, law, public affairs, theology, and interdisciplinary studies.

The number of first-professional degrees (areas of law, theology and medicine) awarded increased by nearly 75 percent between 1970-71 and 1978-79 (entry 3.18). Law represented more than half of such degrees in the latter year and the number had doubled since 1971. Degrees awarded in osteopathic medicine and podiatry more than doubled, while optometry degrees nearly doubled. There were no decreases in any specialty area.

#### Organization

There were 3,142 institutions and branches of higher education in 1979-80 (excluding the 10 U.S. service schools). Of these, 1,677 were private and 1,465 were public institutions (entry 3.19). While private institutions were primarily 4-year colleges and universities (1,408 versus 269 2-year schools), the majority of public institutions were 2-year. Only the District of Columbia had no 2-year institutions and Wyoming was the only State with no private institutions. States which had more private than public colleges were concentrated in the Northeast and North Central regions and only six States had more 2-year than 4-year institutions.

As was shown in chapter 1 (entry 1.4), public institutions tended to be larger in enrollment size. While consisting of less than half of all schools, they enrolled more than three-quarters of the students (entry 3.20). The enrollment growth rate of public 2-year institutions was much faster than growth rates of other types of institutions during the 1970's. In 1970-71, public 2-year colleges enrolled one-quarter of all students; by 1979-80 the proportion had risen to more than one-third. The growth rate was quite steep until 1975 but then began to climb at a slower pace. Still, by 1979-80 enrollment in public 2-year institutions had nearly doubled, while enrollment in all institutions had only increased by one-third.

At the beginning of this chapter it was noted that 60 percent of students in 2-year institutions and 30 percent in 4-year institutions were enrolled part time by 1980. These proportions represented steady increases in part-time enrollment over the previous decade. To accommodate part-time students, colleges and universities instituted summer session and evening college degree-credit courses (entry 3.21). By 1979-80, 85 percent of institutions offered summer sessions and 73 percent evening sessions. The proportions were higher for public than private institutions (96 versus 76 percent) and more likely in 2-year than 4-year colleges. Public 2-year institutions were most likely to offer such courses (97 percent) and private 4-year institutions least likely (58 percent).

In spite of these large proportions that offered such an expanded schedule, very few institutions offered 100 percent of credit requirements for a bachelor's degree on evenings or weekends (entry 3.22). A degree in business and management, the most popular field of study, could be obtained on evenings or weekends in only 25 percent of institutions surveyed. Similar degree programs were offered by only 1 to 15 percent of the institutions in the ten other major fields of study under consideration. Earlier surveys of potential students (as reported in *Lifelong Learning in America*, by Richard E. Peterson and Associates, 1979) indicated that inconvenient scheduling of courses was one of the chief barriers to attaining a bachelor's degree. But the survey of evening and weekend course offerings showed that institutions considered insufficient demand to be the major deterrent to the introduction or expansion of such courses. "Limited faculty resources" was the second major deterrent cited most often and "neighborhood or transportation safety" was the least frequently mentioned.

Public and private institutions of higher education had similar patterns of expenditures in fiscal year 1979 but quite different sources of revenue (entry 3.23). The majority of educational and general revenues (all revenues except from auxiliary enterprises, hospitals, and independent operations) for public institutions came from State and local governments (64 percent), while the largest proportion for private institutions came from tuition and fees (54 percent). Tuition and fees accounted for only 14 percent of revenues for public institutions, and State and local governments provided less than 4 percent of revenues for private institutions. The Federal Government, through appropriations, grants, and contracts, provided nearly 16 and 20 percent, respectively, of revenues at public and private institutions.

The greater dependence of private institutions on support from private sources is reflected in the proportions of their revenues that came from private gifts, grants, and contracts. In 1979, 14 percent of revenues for private institutions were from this source, compared to 3 percent for public institutions. Contributions from private sources often go directly into an institution's endowment fund, which, when invested, generates dividends and interest income that provide revenue for current operations. This endowment income represented 7 percent of revenues for private institutions and less than 1 percent for public institutions.

As was noted above, expenditure patterns were much more similar for public and private institutions than were sources of revenue. In 1979, educational and general expenditures (all expenditures except for auxiliary enterprises, hospitals, and independent operations) for public institutions amounted to more than twice that for the private sector—\$27 billion compared to \$12 billion. But expenditure proportions by function showed only minor differences. Public institutions spent 45 percent on instruction while private institutions spent 38 percent. Private institutions spent a slightly larger proportion on research—12 percent compared to 11 percent for public institutions. A larger difference was found in proportions spent for scholarships and fellowships—9 percent for private, 3 percent for public institutions.

Inflation in the general economy is measured by the Consumer Price Index (CPI), which calculates the increase in the prices of goods and services purchased by the consumer. But colleges and universities buy different kinds of goods and services, such as staff salaries, books, and utilities. The Higher Education Price Index (HEPI) was designed to measure the price increases of these goods and services.

Total current funds expenditures for all institutions amounted to nearly \$51 billion in 1979, a 117 percent increase over 1971 amounts (entry 3.24). This more than doubling of expenditures occurred at a time when full-time-equivalent enrollments were increasing and the rate of inflation was soaring. Although the current funds expenditures index far outpaces both the HEPI and the enrollment index, the combined effects must be taken into account. When current funds expenditures are adjusted for inflation using HEPI and calculated on a per-student basis, the result shows very little change in this index between 1971 and 1979.

In last year's edition of this report, faculty salaries were compared with the Consumer Price Index for 1967 through 1978. It was shown that, starting in 1974, faculty salaries fell below the inflation rate, then continued dropping in those terms. In 1978, faculty salaries, adjusted for inflation, were nearly 10 percent below 1967 levels. More recent data show this trend continuing.

Most faculty (four out of five) supplement their base salary with other jobs (entry 3.25). In 1979-80, the average salary for all faculty was \$23,658, but the 80 percent who reported earnings beyond the base salary averaged an additional \$4,811. Faculty at the rank of professor were most likely to have outside earnings (83 percent) and they reported higher average earnings than other ranks. Sixty-five percent of all faculty reported earnings above the base salary that were from tasks performed within the institution, such as research, administrative assignments, and for teaching evening, summer session, and other extra classes. Forty-nine percent reported earnings from outside their institutions for consulting, research, and other professional work.

The base salary of higher education faculty varies by their discipline (entry 3.26). The disciplines, ranked by average base salary, were: (1) engineering and computer sciences; (2) business and management; (3) science and mathematics; (4) social sciences; (5) humanities, languages, literature, and communications; (6) arts, fine and applied; (7) physical education; and (8) vocational education, home economics, nursing, and health. Faculty salaries in engineering and computer sciences averaged nearly 30 percent more than salaries of faculty teaching vocational education, home economics, nursing, and health.

**Table 3.1**  
**Educational expectations of 1972 and 1980 high school seniors, by sex, racial/ethnic group, ability, and socioeconomic status (SES)**

Item	Total	Educational expectation			
		No college	Some college	4-year or 5-year degree	Graduate school
Percentage distribution of 1972 seniors					
All 1972 seniors	100.0	44.7	12.4	30.6	12.3
Sex:					
Male	100.0	36.9	11.4	34.6	17.0
Female	100.0	45.3	13.2	32.0	9.5
Racial/ethnic group <sup>1</sup> :					
White	100.0	40.4	12.4	34.2	13.0
Black	100.0	44.0	9.8	31.0	15.2
Hispanic	100.0	45.3	20.6	25.1	9.0
Ability <sup>2</sup> :					
Low	100.0	68.4	13.0	15.2	3.4
Middle	100.0	43.2	15.5	33.2	8.0
High	100.0	14.6	8.0	53.8	23.6
SES <sup>3</sup> :					
Low	100.0	63.5	10.2	20.0	6.3
Middle	100.0	45.0	14.6	30.3	10.1
High	100.0	15.9	9.9	49.7	24.5
Percentage distribution of 1980 seniors					
All 1980 seniors	100.0	39.0	15.0	25.5	20.5
Sex:					
Male	100.0	41.1	11.7	26.0	21.2
Female	100.0	37.1	18.1	25.1	19.8
Racial/ethnic group:					
White	100.0	39.3	15.1	26.0	19.6
Black	100.0	38.5	14.0	24.3	23.2
Hispanic	100.0	46.3	17.8	19.2	16.8
Ability <sup>2</sup> :					
Low	100.0	64.7	15.5	12.5	7.1
Middle	100.0	39.4	18.4	26.5	15.6
High	100.0	11.7	9.2	37.4	41.7
SES <sup>3</sup> :					
Low	100.0	58.8	15.1	16.2	10.0
Middle	100.0	40.7	17.4	25.3	16.6
High	100.0	13.6	10.7	36.6	39.2

NOTE: Details may not add to totals because of rounding.

<sup>1</sup>Non-Hispanic.

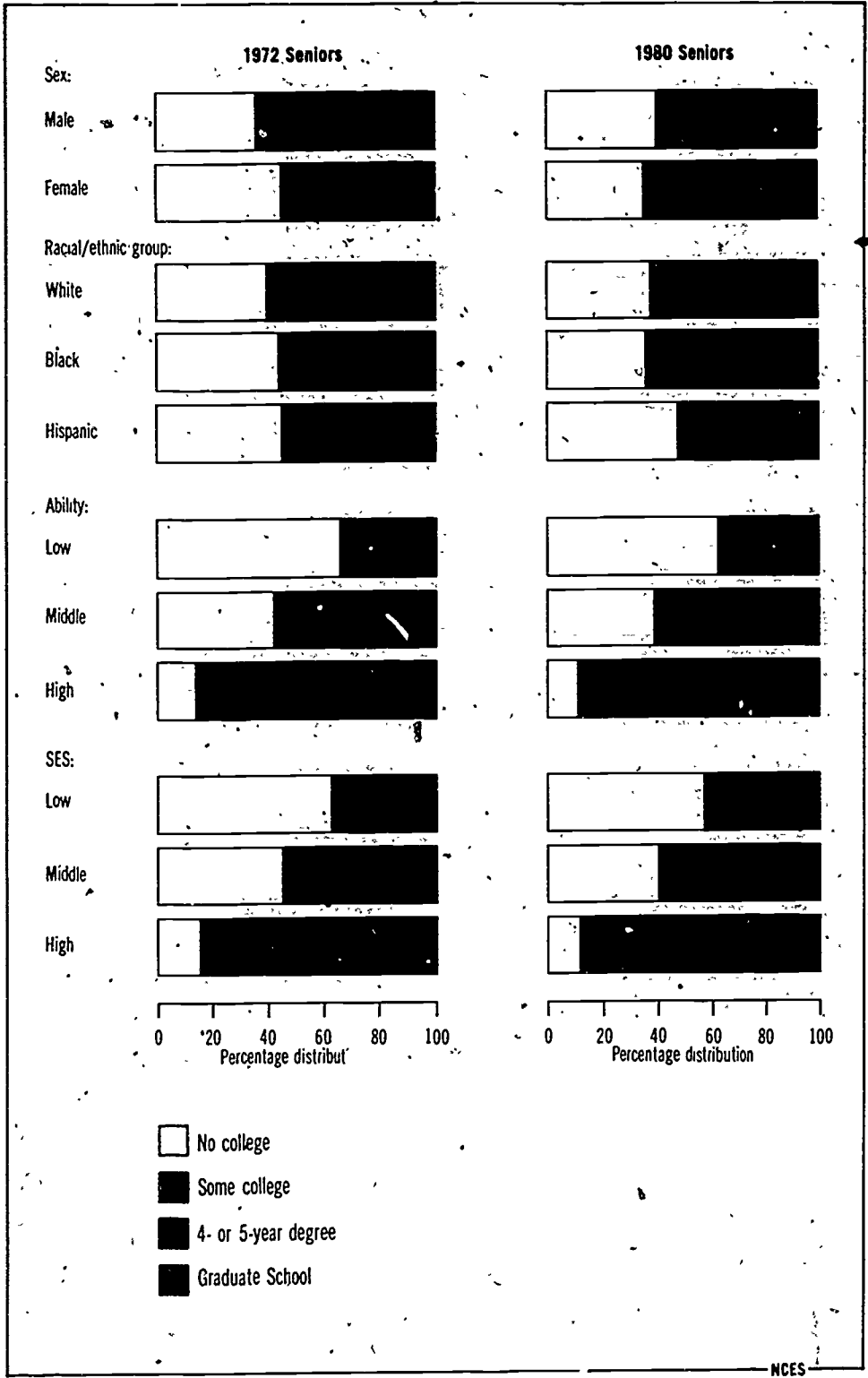
<sup>2</sup>The ability index was based upon a composite score involving academic tests of vocabulary, reading, letter groups, and mathematics administered in the first year of each study.

<sup>3</sup>The SES index was based upon a composite score involving father's education, mother's education, parental income, father's occupation and a household items index.

SOURCE: U.S. Department of Education; National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 and High School and Beyond Survey, unpublished tabulations.

**Chart 3.1**  
**Educational Expectations of 1972 and 1980 High School Seniors**

Proportions of high school seniors planning a bachelor's degree or graduate school varied considerably by SES and ability. Differences were smaller by sex and racial/ethnic group.



NCES

**Table 3.2**  
**Educational expectations of high school seniors in spring 1972 and their attainment in fall 1979,**  
**by sex and racial/ethnic group**

Expectations, spring 1972	Total	Attainment, fall 1979			
		No college	Some college	4- or 5-year degree	Graduate school
Percentage distribution					
All persons	100.0	35.2	37.7	12.3	11.7
No college	100.0	68.3	29.4	1.2	1.2
Some college	100.0	20.3	68.5	7.4	3.9
4- or 5-year degree	100.0	5.4	40.8	34.3	19.5
Graduate school	100.0	4.0	29.7	28.4	37.8
Males	100.0	32.7	38.5	16.2	12.6
No college	100.0	68.0	29.5	1.3	1.2
Some college	100.0	22.0	65.4	9.0	3.6
4- or 5-year degree	100.0	5.6	44.6	32.6	17.1
Graduate school	100.0	3.6	29.4	27.2	39.8
Females	100.0	37.6	37.0	14.7	10.8
No college	100.0	68.5	29.2	1.1	1.2
Some college	100.0	18.7	71.2	5.9	4.2
4- or 5-year degree	100.0	5.1	36.6	36.2	22.0
Graduate school	100.0	4.8	30.2	30.5	34.6
Whites <sup>1</sup>	100.0	34.2	37.0	16.6	12.2
No college	100.0	68.7	29.1	1.1	1.0
Some college	100.0	19.6	68.8	7.9	3.8
4- or 5-year degree	100.0	4.8	38.8	36.3	20.1
Graduate school	100.0	3.1	27.9	29.0	40.0
Blacks <sup>1</sup>	100.0	37.2	42.3	11.5	9.0
No college	100.0	64.2	31.7	1.3	2.8
Some college	100.0	26.4	64.5	4.7	4.4
4- or 5-year degree	100.0	10.8	52.3	23.2	13.7
Graduate school	100.0	7.1	41.2	27.6	24.0
Hispanics	100.0	40.5	46.2	6.2	7.1
No college	100.0	65.1	32.9	0.7	1.3
Some college	100.0	19.6	73.5	4.1	2.8
4- or 5-year degree	100.0	10.1	56.8	15.8	17.3
Graduate school	100.0	12.2	41.6	19.6	26.6

NOTE: Details may not add to totals because of rounding.

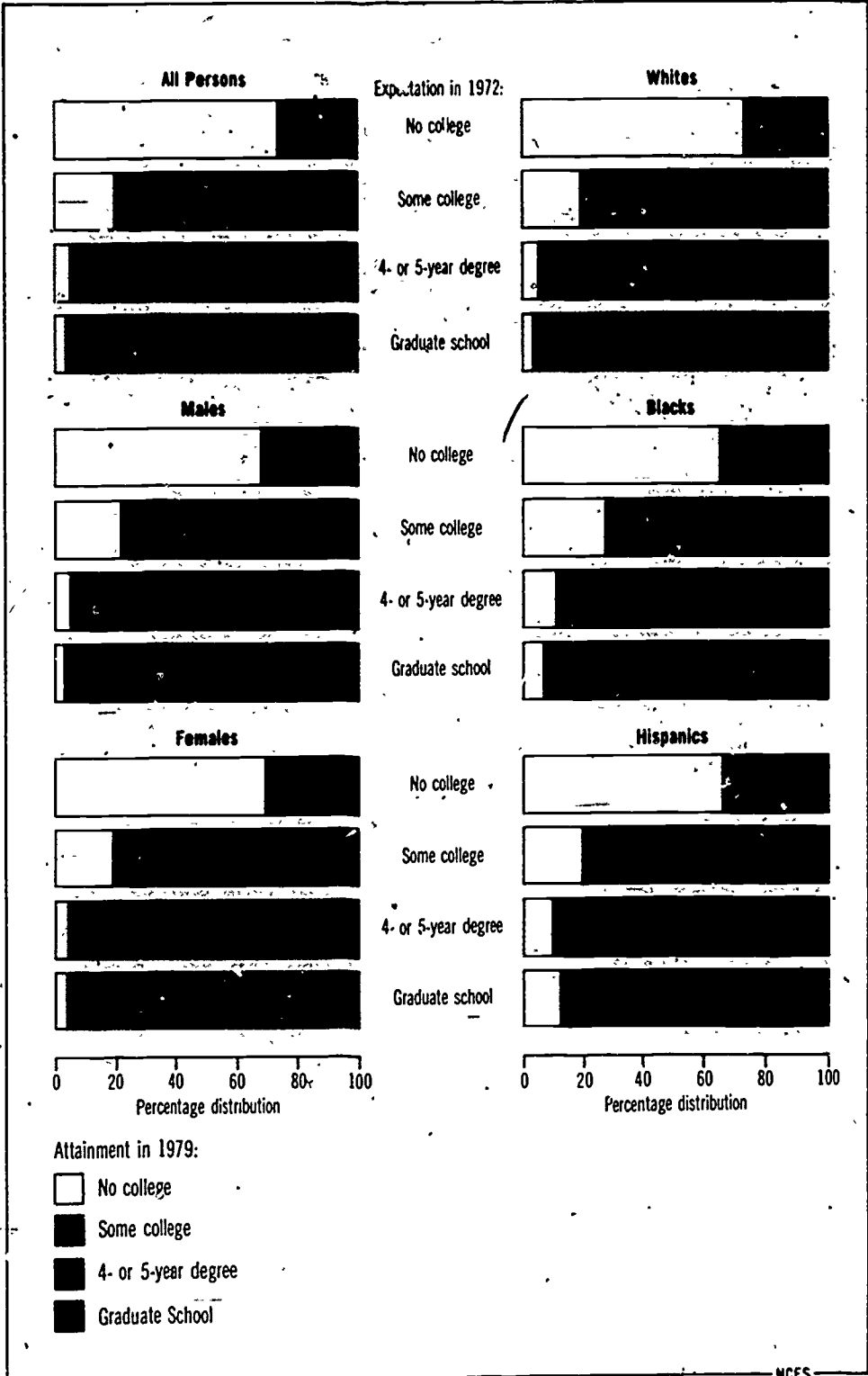
<sup>1</sup>Non-Hispanic.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972, unpublished tabulations.



**Chart 3.2**  
**Educational Expectations Compared to Attainment by Sex and Racial/Ethnic Group**

In all groups, low expectations were likely to correspond to low levels of attainment. Two-thirds of all persons who expected "no college" or "some college" in 1972 had not attained higher levels by 1979.



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**Table 3.3**

**Educational expectations of high school seniors in spring 1972 and their attainment in fall 1979, by socioeconomic status (SES) and ability level**

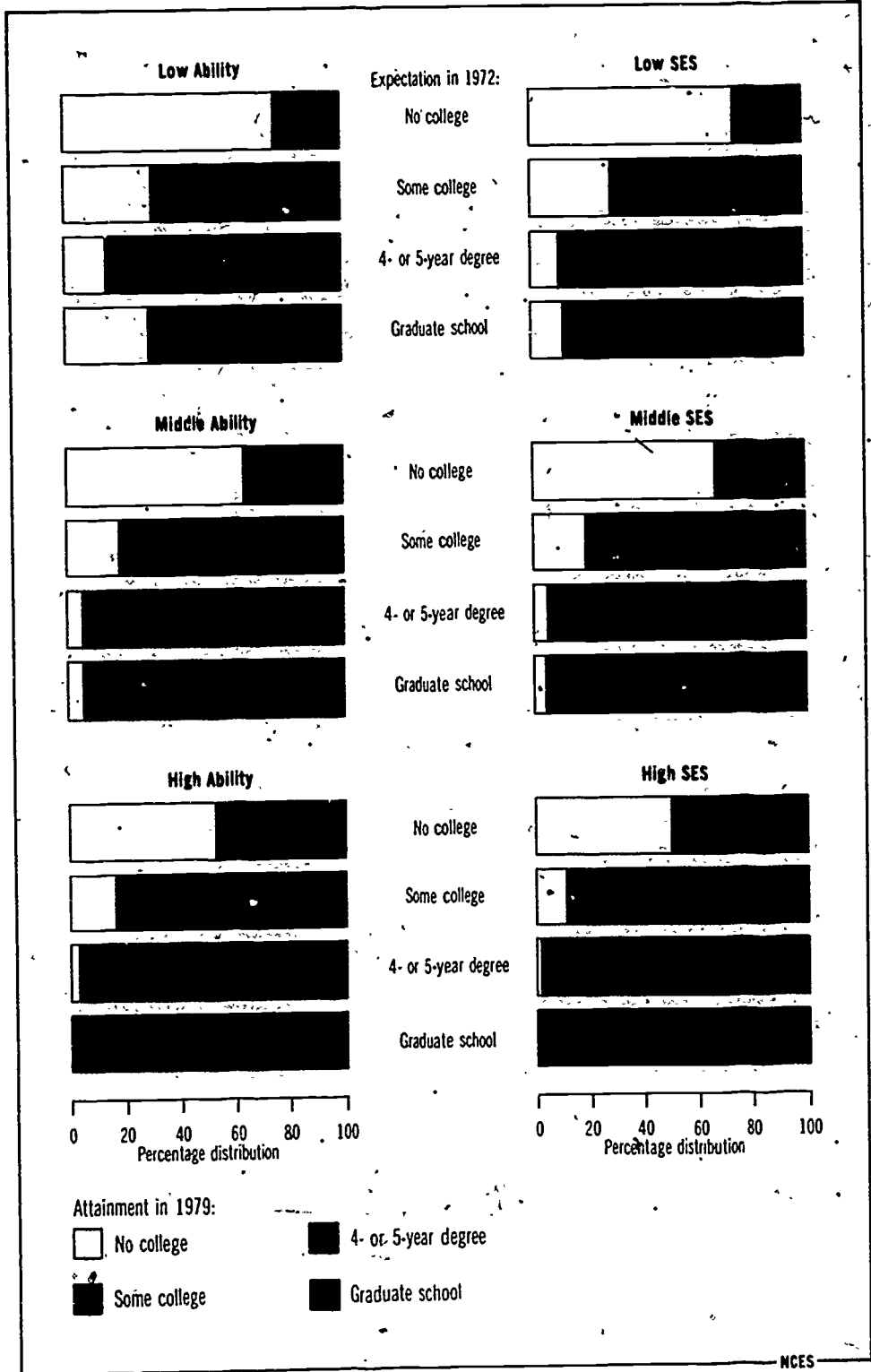
Expectations, spring 1972	Total	Attainment, fall 1979			
		No college	Some college	4- or 5-year degree	Graduate school
Percentage distribution					
Low ability	100.0	61.4	32.4	3.8	2.4
No college	100.0	77.0	21.3	.8	1.0
Some college	100.0	32.5	61.7	3.6	2.2
4- or 5-year degree	100.0	14.8	61.7	15.7	7.8
Graduate school	100.0	30.6	42.0	17.2	10.2
Middle ability	100.0	34.7	43.7	13.9	7.8
No college	100.0	64.4	32.8	1.6	1.1
Some college	100.0	18.5	70.2	6.8	4.5
4- or 5-year degree	100.0	5.7	47.0	32.2	15.1
Graduate school	100.0	5.7	42.5	27.7	24.1
High ability	100.0	11.7	34.1	28.9	25.3
No college	100.0	53.9	41.2	2.5	2.5
Some college	100.0	16.2	69.4	10.0	4.4
4- or 5-year degree	100.0	3.3	32.5	39.3	24.8
Graduate school	100.0	.8	21.0	29.4	48.9
Low SES	100.0	55.0	33.4	6.5	5.1
No college	100.0	75.1	23.3	.6	1.1
Some college	100.0	29.5	63.4	4.2	2.9
4- or 5-year degree	100.0	19.7	49.6	23.9	15.8
Graduate school	100.0	12.6	43.4	22.9	21.1
Middle SES	100.0	37.7	40.1	13.2	8.9
No college	100.0	67.3	30.3	1.3	1.1
Some college	100.0	19.7	68.7	7.9	3.7
4- or 5-year degree	100.0	6.9	44.5	31.5	17.2
Graduate school	100.0	5.4	34.5	27.9	32.1
High SES	100.0	11.2	37.3	28.3	23.2
No college	100.0	49.2	46.2	2.4	2.2
Some college	100.0	12.7	73.2	8.8	5.3
4- or 5-year degree	100.0	1.9	33.5	41.2	23.4
Graduate school	100.0	.7	22.5	30.2	46.6

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972, unpublished tabulations.

**Chart 3.3**  
**Educational Expectations Compared to Attainment by Ability and Socioeconomic Status (SES)**

Students in low ability and low SES groups were less likely to attain their expectations of earning a college degree or going to graduate school than those in high ability and high SES groups.



NCES

14

**Table 3.4**

**Credentials required of all applicants for admission to institutions of higher education, by type and control of institution: 1979**

Credential	Public institutions		Private institutions	
	2-year	4-year	2-year	4-year
	Percent of responding <sup>1</sup> institutions requiring credential			
Complete high school transcript	46	77	85	88
Evidence of high school graduation or G.E.D. <sup>2</sup>	48	80	83	79
Admission test scores such as ACT <sup>3</sup> or SAT <sup>4</sup>	11	61	41	65
Achievement test scores such as APP <sup>5</sup> , CLEP <sup>6</sup>	1	3	4	10
Letters of recommendation	1	5	40	46
Interviews with admissions staff, faculty, alumni	5	1	15	8
Personal essay or autobiographical statement	1	8	11	34
Health statement	27	47	65	54
Portfolio, statement, audition, etc.	1	2	6	6

<sup>1</sup>Response rate was 56 percent for all institutions, 52 percent for public 2-year, 63 percent for public 4-year, 45 percent for private 2-year, and 56 percent for private 4-year institutions.

<sup>2</sup>General Education Development, an examination for high school equivalency.

<sup>3</sup>American College Testing program.

<sup>4</sup>Scholastic Aptitude Test.

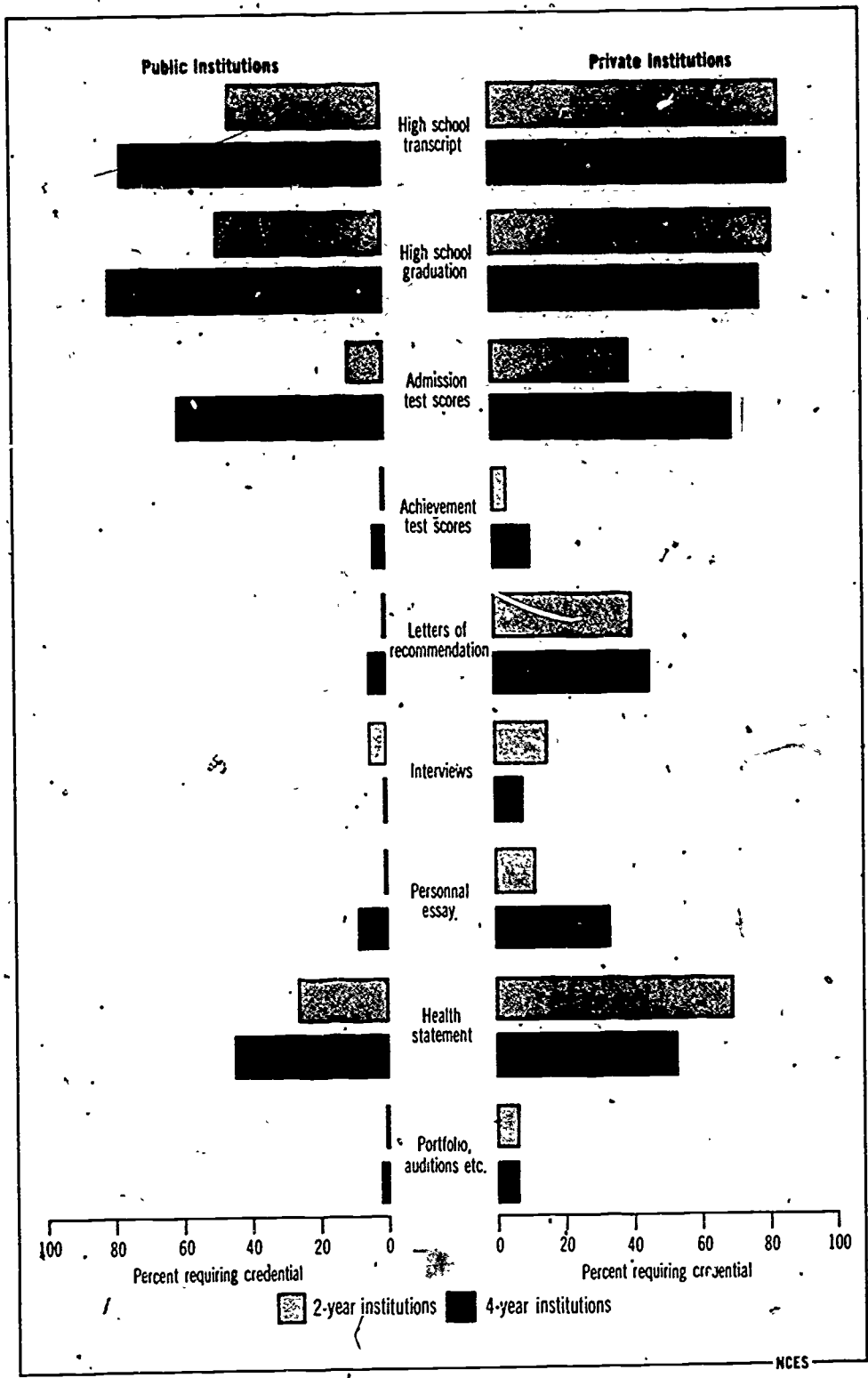
<sup>5</sup>Advanced Placement Program.

<sup>6</sup>College Level Examination Program.

SOURCE: American Association of Collegiate Registrars and Admissions Officers and The College Board, *Undergraduate Admissions. The Realities of Institutional Policies, Practices, and Procedures*. Copyright © 1980.

**Chart 3.4**  
**Credentials Required for Admission to Institutions of Higher Education**

Admission test scores, along with several other criteria, were required of applicants in more than half of public and private 4-year institutions.



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**Table 3.5**

**Admission test scores as a factor in acceptance to institutions of higher education and minimum SAT and ACT scores below which applicants generally are not considered eligible for admission, by type and control of institution: 1979**

Importance of test scores	Public institutions		Private institutions	
	2-year	4-year	2-year	4-year
	Percent of responding <sup>1</sup> institutions			
Single most important factor	1	4	2	1
Very important factor	9	59	36	54
One of several factors <sup>2</sup>	15	23	36	35
A minor factor	6	4	14	4
Do not review/no response	69	10	13	5
Percent with any SAT minimum	4	39	22	42
Mean SAT <sup>3</sup> cut-off for those reporting any minimum	650	740	617	754
Percent with any ACT minimum	2	30	21	36
Mean ACT <sup>3</sup> cut-off for those reporting any minimum	15.5	16.2	14.8	16.4

<sup>1</sup> Response rate was 56 percent for all institutions, 52 percent for public 2-year, 63 percent for public 4-year, 45 percent for private 2-year, and 56 percent for private 4-year institutions.

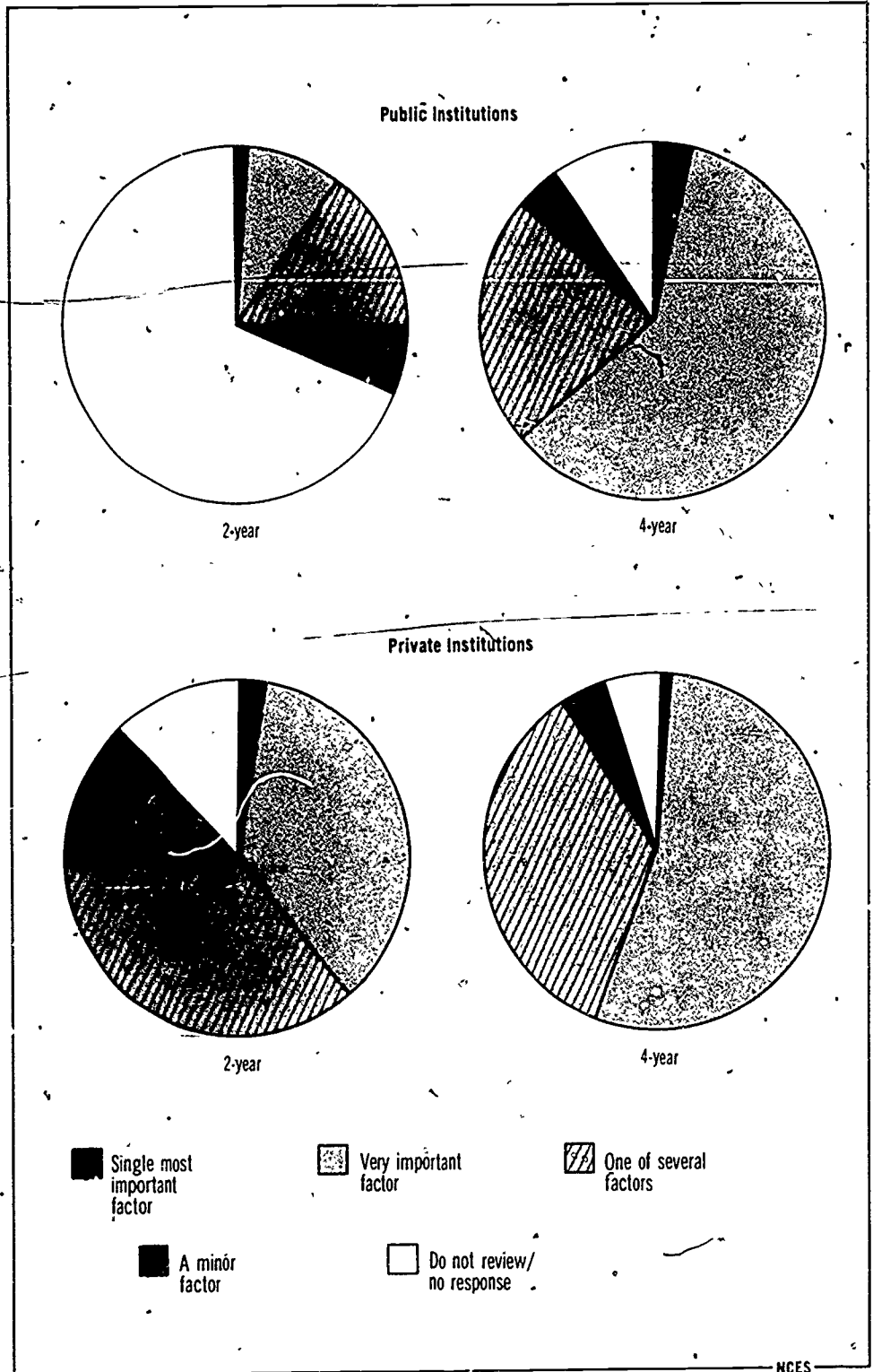
<sup>2</sup> Scores are for combined verbal and mathematical Scholastic Aptitude Test (SAT) scores.

<sup>3</sup> Scores are for a composite of the American College Testing program (ACT) scores.

SOURCE: American Association of Collegiate Registrars and Admissions Officers and The College Board, *Undergraduate Admissions. The Realities of Institutional Policies, Practices, and Procedures*, Copyright 1980.

**Chart 3.5**  
**Importance of Admission Test Scores**

While admission test scores were described as a "very important" criteria in acceptance to most 4-year institutions, in very few cases were they the single most important factor.



**Table 3.6****Mean scores on standardized college entrance examinations: School year ending 1970 to 1980**

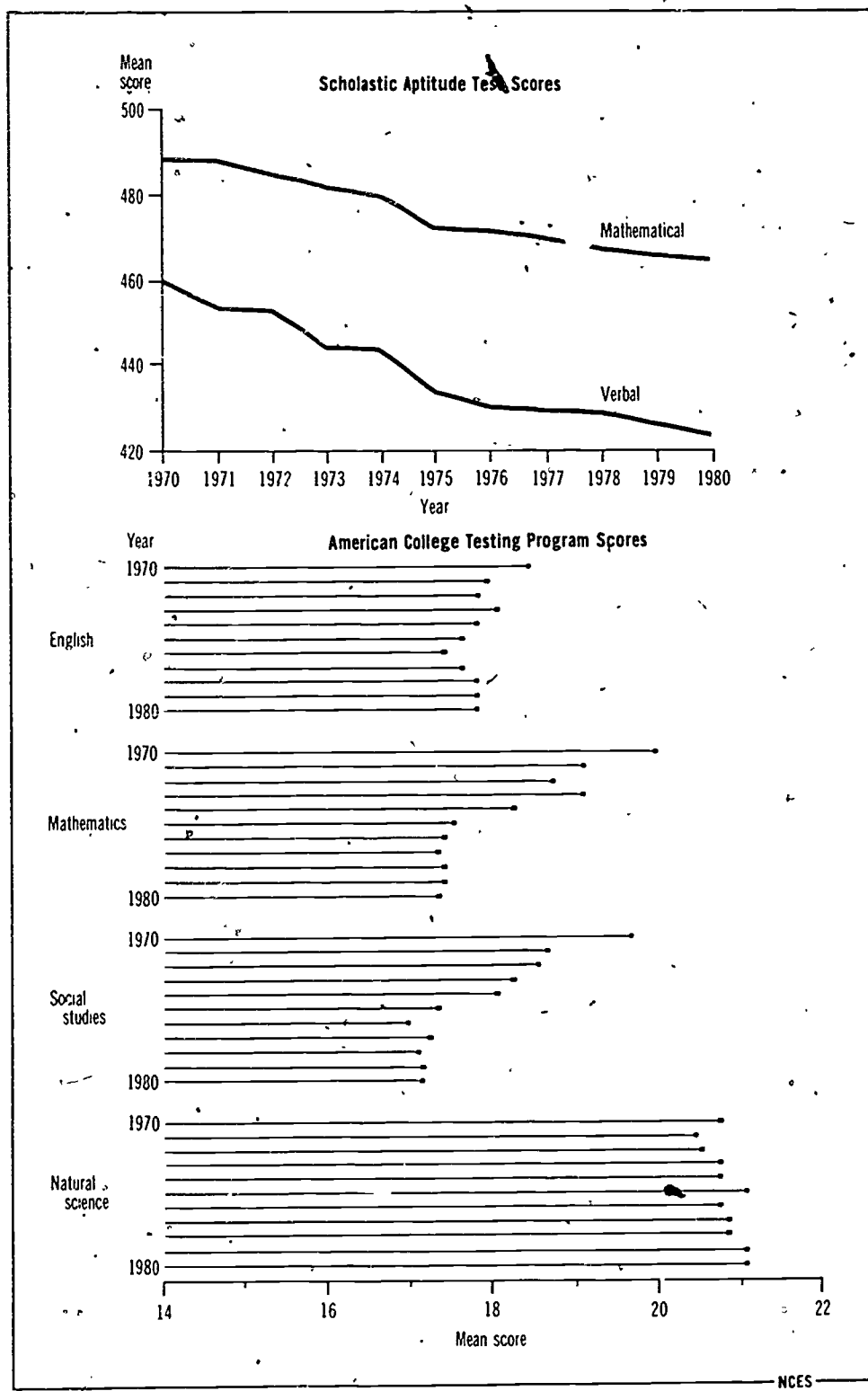
School year ending	Scholastic Aptitude Test (SAT)		American College Testing (ACT) Program			
	Verbal	Mathematical	English	Mathematical	Social studies	Natural science
1970	460	488	18.5	20.0	19.7	20.8
1971	455	488	18.0	19.1	18.7	20.5
1972	453	484	17.9	18.8	18.6	20.6
1973	445	481	18.1	19.1	18.3	20.8
1974	444	480	17.9	18.3	18.1	20.8
1975	434	472	17.7	17.6	17.4	21.1
1976	431	472	17.5	17.5	17.0	20.8
1977	429	470	17.7	17.4	17.3	20.9
1978	429	468	17.9	17.5	17.1	20.9
1979	427	467	17.9	17.5	17.2	21.1
1980	424	466	17.9	17.4	17.2	21.1

SOURCE. College Entrance Examination Board, *College-Bound Seniors, 1980*, Copyright © 1980, all rights reserved, and American College Testing Program, *The High School Profile Report, (1970-80)*.



**Chart 3.6**  
**Mean Scores on Standardized College Entrance Examinations**

SAT scores on both verbal and mathematical tests declined throughout the 1970's. ACT scores stabilized during the latter half of the decade.



**Table 3.7**  
**Median family income by racial/ethnic group and student charges, by type and control of institution:**  
**1970 to 1978**

Item	Year <sup>1</sup>								
	1970	1971	1972	1973	1974	1975	1976	1977	1978
<b>Median income of:</b>									
All families:	\$ 9,867	\$10,285	\$11,116	\$12,051	\$12,302	\$13,719	\$14,958	\$16,009	\$17,640
White families	10,236	10,672	11,549	12,595	13,408	14,268	15,537	16,740	18,368
Black families	6,279	6,440	6,864	7,269	8,006	8,779	9,242	9,563	10,879
Hispanic families <sup>2</sup>	NA	NA	8,183	8,715	9,540	9,551	10,259	11,421	12,566
<b>Average student charges<sup>3</sup>:</b>									
<b>Universities</b>									
Public	\$1,477	\$ 1,579	\$ 1,668	\$ 1,707	\$ 1,750	\$ 1,933	\$ 2,066	\$ 2,168	\$ 2,286
Private	3,163	3,375	3,512	3,717	4,063	4,463	4,859	5,191	5,604
<b>Other 4-year institutions:</b>									
Public	1,206	1,263	1,460	1,506	1,549	1,654	1,808	1,924	2,025
Private	2,599	2,748	2,934	3,040	3,147	3,391	3,573	3,812	4,123
<b>2-year institutions:</b>									
Public	1,018	1,073	1,197	1,274	1,332	1,386	1,502	1,594	1,685
Private	2,103	2,186	2,273	2,410	2,581	2,708	2,917	3,063	3,344
<b>Average student charges as percent of median income for all families for:</b>									
<b>Universities</b>									
Public	15.0	15.4	15.0	14.2	13.6	14.1	13.8	13.5	13.0
Private	32.1	32.8	31.6	30.8	31.5	32.5	32.5	32.4	31.8
<b>Other 4-year institutions:</b>									
Public	12.2	12.3	13.1	12.5	12.0	12.1	12.1	12.0	11.5
Private	26.3	26.7	26.4	25.2	24.4	24.7	23.9	23.8	23.4
<b>2-year institutions:</b>									
Public	10.3	10.4	10.8	10.6	10.3	10.1	10.0	10.0	9.6
Private	21.3	21.3	20.4	20.0	20.0	19.7	19.5	19.1	19.0

NA: Not available.

<sup>1</sup> Median income is for calendar year. Average student charges is for the academic year beginning in fall of the year indicated.

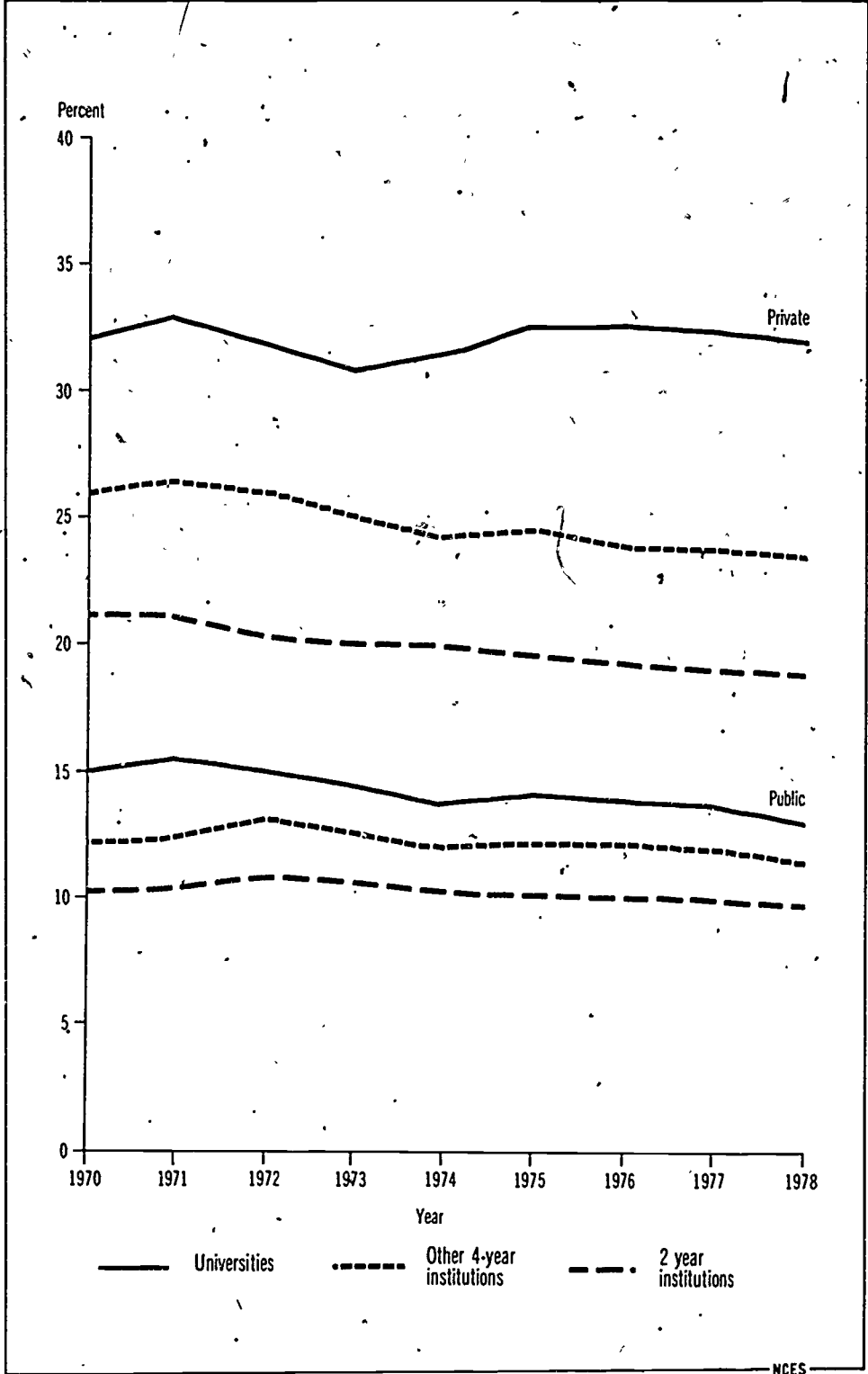
<sup>2</sup> Represents families in which the head is of Hispanic origin.

<sup>3</sup> Estimated average charges per full-time undergraduate student. Includes tuition, board and room charges. Data for 1974 to 1976 were revised from earlier publication.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-60, No 123, 1980 and U.S. Department of Education, National Center for Education Statistics, *Projections of Education Statistics to 1988-89*, 1981.

**Chart 3.7**  
**Student Charges as a Percent of Median Family Income**

The ratio of average student charges to median family income has varied little since 1970. This ratio has remained relatively constant at private universities but has decreased slightly at other types of institutions.



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**Table 3.8**  
**Proportion of Federal financial aid recipients among sophomores and juniors in 4-year colleges,**  
**by type of award and income group: 1978-79 and 1979-80**

Type of award and income group <sup>1</sup>	Sophomores		Juniors	
	1978-79	1979-80	1978-79	1979-80
	Percent of students			
All forms of Federal financial aid	68	*72	67	*76
Basic Educational Opportunity Grants (BEOG)	45	*56	44	*62
Low income	80	83	77	*88
Middle income	34	*66	29	*66
High income	1	*26	*24	*24
Supplemental Educational Opportunity Grants (SEOG)	17	19	17	17
Low income	27	29	25	28
Middle income	14	*22	17	16
High income	4	5	4	4
National Direct Student Loan (NDSL)	27	24	27	24
Low income	32	27	33	30
Middle income	34	29	30	29
High income	12	19	14	11
College Work-Study (CWS)	29	31	29	32
Low income	35	37	38	38
Middle income	34	35	29	37
High income	15	*25	13	21
Guaranteed Student Loan (GSL)	14	*18	15	*20
Low income	10	11	10	12
Middle income	14	18	18	18
High income	23	26	23	*33

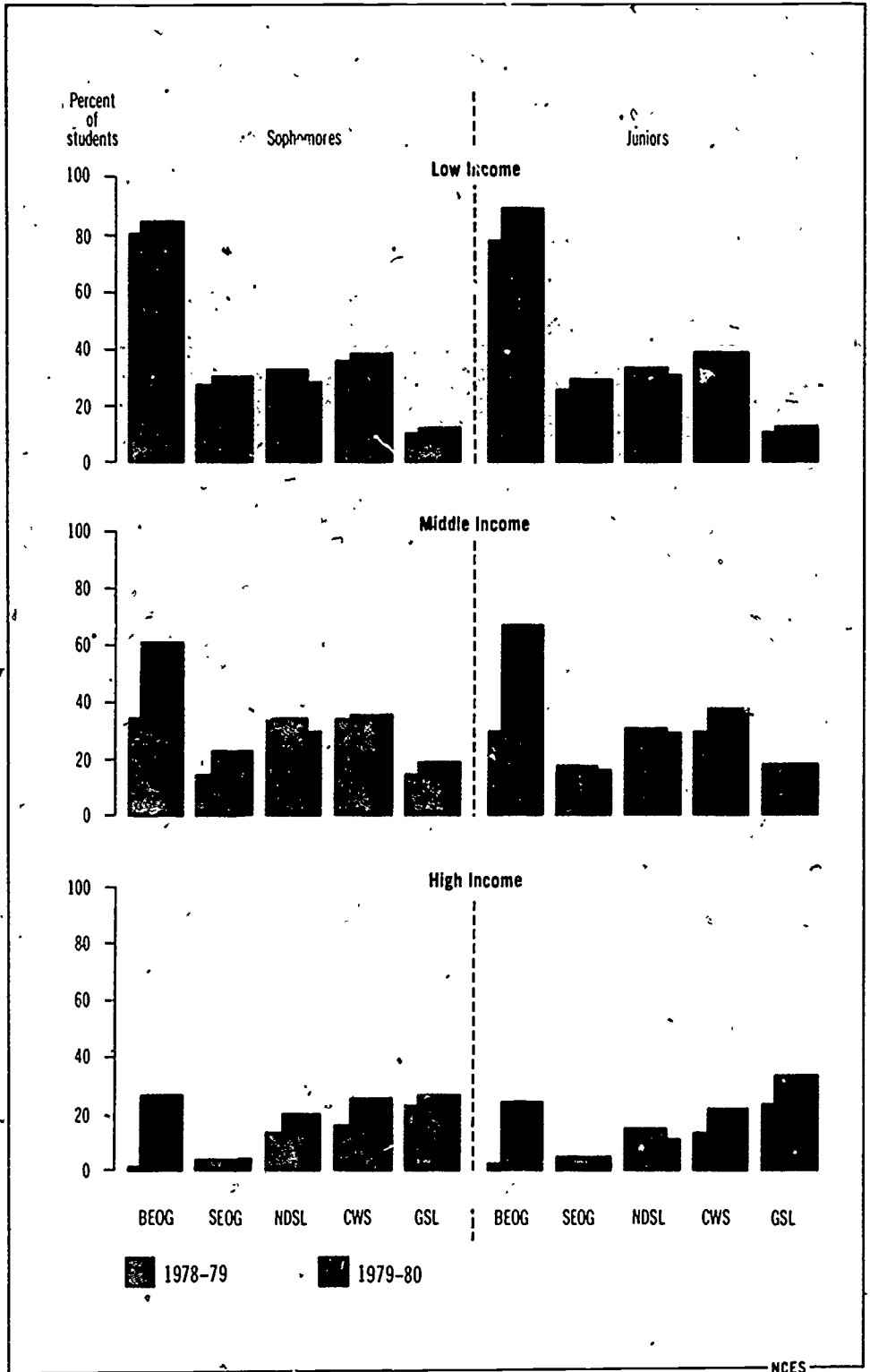
\* Represents increase, statistically significant at the .01 level.

<sup>1</sup> The three income groups encompass the following boundaries: (1) low income, \$11,999 and below; (2) middle income, \$12,000 to \$24,999; and (3) high income, \$25,000 and above. Represents parental income for dependent students and student income for independent students.

SOURCE: Applied Management Sciences, *Study of Program Management Procedures in the Campus-Based and Basic Grant Programs, Final Report, MISAA Impact Analysis, 1980*, prepared for U.S. Department of Education, Office of Program Evaluation.

**Chart 3.8**  
**Proportion of Federal Financial Aid Recipients Among Sophomores and Juniors**

After passage of the Middle Income Students Assistance Act (MISAA) in 1978, there were significant increases in the proportion of students in the middle and high income groups who received Federal financial aid.



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**Table 3.9**

**Enrollment in institutions of higher education, by enrollment level and attendance status of student and by type of institution, with projections: Fall 1970 to fall 1988**

Fall of year	Total enrollment	2-year institutions		4-year institutions			
		Undergraduate		Undergraduate		Post-baccalaureate	
		Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
In thousands							
1970	8,581	1,165	1,058	4,115	1,038 <sup>c</sup>	536	669
1971	8,949	1,290	1,195	4,222	1,036	565	640
1972	9,215	1,340	1,394	4,148	1,039	583	689
1973	9,602	1,433	1,579	4,147	1,102	611	732
1974	10,224	1,509	1,894	4,217	1,178	644	781
1975	11,185	1,762	2,204	4,407	1,306	672	836
1976	11,012	1,589	2,215	4,367	1,184	688	896
1977	11,286	1,654	2,386	4,435	1,235	698	870
1978	11,259	1,558	2,465	4,409	1,259	701	868
1979	11,569	1,591	2,622	4,488	1,296	715	857
1980 <sup>a</sup>	11,940	1,718	2,733	4,653	1,267	739	830
Projected <sup>b</sup>							
1981 <sup>a</sup>	11,831	1,727	2,711	4,523	1,267	734	864
1982 <sup>a</sup>	11,722	1,737	2,697	4,393	1,268	728	898
1983	11,613	1,747	2,679	4,263	1,269	722	933
1984	11,492	1,718	2,692	4,159	1,264	724	935
1985	11,358	1,689	2,701	4,048	1,260	723	937
1986	11,215	1,667	2,702	3,934	1,255	720	937
1987	11,104	1,655	2,698	3,857	1,247	713	934
1988	11,048	1,661	2,693	3,823	1,240	701	930

<sup>1</sup> Preliminary estimates.

<sup>2</sup> Projections are based on actual data through 1978.

<sup>3</sup> Revised since previously published.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Projections of Education Statistics to 1988-89*, 1981.

**Chart 3.9**  
**Enrollment in Institutions of Higher Education**

Part-time enrollment in higher education increased at faster rates than full-time enrollment between 1970 and 1980. While full-time enrollment is expected to decline during the 1980's, part-time enrollment is expected to remain fairly constant.

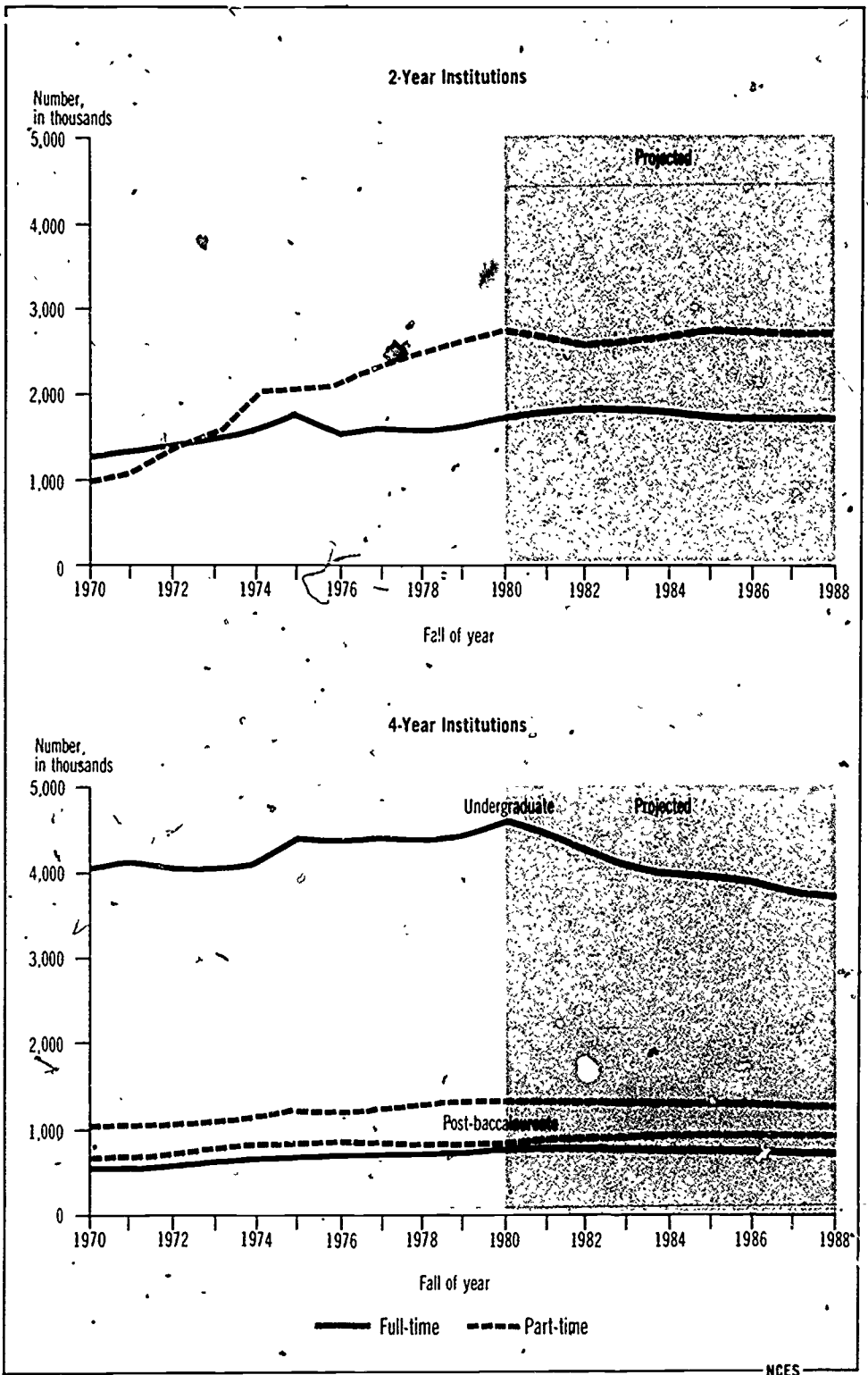


Table 3.10

Average annual percent change in full-time-equivalent enrollment in institutions of higher education, by State:  
Fall 1970 to fall 1979

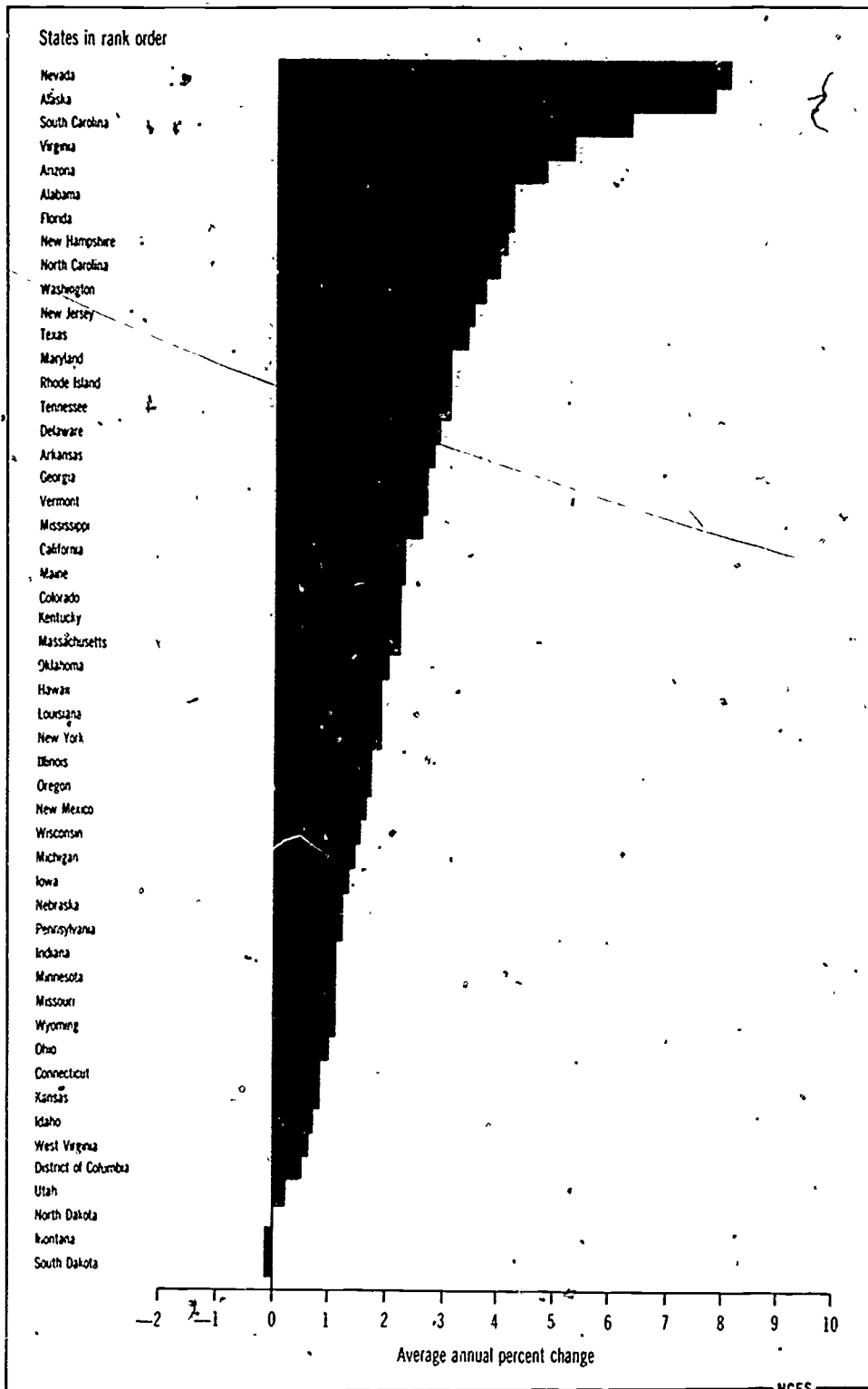
State	Average annual percent change		
	1970 to 1975	1975 to 1979	1970 to 1979
Total, 50 States and D.C.	3.6	0.1	2.0
Alabama	8.3	-0.9	4.2
Alaska	6.0	10.0	7.8
Arizona	8.1	.8	4.4
Arkansas	2.7	2.9	2.8
California	6.0	-2.4	2.3
Colorado	3.4	.8	2.2
Connecticut	2.3	1.1	.8
Delaware	5.0	.3	2.9
District of Columbia	1.9	-1.3	.5
Florida	6.4	1.4	4.2
Georgia	2.3	-0.6	2.7
Hawaii	4.0	-0.8	1.9
Idaho	1.1	-.2	.7
Illinois	3.7	-.7	1.7
Indiana	1.8	.3	1.1
Iowa	1.7	.8	1.3
Kansas	1.2	.2	.8
Kentucky	3.7	.3	2.2
Louisiana	4.1	-.8	1.9
Maine	3.6	.7	2.3
Maryland	5.0	.8	3.1
Massachusetts	3.9	.1	2.2
Michigan	3.5	-1.2	1.4
Minnesota	1.4	.6	1.1
Mississippi	4.9	-.3	2.6
Missouri	3.1	-1.4	1.1
Montana	-.6	.6	-.1
Nebraska	-.9	1.6	1.2
Nevada	16.1	-2.1	8.0
New Hampshire	7.0	.5	4.1
New Jersey	6.5	-.3	3.5
New Mexico	2.7	.3	1.6
New York	4.2	-1.0	1.9
North Carolina	6.8	.4	4.0
North Dakota	-1.0	1.2	0
Ohio	2.2	-.4	1.0
Oklahoma	3.8	-.3	2.0
Oregon	3.2	-.1	1.7
Pennsylvania	2.3	-.3	1.2
Rhode Island	6.6	-1.2	3.1
South Carolina	11.6	-.5	6.3
South Dakota	-.2	0	-.1
Tennessee	4.5	2.1	3.1
Texas	5.7	.6	3.4
Utah	1.0	-.8	-.2
Vermont	5.0	-.3	2.7
Virginia	8.1	1.7	5.3
Washington	3.3	4.1	3.7
West Virginia	1.8	1.1	.6
Wisconsin	2.3	.6	1.5
Wyoming	1.2	1.1	1.1

SOURCE: U.S. Department of Education, National Center for Education Statistics and American Council on Education, *Trends in Enrollment, 1970-79*, forthcoming, and unpublished tabulations.



**Chart 3.10**  
**Average Annual Percent Change in Full-Time-Equivalent Enrollment, 1970 to 1979, by State**

Since 1970, the average annual percent change in full-time-equivalent enrollment in institutions of higher education varied considerably by State. While most States showed increases between 1970 and 1975; 21 States showed decreases between 1975 and 1979.



**Table 3.11**  
**Enrollment of first-time freshmen and total enrollment in institutions of higher education, by sex:**  
**Fall 1970 to fall 1979**

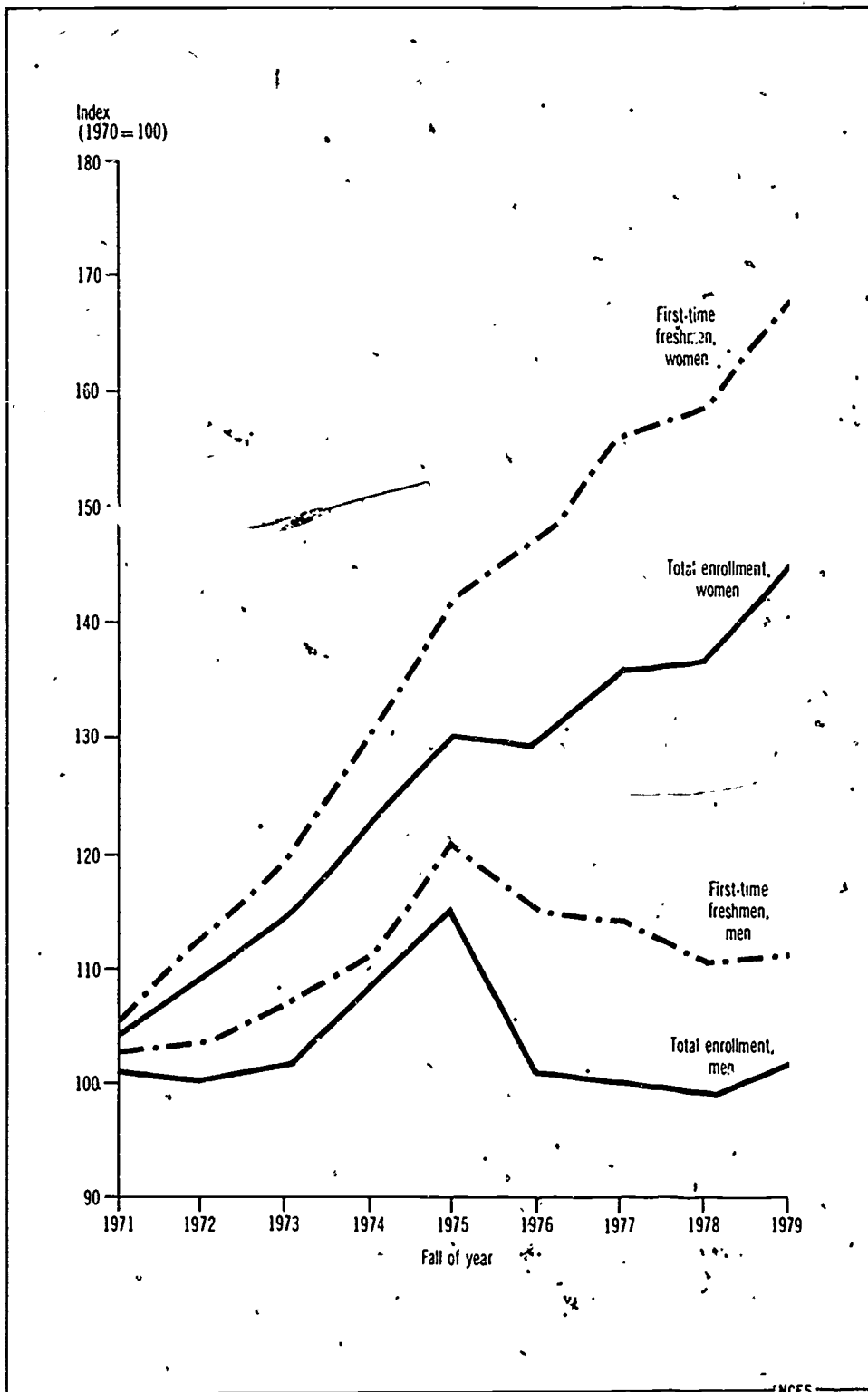
Fall of year	First-time freshmen		Total enrollment	
	Men	Women	Men	Women
1970	1,151,960	911,437	5,043,642	3,537,245
1971	1,170,518	948,500	5,207,004	3,741,640
1972	1,157,501	995,277	5,238,757	3,976,103
1973	1,182,173	1,043,868	5,371,052	4,231,071
1974	1,243,790	1,121,971	5,622,429	4,601,300
1975	1,327,935	1,187,220	6,148,997	5,035,862
1976	1,170,326	1,176,688	5,810,828	5,201,309
1977	1,155,856	1,238,570	5,789,016	5,496,771
1978	1,141,777	1,247,850	5,640,998	5,619,094
1979	1,179,846	1,323,050	5,682,877	5,887,022
Indices (1970 = 100)				
1970	100.0	100.0	100.0	100.0
1971	101.6	104.1	103.2	105.8
1972	100.5	109.2	103.9	112.4
1973	102.6	114.5	106.5	119.6
1974	108.0	123.1	111.5	130.1
1975	115.3	130.3	121.9	142.4
1976	101.6	129.1	115.2	147.0
1977	100.3	135.9	114.8	155.4
1978	99.1	136.9	111.8	158.9
1979	102.4	145.2	112.7	166.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Fall Enrollment in Higher Education*, various years.

**Chart 3.11**

**Enrollment of First-Time Freshmen and Total Enrollment in Higher Education by Sex**

The rate of growth in higher education enrollment was much faster for women than for men between 1971 and 1979. The rate of growth for first-time students was slower than the total enrollment, indicating that some of the growth was due to returning students and to students staying in school longer.



**Table 3.12**  
**Number and distribution of population, high school graduates, and college enrollment of 18- to 20-year-olds,**  
**by racial/ethnic group: 1971, 1975, and 1979**

Year and race/ethnicity	Number in thousands			Percent of		
	Population	High school graduates	College enrollment	Population	High school graduates	College enrollment
<b>1971</b>						
Total	23,668	18,691	6,210	100.0	100.0	100.0
White	20,533	16,693	5,594	86.8	89.3	90.1
Black	2,866	1,789	522	12.1	9.6	8.4
Hispanic	NA	NA	NA	NA	NA	NA
<b>1975</b>						
Total	26,387	21,326	6,935	100.0	100.0	100.0
White	22,703	18,883	6,116	86.0	88.5	88.2
Black	3,213	2,081	665	12.2	9.8	9.6
Hispanic	1,446	832	295	5.5	3.9	4.3
<b>1979</b>						
Total	27,974	22,421	6,991	100.0	100.0	100.0
White	23,895	19,616	6,120	85.4	87.5	87.5
Black	3,510	2,356	696	12.5	10.5	13.0
Hispanic	1,754	968	292	6.3	4.3	4.2

NA: Not available.

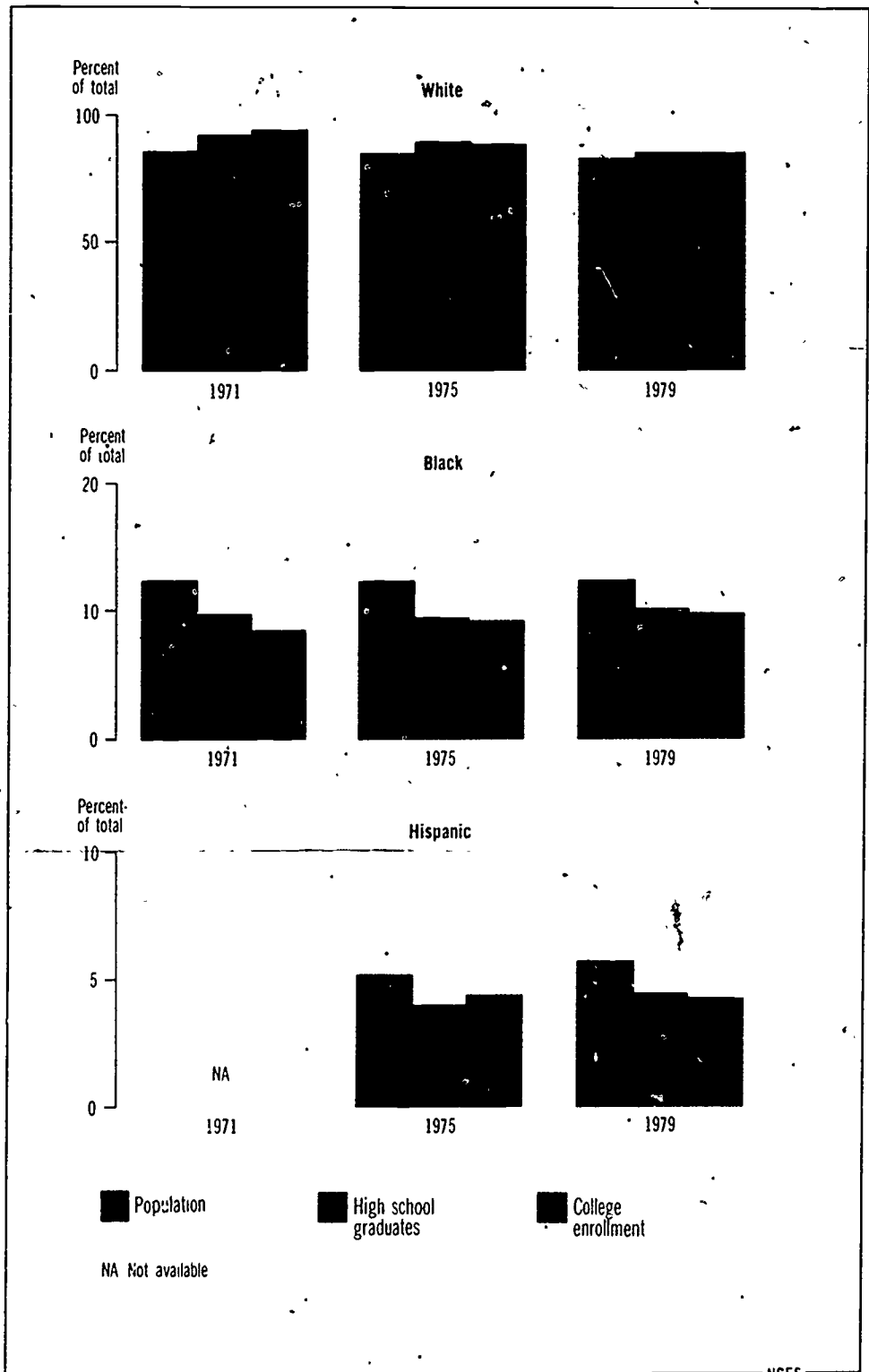
NOTE: Details do not add to totals because not all races are represented and categories are not discrete in that a person in the Hispanic ethnic group may also be counted in a racial group.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*. "School Enrollment—Social and Economic Characteristics of Students." Series P-20, No. 241, 1972, No. 294, 1976, No. 355, 1980

**Chart 3.12**

**Population, High School Graduates, and College Enrollment of 18- to 24-Year-Olds by Racial/Ethnic Group**

Whites were represented in larger proportions among high school graduates and college enrollment than their representation in the general population during the 1970's, although the gap narrowed somewhat by 1979. The proportion of blacks and Hispanics among both groups increased during that period.



NCES

**Table 3.13**

**Distribution of college enrollment and 'primary family members', 3 to 34 years old, by years of school completed by family head and by racial/ethnic group: 1979**

Racial/ethnic group	Years of school completed by head					
	Total	Elementary 0-8 years	High school		College	
			1-3 years	4 years	1-3 years	4 years or more
Percentage distribution						
<b>Total:</b>						
All family members	100.0	15.6	15.1	37.4	14.3	17.7
Enrolled in college	100.0	8.3	8.7	32.4	17.1	33.6
<b>White:</b>						
All family members	100.0	13.5	12.8	38.9	14.8	19.9
Enrolled in college	100.0	6.1	7.3	32.4	17.8	36.3
<b>Black:</b>						
All family members	100.0	25.9	27.1	30.7	11.4	4.9
Enrolled in college	100.0	24.7	19.9	31.0	12.2	12.1
<b>Hispanic<sup>2</sup></b>						
All family members	100.0	46.9	15.3	24.8	7.8	5.2
Enrolled in college	100.0	35.7	21.3	17.9	12.8	12.8

<sup>1</sup> Excludes family members who are family heads and family members who are married, spouses present.

<sup>2</sup> Persons of Hispanic origin may be of any race.

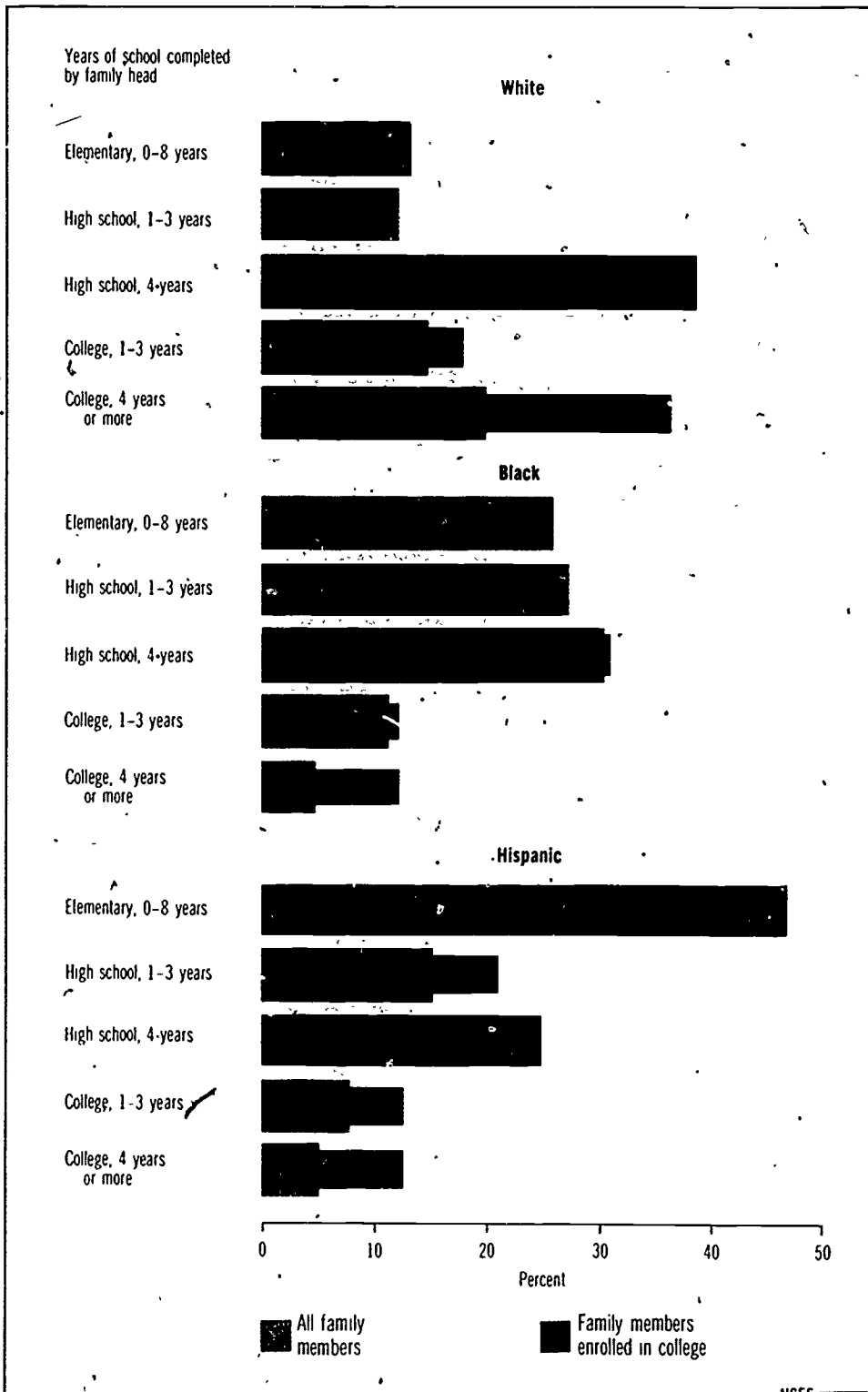
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20, "School Enrollment-Social and Economic Characteristics of Students: October 1979", forthcoming.

**Chart 3.13**

**Distribution of College Enrollment and Primary Family Members by Educational Attainment of Family Head**

College enrollment in 1979 was closely related to parental educational attainment (as achieved by the family head). Blacks and Hispanics had higher proportions of college enrollment at the lower levels of parental educational attainment than did whites.



NCS

**Table 3.14****Primary families<sup>1</sup>, by college enrollment status and family income for primary family members 18 to 24 years old, by race/ethnicity: 1979**

Total families <sup>2</sup> with 1 or more members 18 to 24 years old								
Family income	All families	White	Black	Hispanic <sup>3</sup>	All families	White	Black	Hispanic <sup>3</sup>
	Number, in thousands				Percentage distribution			
Total	11,380	9,339	1,822	630	100.0	100.0	100.0	100.0
Under \$5,000	1,116	589	501	123	9.8	6.3	27.5	19.5
\$5,000 to \$9,999	1,389	912	444	126	12.2	9.8	24.4	20.0
\$10,000 to \$14,999	1,612	1,269	307	135	14.2	13.6	16.8	21.4
\$15,000 to \$19,999	1,444	1,257	159	89	12.7	13.5	8.7	14.1
\$20,000 to \$24,999	1,550	1,398	137	38	13.6	15.0	7.5	6.0
\$25,000 and over	3,181	3,018	118	70	28.0	32.3	6.5	11.1
Not reported	1,087	897	156	52	9.6	9.6	8.6	8.3

Families <sup>2</sup> with 1 or more members 18 to 24 years old attending college full time								
	All families	White	Black	Hispanic <sup>3</sup>	All families	White	Black	Hispanic <sup>3</sup>
	Number, in thousands				Percentage distribution			
Total	3,788	3,281	423	143	100.0	100.0	100.0	100.0
Under \$5,000	150	83	64	23	4.0	2.5	15.1	16.1
\$5,000 to \$9,999	291	178	97	21	7.7	5.4	22.9	14.7
\$10,000 to \$14,999	425	336	72	33	11.2	10.2	17.0	23.1
\$15,000 to \$19,999	461	400	51	26	12.2	12.2	12.1	18.2
\$20,000 to \$24,999	535	473	54	9	14.1	14.4	12.8	6.3
\$25,000 and over	1,574	1,497	56	29	41.6	45.6	13.2	20.3
Not reported	352	314	29	6	9.3	9.6	6.9	4.2

<sup>1</sup> A primary family is a family that includes among its members the person who maintains the household.<sup>2</sup> Excludes families in which the only members 18 to 24 years old are the head, wife, or other members who are married, spouse present<sup>3</sup> Persons of Hispanic origin may be of any race.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20, "School Enrollment—Social and Economic Characteristics of Students: October 1979", forthcoming.



**Chart 3.14**

**Families, by College Enrollment Status and Family Income for 18- to 24-Year-Old Family Members**

Income distributions measured among all families with 18- to 24-year-olds were compared to families with 1 or more members attending college full time in 1979. The result showed that higher income families were represented in larger proportions in the latter group than were all families.

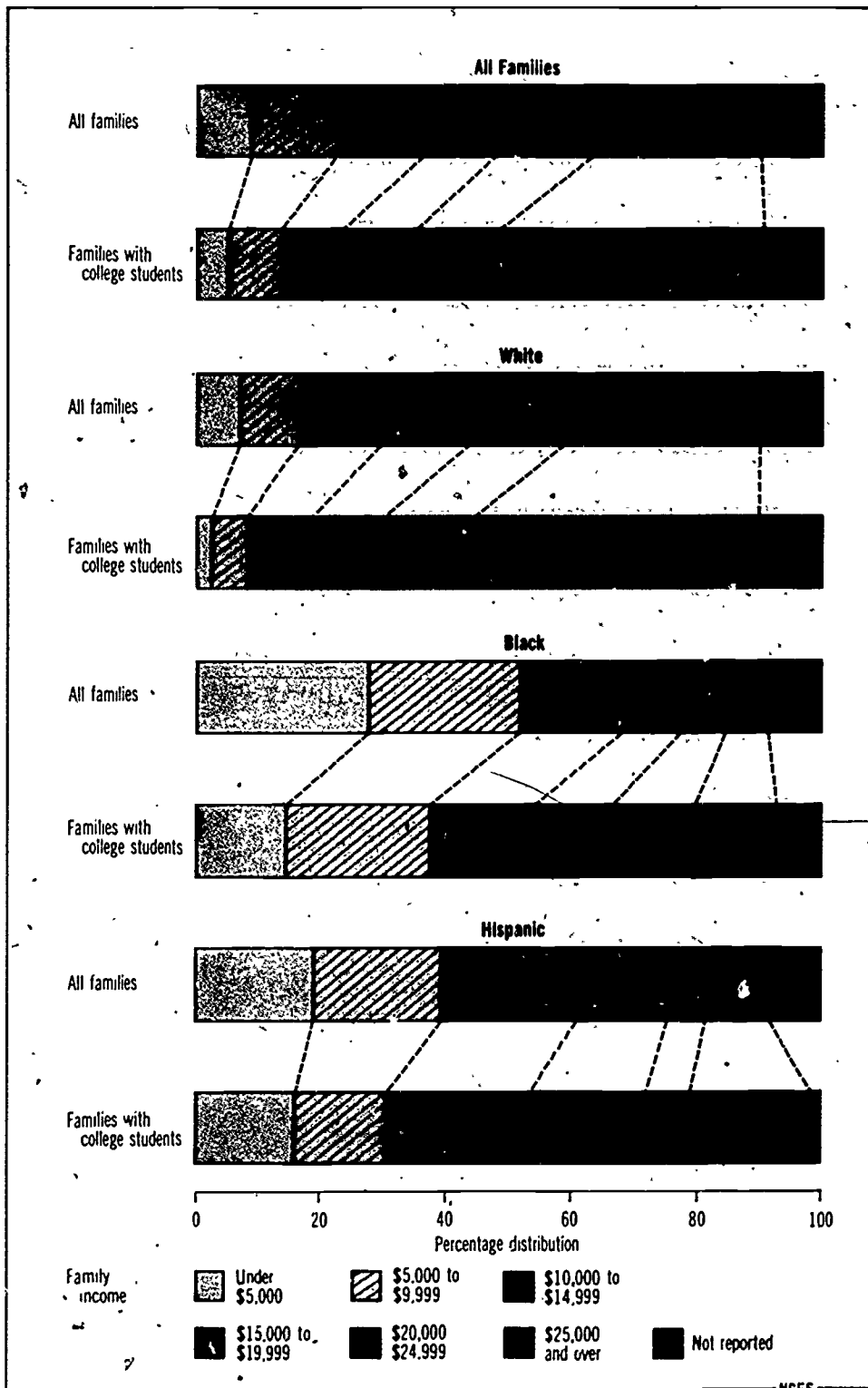


Table 3.15

Bachelor's and master's degrees<sup>1</sup> conferred by institutions of higher education, by racial/ethnic group and sex: 1976-77 and 1978-79

Racial/ethnic group and sex	Bachelor's degrees			Master's degrees		
	1976-77	1978-79	Percent change	1976-77	1978-79	Percent change
Total	915,131	916,347	0.1	315,131	299,887	-4.8
White <sup>2</sup>	805,186	799,617	-7	265,147	249,051	-6.1
Black <sup>2</sup>	58,515	60,130	2.8	21,024	19,393	-7.8
Hispanic	18,663	20,029	7.3	6,069	5,544	-8.7
American Indian/ Alaskan Native	3,319	3,404	2.5	967	999	3.3
Asian or Pacific Islander	13,745	15,336	11.6	5,115	5,495	7.4
Nonresident alien	15,703	17,831	13.6	17,338	19,405	11.9
Males	491,655	472,887	-3.8	166,462 <sup>1</sup>	152,274	-8.5
White <sup>2</sup>	435,659	415,301	-4.7	138,303	123,754	-10.5
Black <sup>2</sup>	25,026	24,544	-1.9	7,769	7,045	-9.3
Hispanic	10,238	10,354	1.1	3,266	2,775	-15.0
American Indian/ Alaskan Native	1,797	1,730	-3.7	521	495	-5.0
Asian or Pacific Islander	7,590	8,190	7.9	3,116	3,324	6.7
Nonresident alien	11,345	12,768	12.5	13,487	14,881	10.3
Females	423,476	443,460	4.7	149,198	147,613	-1.1
White <sup>2</sup>	369,527	384,316	4.0	126,844	125,297	-1.2
Black <sup>2</sup>	33,489	35,586	6.3	13,255	12,348	-6.8
Hispanic	8,425	9,675	14.8	2,803	2,769	-1.2
American Indian/ Alaskan Native	1,522	1,674	10.0	446	504	13.0
Asian or Pacific Islander	6,155	7,146	16.1	1,999	2,171	8.6
Nonresident alien	4,358	5,063	16.2	3,851	4,524	17.5

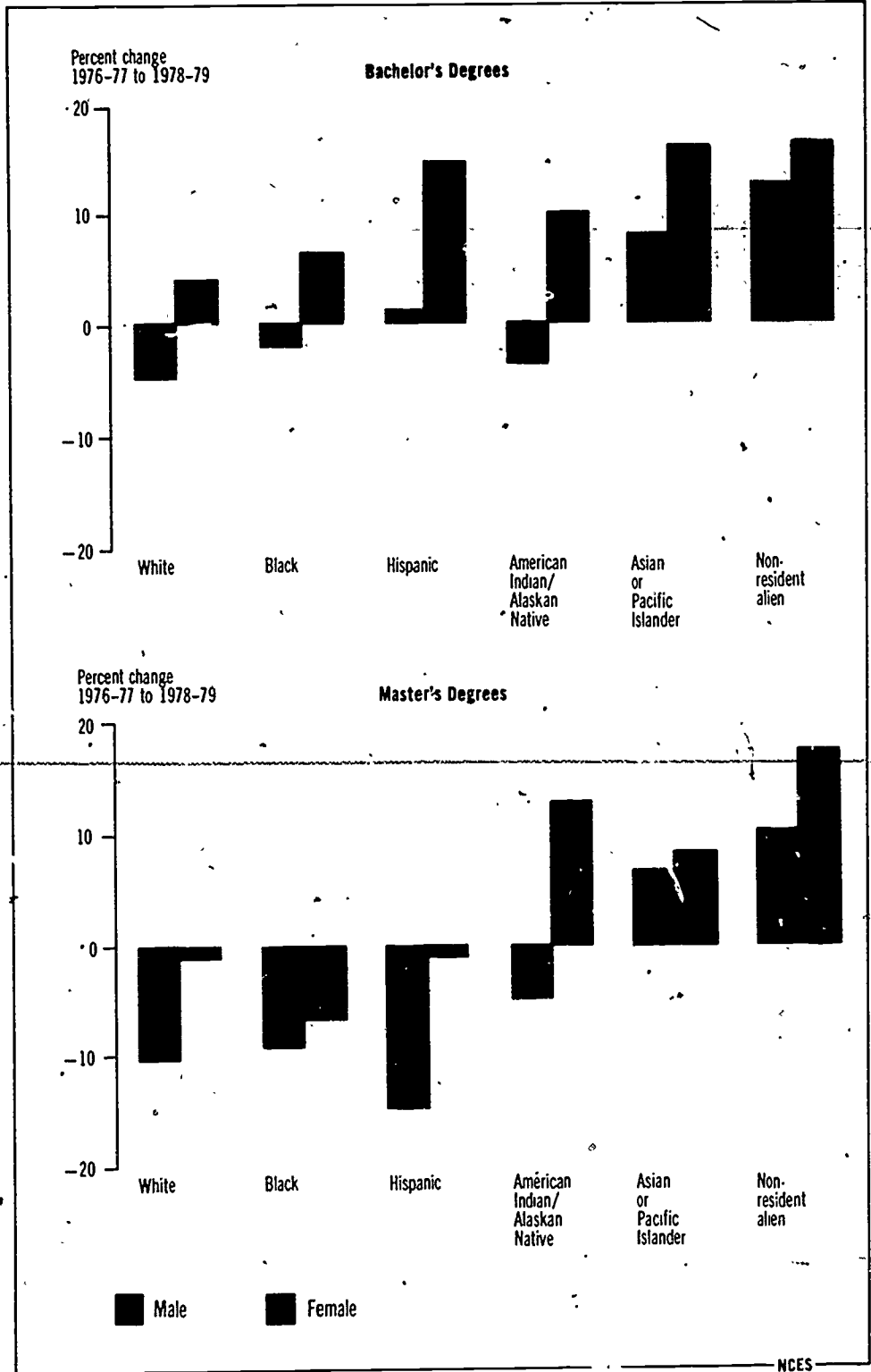
<sup>1</sup> Excludes degrees not reported by racial/ethnic group. More than 99.5 percent of the degrees conferred at each level were reported by racial/ethnic group.

<sup>2</sup> Non-Hispanic.

SOURCE: U.S. Department of Education, Office for Civil Rights, *Data on Earned Degrees Conferred by Institutions of Higher Education by Race, Ethnicity and Sex, Academic Year 1976-77, 1979, and unpublished tabulations.*

**Chart 3.15**  
**Change in Bachelor's and Master's Degrees Conferred, by Race/Ethnicity and Sex**

The largest decrease in the number of bachelor's degrees conferred between 1976-77 and 1978-79 occurred among white males. Both male and female degree recipients in the Asian or Pacific Islander group showed the largest increases during that period.



**Table 3.16**

**Doctor's and first-professional degrees<sup>1</sup> conferred by institutions of higher education, by racial/ethnic group and sex: 1976-77 and 1978-79**

Racial/ethnic group and sex	Doctor's degrees			First-professional degrees <sup>3</sup>		
	1976-77	1978-79	Percent change	1976-77	1978-79	Percent change
Total	33,111	32,664	-1.4	64,133	68,611	7.0
White <sup>2</sup>	26,836	26,128	-2.6	58,422	62,430	6.9
Black <sup>2</sup>	1,253	1,267	1.1	2,537	2,836	11.8
Hispanic	522	439	-15.9	1,076	1,283	19.2
American Indian/ Alaskan Native	95	104	9.5	196	216	10.2
Asian or Pacific Islander	658	811	23.3	1,021	1,205	18.0
Nonresident alien	3,747	3,915	4.5	701	641	-8.6
Males	25,021	23,477	-6.2	51,980	52,425	0.9
White <sup>2</sup>	20,017	18,423	-8.0	47,777	48,123	.7
Black <sup>2</sup>	766	733	-4.3	1,761	1,783	1.2
Hispanic	383	294	-23.2	893	989	10.8
American Indian/ Alaskan Native	67	69	3.0	159	150	-5.7
Asian or Pacific Islander	540	646	19.6	776	860	10.8
Nonresident alien	3,248	3,312	2.0	614	520	-15.3
Females	8,090	9,187	13.6	11,973	16,186	35.2
White <sup>2</sup>	6,819	7,705	13.0	10,645	14,307	34.4
Black <sup>2</sup>	487	534	9.7	776	1,053	35.7
Hispanic	139	145	4.3	183	294	60.7
American Indian/ Alaskan Native	28	35	25.0	37	66	78.4
Asian or Pacific Islander	118	165	39.8	245	345	40.8
Nonresident alien	449	603	20.8	87	121	39.1

<sup>1</sup> Excludes degrees not reported by racial/ethnic group. More than 99.5 percent of the degrees conferred at each level were reported by racial/ethnic group.

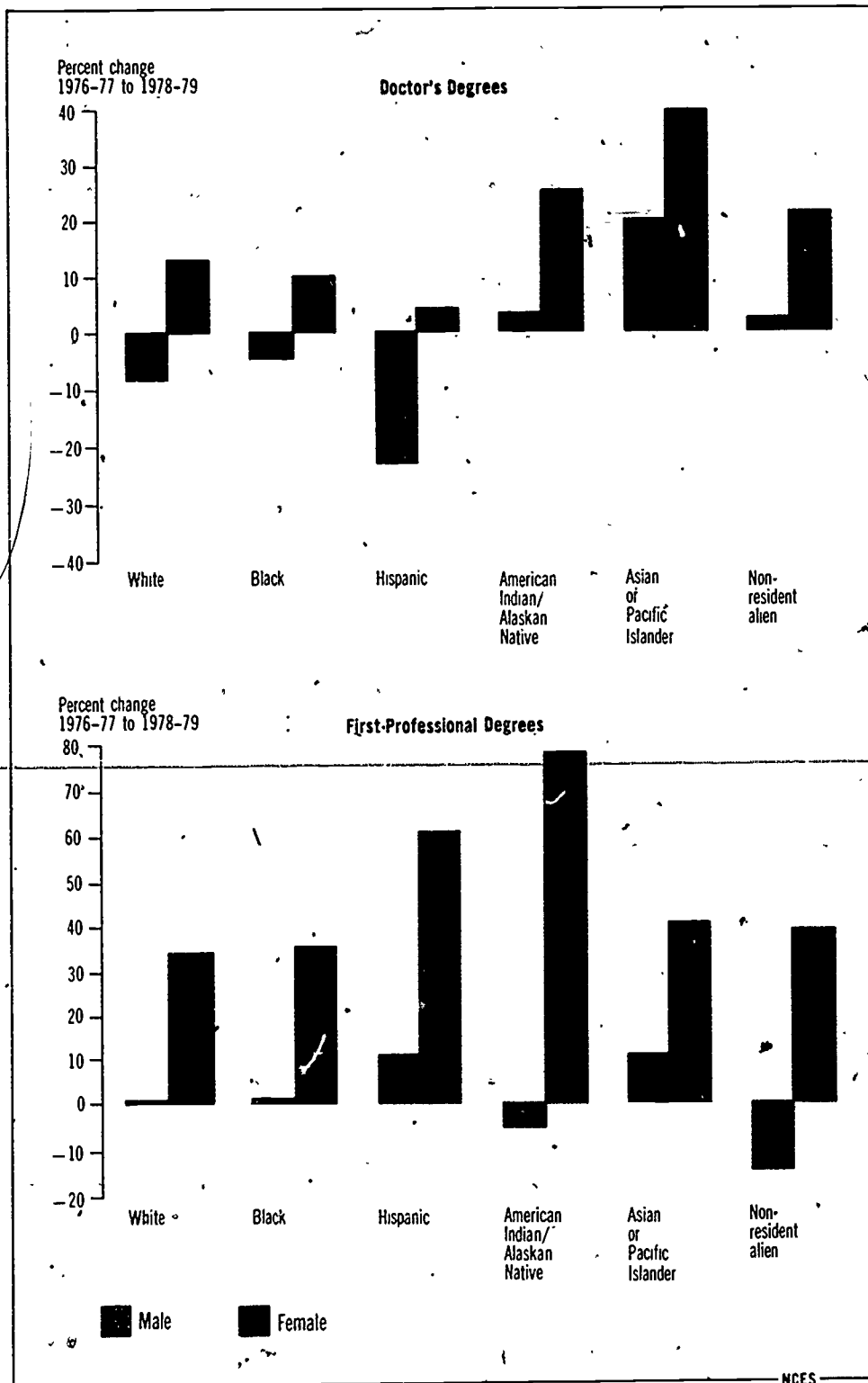
<sup>2</sup> Non-Hispanic.

<sup>3</sup> Includes degrees earned in law, theology, and the various areas of medicine.

SOURCE. U.S. Department of Education, Office for Civil Rights, *Data on Earned Degrees Conferred by Institutions of Higher Education by Race, Ethnicity and Sex, Academic Year 1976-77, 1979, and unpublished tabulations.*

**Chart 3.16**  
**Change in Doctor's and First-Professional Degrees Conferred, by Race/Ethnicity and Sex**

Women of every racial/ethnic group had large increases in the numbers of doctor's and first-professional degrees conferred in the two-year period between 1976-77 and 1978-79. The number of white, black, and Hispanic males receiving doctor's degrees decreased during that time.



**Table 3.17**

**Distribution of bachelor's, master's, and doctor's degrees earned in institutions of higher education, and percent change, by area of study: 1970-71 and 1978-79**

Area of study	Bachelor's degrees			Master's degrees			Doctor's degrees		
	1970 -71	1978 -79	Percent change	1970 -71	1978 -79	Percent change	1970 -71	1978 -79	Percent change
			1970 to -79			1970 to -79			1970 to -79
Number of degrees	839,730	921,390	9.7	230,509	301,709	30.6	32,107	32,730	2.0
	Percentage distribution			Percentage distribution			Percentage distribution		
Total	100.0	100.0	...	100.0	100.0	...	100.0	100.0	...
Agriculture	15	2.5	82.6	1.1	1.3	62.6	3.4	2.9	-12.5
Architecture	7	1.0	66.7	7	1.0	82.6	1	.3	166.7
Area studies	3	3	3.8	4	3	-23.2	.4	4	-7.6
Biological sciences	4.3	5.3	36.7	2.5	2.3	19.3	11.4	10.8	-2.8
Business and management	13.8	18.8	49.7	11.5	16.8	90.3	2.5	2.6	6.5
Communications	1.3	2.9	144.9	8	10	55.3	.5	.6	32.4
Computer/information sciences	3	9	265.1	7	10	92.4	.4	.7	84.4
Education	21.0	13.7	-28.6	38.5	37.0	25.7	19.9	23.6	20.8
Engineering	6.0	6.8	24.6	7.1	5.1	-5.8	11.3	7.7	-31.1
Fine and applied arts	3.6	4.4	34.8	2.9	2.8	27.7	1.9	2.1	12.7
Foreign languages	2.4	1.3	-40.7	2.1	8	-49.0	2.4	2.0	-17.9
Health professions	3.0	6.7	146.1	2.5	5.1	169.4	1.5	2.2	54.1
Home economics	1.3	2.0	63.9	6	.8	72.9	4	7	78.0
Law	1	1	24.4	4	5	72.5	1	.1	130.0
Letters	8.7	4.6	-42.6	5.5	3.0	-30.0	7.5	5.9	-20.4
Library science	1	1	-44.9	3.0	2.0	-15.6	1	.2	79.5
Mathematics	3.0	1.3	-52.4	2.3	1.0	-41.5	3.7	2.2	-39.1
Physical sciences	2.5	2.5	3.4	2.8	1.8	-14.4	13.7	9.5	-29.3
Psychology	4.5	4.6	12.1	1.9	2.7	80.6	5.5	8.1	49.4
Public affairs	1.1	4.2	314.8	3.6	6.6	141.5	6	1.1	106.7
Social sciences	18.5	11.8	-30.2	7.2	4.3	-21.9	11.4	10.3	-8.2
Theology	4	7	63.7	1.2	1.2	31.3	1.0	3.8	294.9
Interdisciplinary studies	1.6	3.7	148.1	7	1.5	168.8	3	2.2	679.1

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey, unpublished tabulations.

**Chart 3.17**  
**Change in Area of Study of Earned Degrees, 1971 to 1979**

Education was the top field at every degree level in 1971 and remained so at the master's and doctor's levels in 1979, but dropped to second place at the bachelor's degree level. Mathematics, letters, and foreign languages showed large decreases at every degree level during that time.

Bachelor's Degrees	Master's Degrees	Doctor's Degrees
<b>Top 5 Fields in 1971</b>		
1—Education 2—Social sciences 3—Business and management 4—Letters 5—Engineering	1—Education 2—Business and management 3—Engineering 4—Social sciences 5—Letters 6—Public affairs	1—Education 2—Physical sciences 3—Biological sciences 4—Social sciences 5—Engineering 6—Letters
<b>Top 5 Fields in 1979<sup>a</sup></b>		
1—Business and management 2—Education 3—Social sciences 4—Engineering 5—Health professions 6—Biological sciences	1—Education 2—Business and management 3—Public affairs 4—Health professions 5—Engineering	1—Education 2—Biological sciences 3—Social sciences 4—Physical sciences 5—Psychology
<b>Fields with Greatest Percent Increase, 1971 to 1979</b>		
1—Public affairs 2—Computer/information sciences 3—Health professions 4—Interdisciplinary studies 5—Communications	1—Interdisciplinary studies 2—Health professions 3—Public affairs 4—Computer/information sciences 5—Business and management	1—Interdisciplinary studies 2—Theology 3—Architecture 4—Law 5—Public affairs
<b>Fields with Greatest Percent Decrease, 1971 to 1979</b>		
1—Mathematics 2—Library science 3—Letters 4—Foreign languages 5—Social sciences	1—Foreign languages 2—Mathematics 3—Letters 4—Area studies 5—Social sciences	1—Mathematics 2—Engineering 3—Physical sciences 4—Letters 5—Foreign languages

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**Table 3.18**

**First-professional degrees awarded by institutions of higher education, by discipline specialty:  
1970-71 and 1978-79**

Specialty	1970-71		1978-79		Change, 1970-71 to 1978-79	
	Number	Percent of total	Number	Percent of total	Numerical	Percentage
Total	37,946	100.0	68,848	100.0	30,902	74.5
Dentistry	3,745	9.9	5,434	7.9	1,689	45.1
Law	17,421	45.9	35,206	51.1	17,785	102.1
Medicine	8,919	23.5	14,786	21.5	5,867	65.8
Optometry	531	1.4	1,046	1.5	515	97.0
Osteopathic medicine	472	1.2	1,065	1.5	593	125.6
Podiatry	240	.6	572	.8	332	138.3
Theology	5,055	13.3	6,607	9.6	1,552	30.7
Veterinary medicine	1,252	3.3	1,714	2.5	462	36.9
Other	311	.8	2,418	3.5	...	...
Pharmacy	(1)	(1)	639	.9	...	...
Chiropractic	(1)	(1)	1,789	2.6	...	...

\* Not identified as first-professional in 1971.

SOURCE. U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey, unpublished tabulations



**Chart 3.18**  
**First-Professional Degrees Earned by Discipline Specialty**

First-professional degrees increased in every discipline specialty between 1971 and 1979. By 1979 over half of the first-professional degrees were awarded in law.

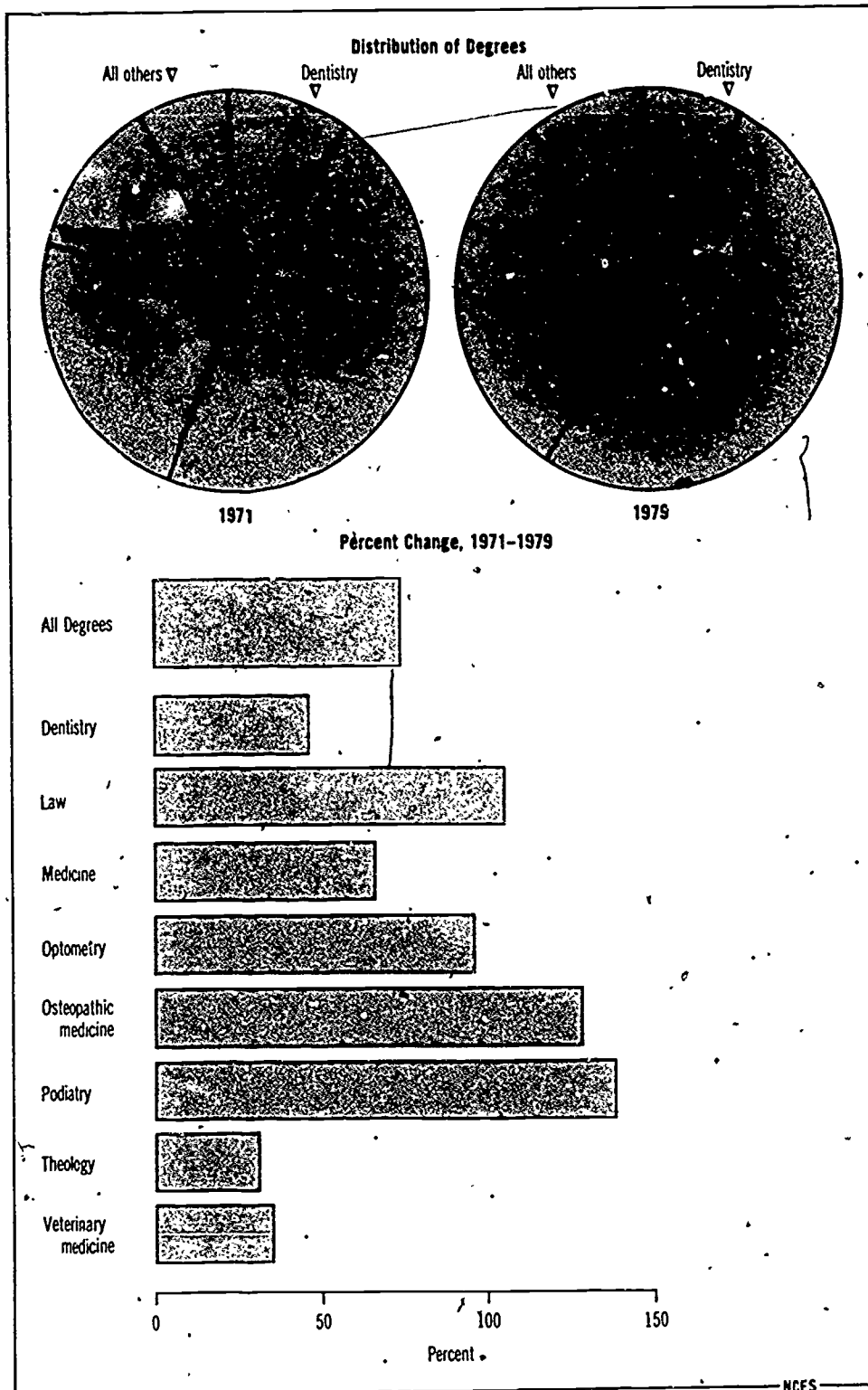


Table 3.19

Number of institutions and branches of higher education, by level and control, and by State: Fall 1979

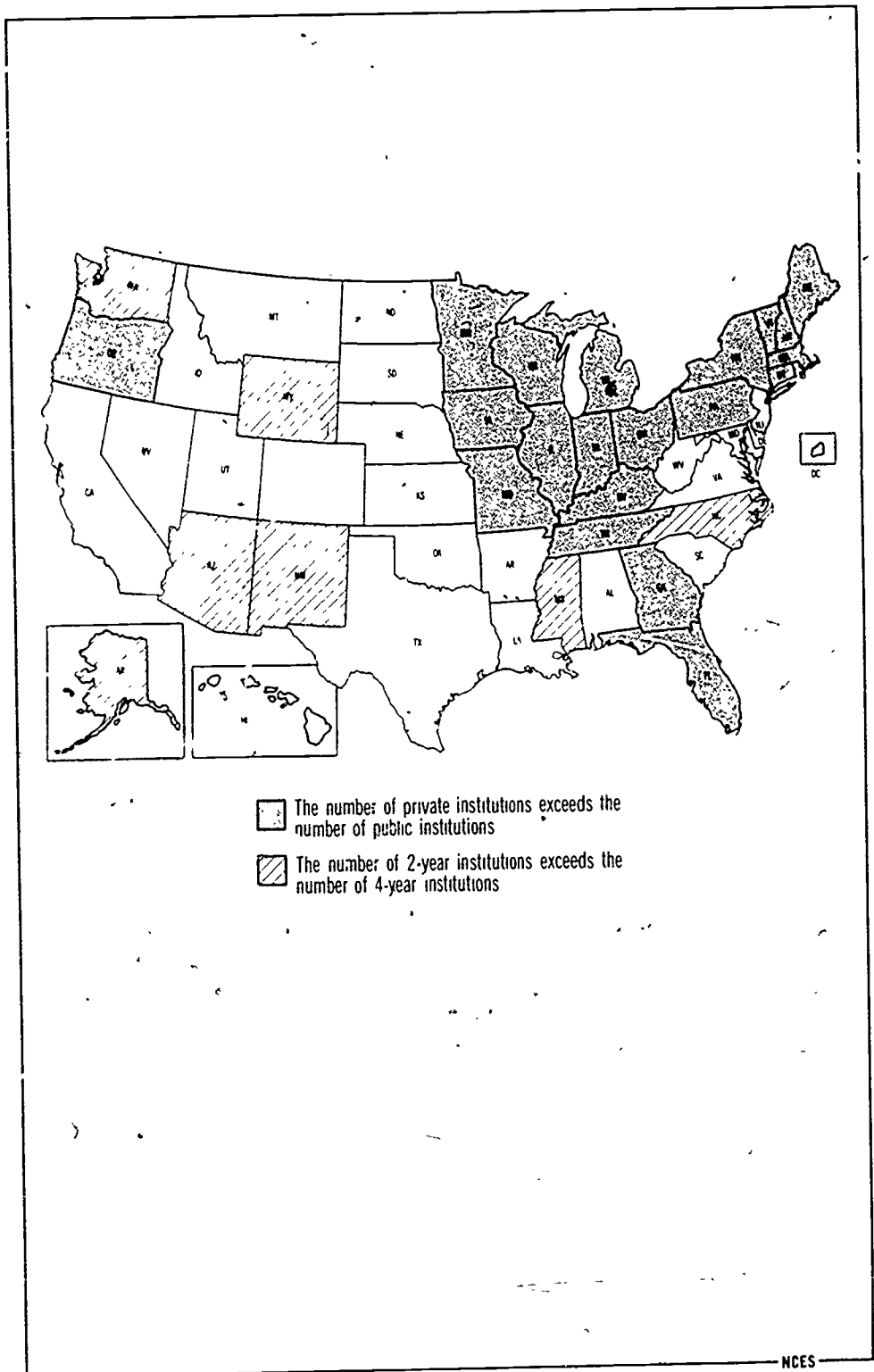
States	All institutions	Public institutions			Private institutions		
		Total	4-year	2-year	Total	4-year	2-year
50 States and D C	3142	1465	549	925	1677	1408	269
Alabama	57	36	16	20	21	13	8
Alaska	16	12	3	9	4	4	0
Arizona	25	17	3	14	8	7	1
Arkansas	34	19	10	9	15	10	5
California	263	135	30	105	128	119	9
Colorado	44	28	13	15	16	14	2
Connecticut	49	24	6	18	25	21	4
Delaware	10	6	3	4	4	3	1
District of Columbia	17	1	1	0	16	16	0
Florida	79	37	9	28	42	36	6
Georgia	73	34	18	16	39	27	12
Hawaii	12	9	3	6	3	3	0
Idaho	9	6	4	2	3	2	1
Illinois	155	63	13	50	92	82	10
Indiana	66	24	12	12	42	36	6
Iowa	60	22	3	19	38	35	3
Kansas	52	29	8	21	23	19	4
Kentucky	41	9	8	1	32	21	11
Louisiana	32	20	14	6	12	1	1
Maine	27	11	7	4	16	17	3
Maryland	3	32	13	19	22	20	2
Massachusetts	116	33	15	18	83	63	20
Michigan	96	45	15	30	51	42	9
Minnesota	65	30	10	20	35	31	4
Mississippi	45	27	9	18	18	12	6
Missouri	85	28	13	15	57	52	5
Montana	13	9	6	3	4	4	0
Nebraska	30	16	7	9	14	13	1
Nevada	6	5	2	3	1	1	0
New Hampshire	24	10	3	7	14	11	3
New Jersey	63	31	14	17	32	27	5
New Mexico	19	16	6	10	3	3	0
New York	296	82	40	42	214	174	40
North Carolina	126	73	16	57	53	34	19
North Dakota	16	11	6	5	5	4	1
Ohio	131	60	14	46	71	64	7
Oklahoma	44	29	14	15	15	11	4
Oregon	44	21	8	13	23	21	2
Pennsylvania	177	61	23	38	116	105	11
Rhode Island	13	3	2	1	10	9	1
South Carolina	60	33	12	21	27	19	8
South Dakota	19	8	7	1	11	9	2
Tennessee	76	23	10	13	53	38	15
Texas	149	95	37	58	54	49	5
Utah	14	9	4	5	5	3	2
Vermont	21	6	4	2	15	14	1
Virginia	71	39	15	24	32	29	3
Washington	49	33	6	27	16	15	1
West Virginia	28	17	12	5	11	8	3
Wisconsin	63	30	13	17	33	31	2
Wyoming	8	8	1	7	0	0	0

NOTE: Does not include the 10 U.S. service schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Education Directory, Colleges and Universities, 1979-80, 1980.*

**Chart 3.19**  
**Number of Public and Private Institutions of Higher Education by State**

Both public and private higher education is available in every State except for Wyoming, which has no private institutions. Ten States have no private 2-year institutions and only the District of Columbia has no public 2-year institutions.



**Table 3.20**

**Trends in higher education enrollment, by type and control of institution: Fall 1970 to fall 1979**

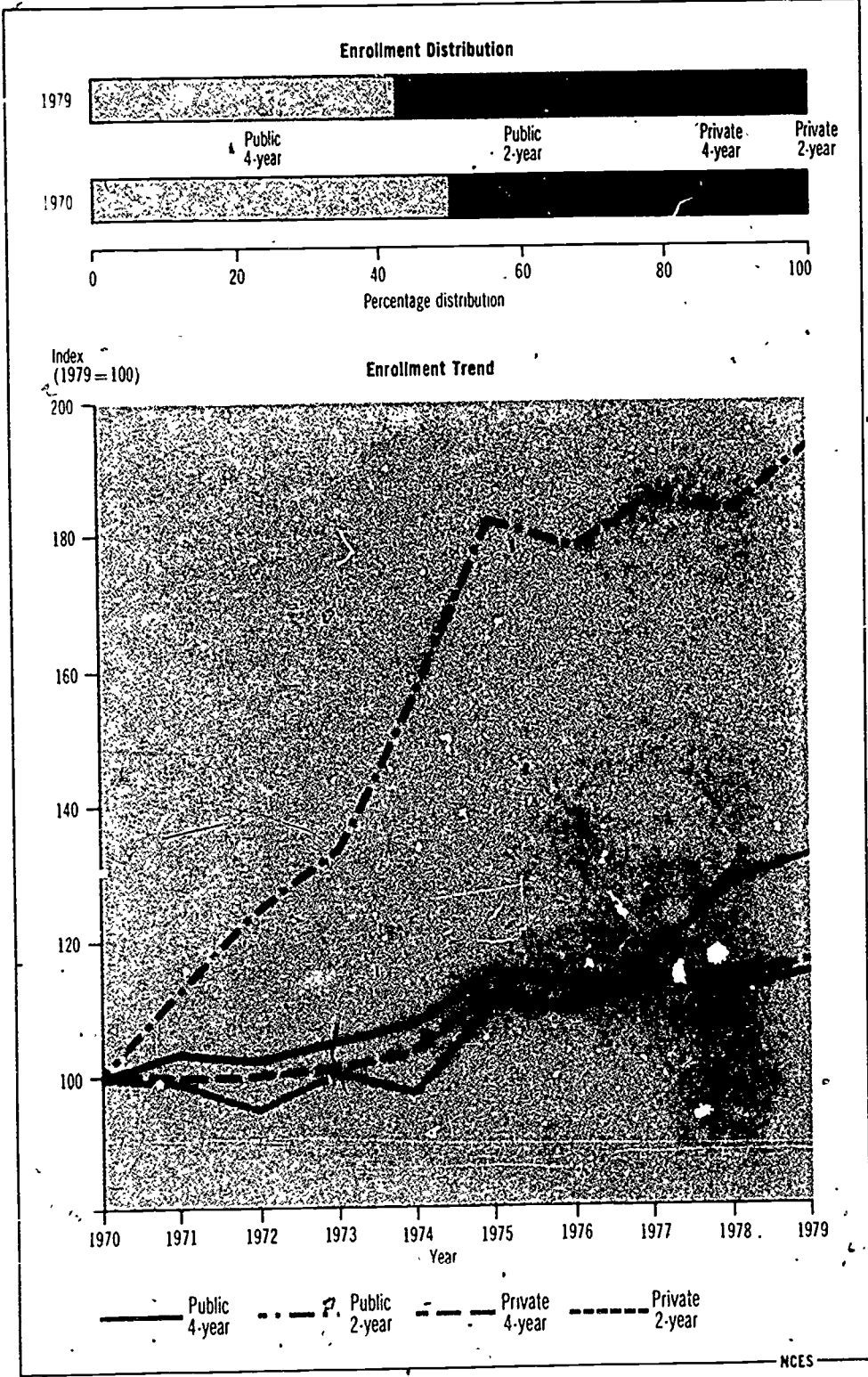
Level and control of institution	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Number, in thousands										
All institutions	8 581	8 949	9 215	9 602	10 224	11 185	11 012	11 286	11 259	11 570
Public	6 428	6 804	7 071	7 420	7 989	8 835	8 653	8 847	8 784	9 037
4-year	4 326	4 438	4 430	4 530	4 703	4 988	4 902	4 945	4 911	4 980
2-year	2 102	2 366	2 641	2 809	3 285	3 636	3 752	3 902	3 873	4 057
Private	2 153	2 144	2 144	2 183	2 235	2 350	2 359	2 438	2 475	2 533
4-year	2 032	2 024	2 029	2 060	2 117	2 217	2 227	2 297	2 320	2 373
2-year	121	120	115	122	119	134	132	141	155	160
Index (1970 = 100)										
All institutions	100.0	104.3	107.4	111.9	119.1	130.3	128.3	131.5	131.2	134.8
Public	100.0	105.8	110.0	115.4	124.3	137.4	134.6	137.6	136.7	140.6
4-year	100.0	102.6	102.4	104.7	108.7	115.5	113.3	114.3	113.5	115.1
2-year	100.0	112.6	125.6	133.6	156.3	182.5	178.5	185.6	184.3	193.0
Private	100.0	99.6	99.6	101.4	103.8	109.2	109.6	113.2	115.0	117.6
4 year	100.0	99.6	99.9	101.4	104.2	109.1	109.6	113.0	114.2	116.8
2 year	100.0	99.2	95.0	100.8	98.3	110.7	109.1	116.5	128.1	132.2
Percentage distribution										
All institutions	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Public	74.9	76.0	76.7	77.3	78.1	79.0	78.6	78.4	78.0	78.1
4-year	50.4	49.6	48.1	47.2	46.0	44.7	44.5	43.8	43.6	43.0
2-year	24.5	26.4	28.7	29.3	32.1	34.3	34.1	34.6	34.4	35.1
Private	25.1	24.0	23.3	22.7	21.9	21.0	21.4	21.6	22.0	21.9
4 year	23.7	22.6	22.0	21.5	20.7	19.8	20.2	20.4	20.6	20.5
2 year	1.4	1.3	1.2	1.3	1.2	1.2	1.2	1.2	1.4	1.4

NOTE. Details may not add to totals because of rounding

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

**Chart 3.20**  
**Distributions and Trends of Enrollment in Institutions of Higher Education**

Enrollment growth rates were highest in public 2-year institutions of higher education between 1970 and 1979, although by 1975 the rate of growth began to slow down. Public 4-year institutions held the largest share of enrollment in 1971 and in 1979, but 1971 was the last year the proportion was over 50 percent.



**Table 3.21**

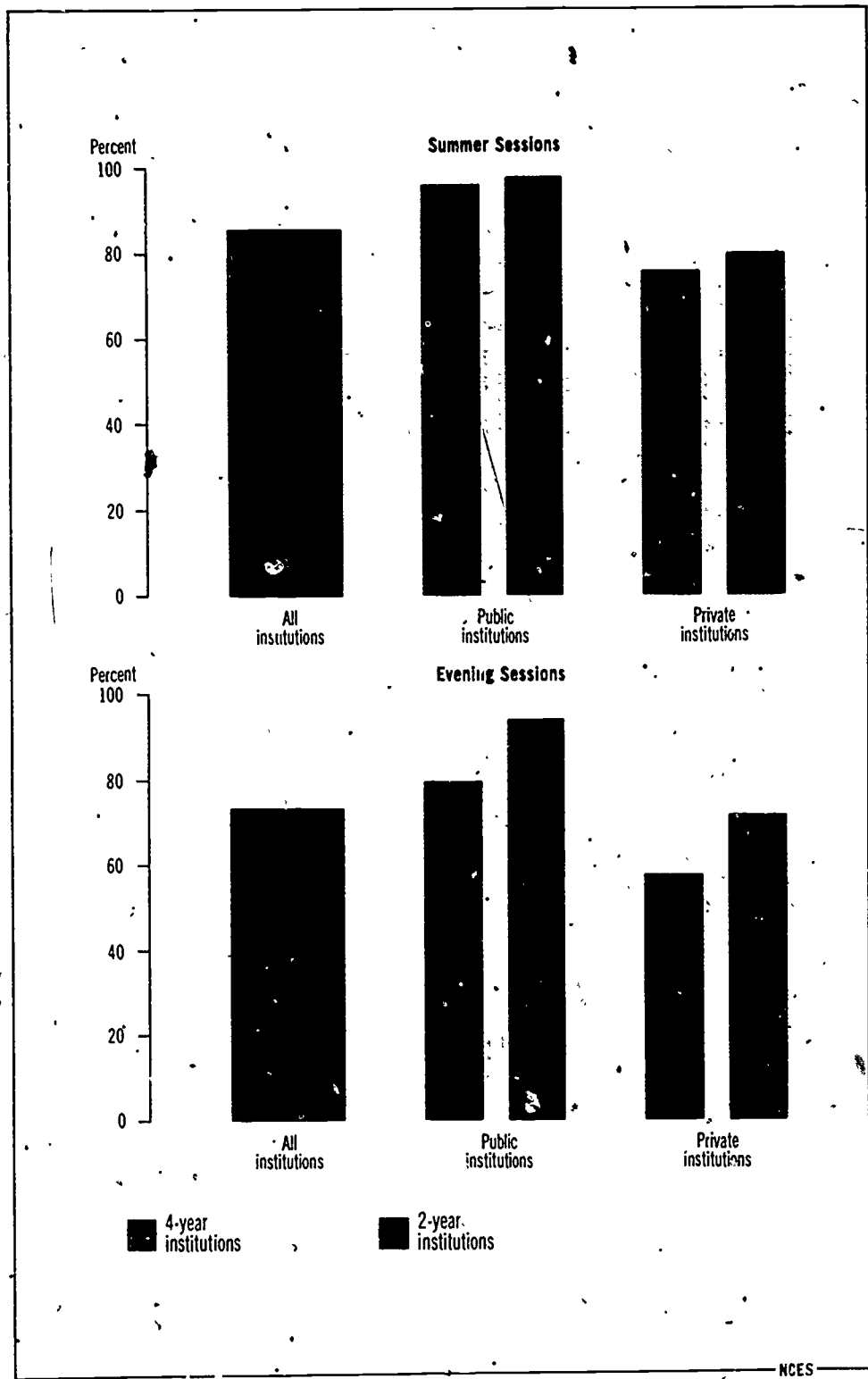
**Number and percent of institutions of higher education offering summer session and evening college degree-credit courses, by type and control of institution: Aggregate United States, 1979-1980**

Level and control	Institutions offering summer sessions		Institutions offering evening sessions	
	Number	Percent of total	Number	Percent of total
All institutions	2,723	85.0	2,331	73.1
4-year	1,601	81.1	1,258	63.7
2-year	1,122	92.3	1,073	88.3
Public institutions	1,425	95.8	1,312	88.2
4-year	527	94.4	440	78.9
2-year	898	96.6	872	93.8
Private institutions	1,298	76.3	1,019	59.9
4-year	1,074	75.8	818	57.7
2-year	224	78.6	201	70.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, *Education Directory, Colleges and Universities 1979-80, 1980.*

**Chart 3.21**  
**Percent of Institutions that Offer Summer and Evening Sessions**

Eighty-five percent of higher education institutions offered summer session degree-credit courses in 1979-80 and nearly three-fourths offered such courses in evening sessions. Public 2-year institutions were more likely than others to offer summer and evening courses.



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**Table 3.22**

**Institutions<sup>1</sup> of higher education offering evening or weekend baccalaureate degree credit courses, by major field and factors discouraging institutions from introducing or expanding such courses: Spring 1980**

Major fields <sup>2</sup>	Proportion of credit requirements available evenings or weekends		
	100 Percent	More than 50 percent	At least some credit
	Percent of institutions		
Business and management	25	35	56
Psychology	15	23	50
Social sciences	14	23	52
Letters	9	17	49
Public affairs and services	9	16	33
Education	8	18	51
Fine and applied arts	6	14	41
Health professions	5	9	30
Biological sciences	4	12	39
Engineering	4	5	15
Home economics	1	3	14

Factor	Percent of institutions discouraging evening courses	Percent of institutions discouraging weekend courses
Insufficient demand	35	50
Limited faculty resources	23	31
Limited availability of student financial aid	14	15
Institutional policies/practices	13	13
Difficulty and cost of rescheduling and restructuring curriculum	10	14
Cost of keeping support services open	5	11
Cost of keeping facilities open	5	11
Maintenance of academic standards	4	5
Neighborhood or transportation safety	2	2

<sup>1</sup> Percents are based on the 1,758 institutions offering baccalaureate degrees  
<sup>2</sup> Represents averages for varying numbers of subfields

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Availability of Evening and Weekend Baccalaureate Degree-Credit Courses", 1981



**Chart 3.22**  
**Higher Education Institutions Offering Evening or Weekend Baccalaureate Degree Credit Courses**

In only one-quarter of higher education institutions could 100 percent of credit requirements for the most popular field of study, business and management, be obtained on evenings or weekends. The most common reason institutions gave for discouraging such scheduling was insufficient demand.

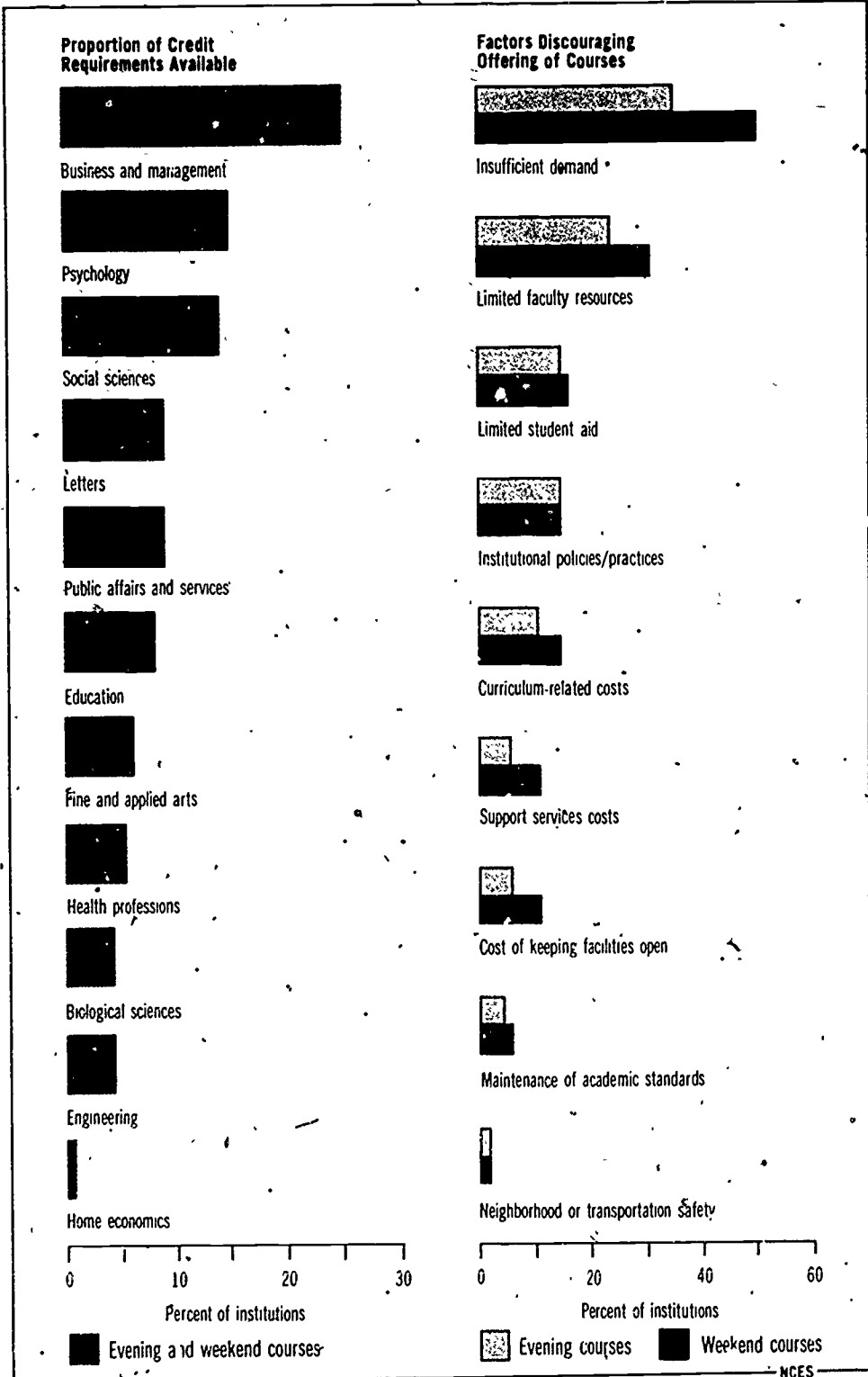


Table 3.23

Educational and general revenues and expenditures by source and function of institutions of higher education, by control of institution: Fiscal year 1979

Item	Public institutions		Private institutions	
	Amount. in thousands	Percentage distribution	Amount. in thousands	Percentage distribution
Educational and general revenues	\$27,326,655	100.0	\$11,632,662	100.0
Federal government <sup>2</sup>	4,477,060	16.4	2,366,676	20.3
State and local governments <sup>2</sup>	17,479,512	64.0	457,289	3.9
Tuition and fees	4,380,567	16.0	6,323,604	54.4
Private gifts, grants, and contracts	835,892	3.1	1,653,475	14.2
Endowment income	153,624	.6	831,618	7.1
Educational and general expenditures <sup>1</sup>	\$27,016,740	100.0	\$12,113,115	100.0
Instruction	12,065,329	44.7	4,597,491	38.0
Research	2,943,497	10.9	1,504,263	12.4
Public and student services	2,887,954	10.7	979,836	8.1
Institutional support	2,845,811	10.5	1,711,501	14.1
Academic support, including libraries	2,498,873	9.2	972,127	8.0
Physical plant maintenance and operation	2,913,698	10.8	1,264,876	10.4
Scholarships and fellowships	861,578	3.2	1,083,021	8.9

<sup>1</sup> Excludes revenues from auxiliary enterprises, hospitals, and independent operations.

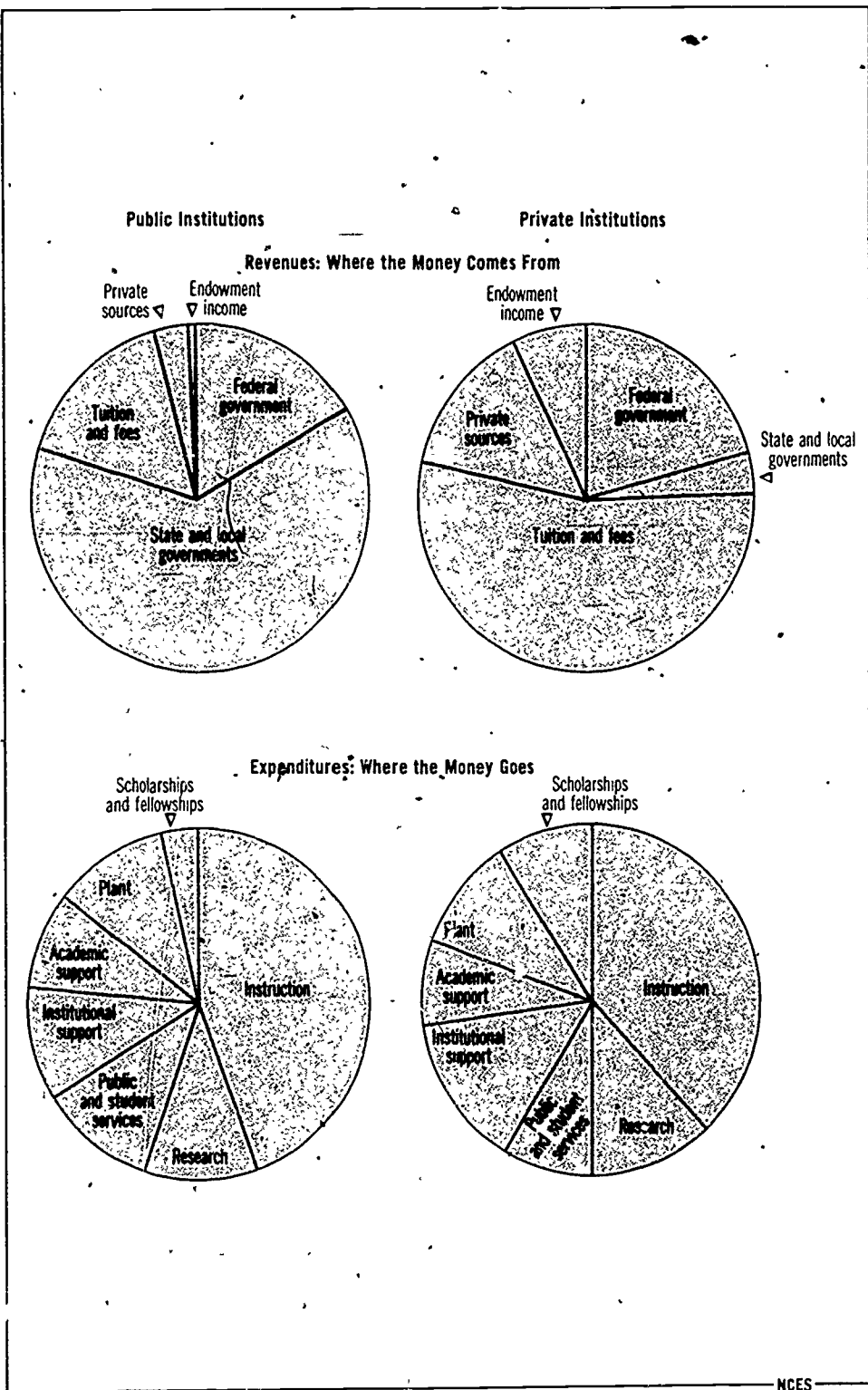
<sup>2</sup> Includes appropriations, grants, and contracts.

<sup>3</sup> Excludes expenditures for auxiliary enterprises, hospitals, and independent operations.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey unpublished tabulations.

**Chart 3.23**  
**Educational and General Revenues and Expenditures by Source and Function**  
**in Institutions of Higher Education**

The largest proportion of revenues for public institutions came from State and local governments; for private institutions the largest proportion came from tuition and fees. The largest proportion of expenditures for both types of institutions was for instruction.



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**Table 3.24**  
**Current funds expenditures, full-time-equivalent enrollments, and price indices in higher education:**  
**Fiscal years 1971 through 1979**

Fiscal year	Totals		Indices (1971 = 100)				Current funds expenditures in 1971 dollars <sup>3</sup> per FTE student
	Current funds expenditures, in thousands	Full-time equivalent (FTE) enrollment	Current funds expenditures, in current dollars	FTE enrollment	HEPI <sup>1</sup>	CPI <sup>2</sup>	
1971	\$23,375,197	6,737,819	100.0	100.0	100.0	100.0	100.0
1972	25,559,560	7,148,575	109.3	106.1	105.6	103.6	97.6
1973	27,955,624	7,253,739	119.6	107.7	111.2	107.7	99.9
1974	30,713,581	7,453,748	131.4	110.6	119.1	117.3	99.7
1975	35,057,563	7,805,453	150.0	115.8	129.2	130.4	100.2
1976	38,903,177	8,479,685	166.4	125.9	137.8	139.6	96.0
1977	42,599,816	8,312,502	182.2	123.4	146.7	147.7	100.7
1978	45,970,790	8,415,339	196.7	124.9	156.5	157.7	100.6
1979	50,720,984	8,366,482	217.0	124.2	168.7	172.4	103.6

<sup>1</sup> Higher Education Price Index.

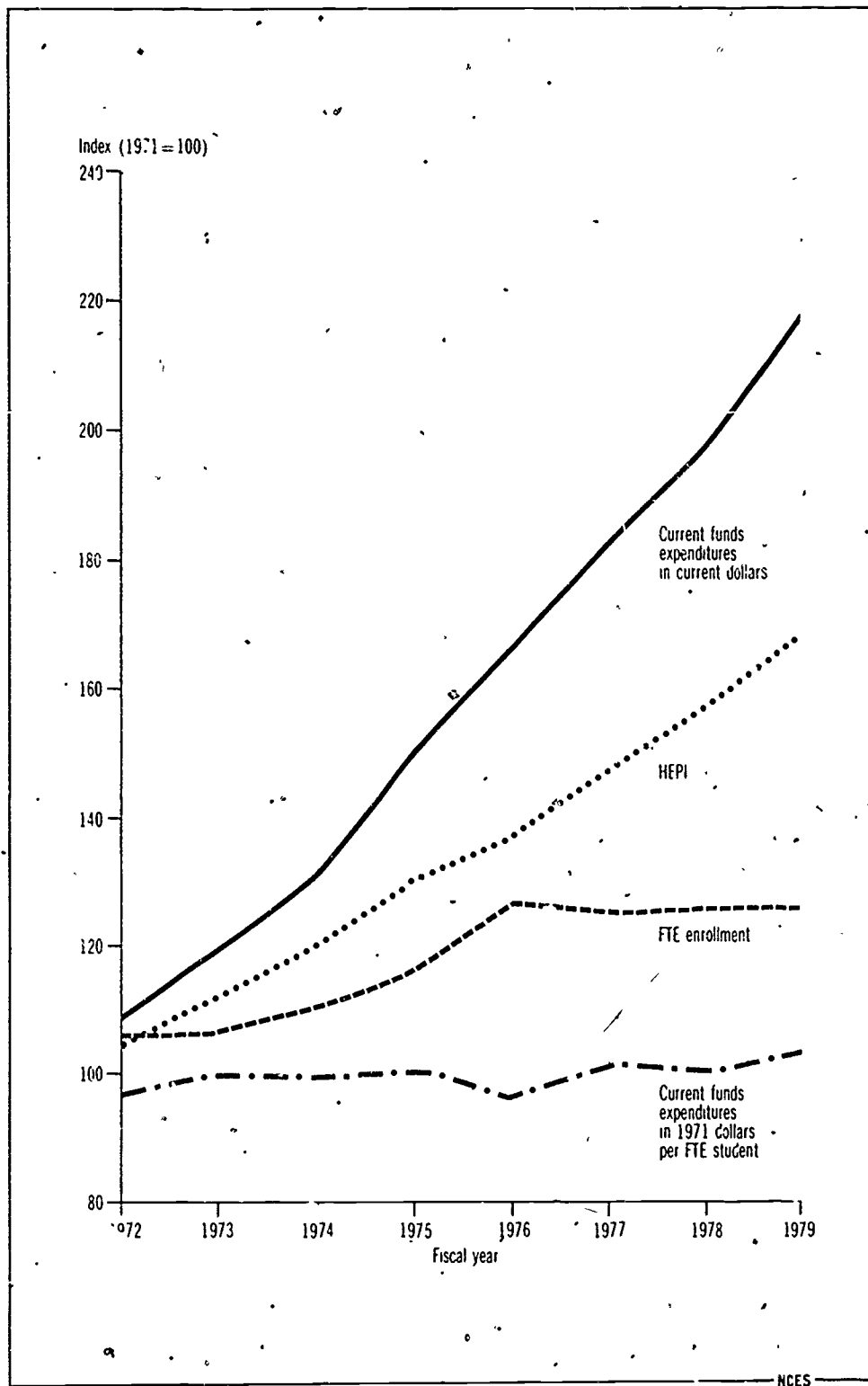
<sup>2</sup> Consumer Price Index

<sup>3</sup> Current dollars adjusted using HEPI

SOURCE U.S. Department of Education, National Center for Education Statistics, *Financial Statistics of Institutions of Higher Education, Fiscal Years 1971 through 1979*, *Fall Enrollment in Institutions of Higher Education, 1970 through 1978*, National Institute of Education, *Higher Education and Price Indexes, 1979 supplement*, and unpublished tabulations.

**Chart 3.24**  
**Current Funds Expenditures, Enrollments, and Price Indices in Higher Education**

Current funds expenditures in higher education, when adjusted for inflation and enrollment changes, varied by only 4 percent between 1971 and 1979.



**Table 3.25**

**Estimated earnings<sup>1</sup> of faculty members beyond their base salaries, by academic rank: 1979-80**

Item	Academic rank				
	All ranks	Professor	Associate professor	Assistant professor	Instructor
Base salary	\$23,658	\$28,990	\$22,729	\$18,428	\$16,900
Total annual earnings above base salary:					
Percent reporting	80.5	83.1	81.7	78.1	73.0
Average amount	\$ 4,811	\$ 6,228	\$ 4,514	\$ 3,605	\$ 3,624
Percent of base salary	21.7	22.6	21.4	20.7	21.5
Amount earnings above base salary from within the institution:					
Percent reporting	65.4	68.1	68.0	60.6	59.3
Average amount	\$ 3,483	\$ 4,328	\$ 3,319	\$ 2,865	\$ 2,375
Percent of base salary	15.8	16.1	15.8	16.2	13.1
Annual earnings, above base salary from outside the institution:					
Percent reporting	49.4	54.1	50.3	48.2	33.2
Average amount	\$ 3,226	\$ 4,119	\$ 2,849	\$ 2,238	\$ 3,733
Percent of base salary	14.4	14.4	13.5	13.1	23.9

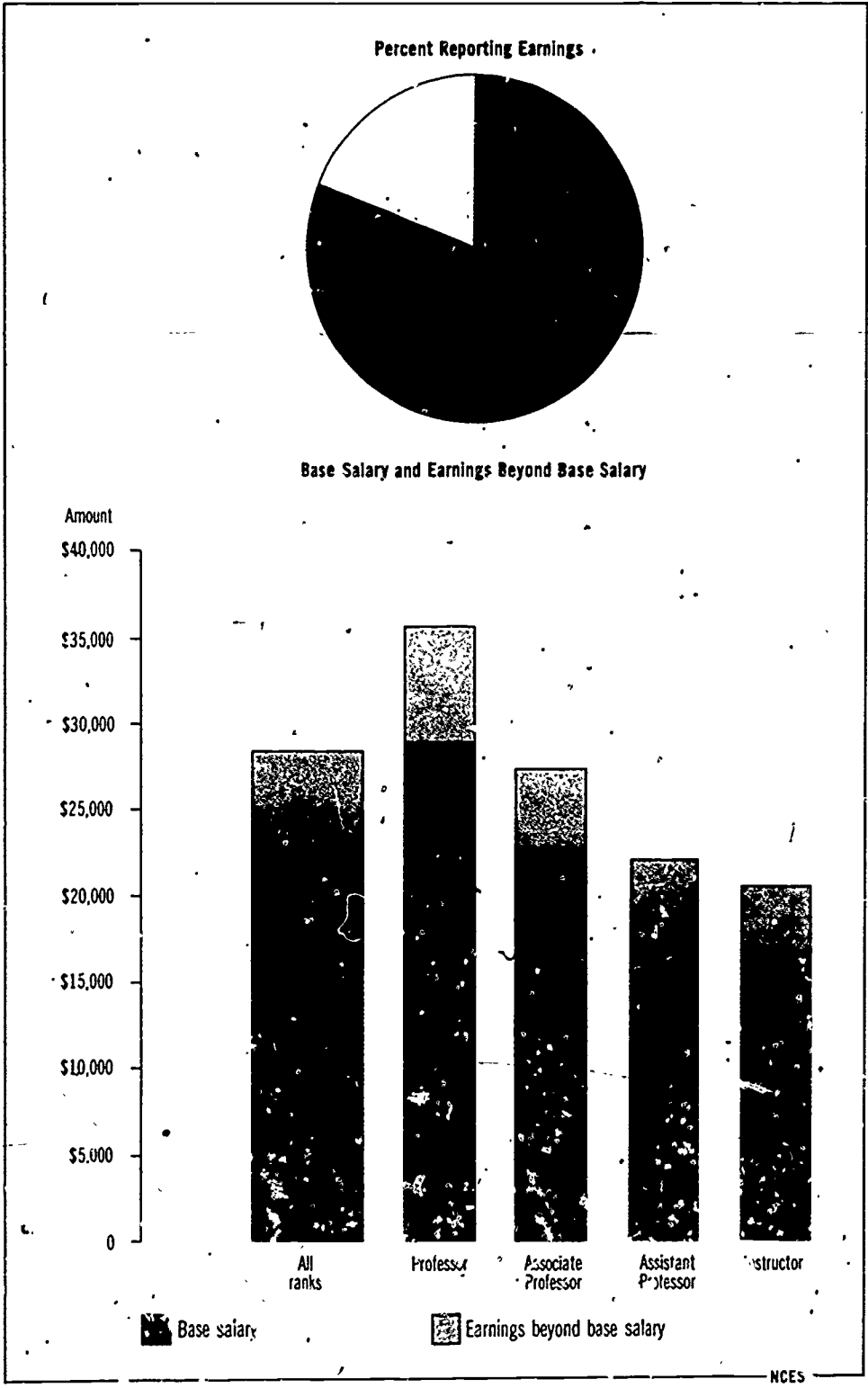
<sup>1</sup> Does not include data for institutions without academic ranks, law schools, medical schools, proprietary institutions, and colleges with enrollment under 500.

NOTE: The survey's estimates are based on data obtained directly from approximately 2,400 persons in a sample of 4,800 full-time faculty members. Statistical confidence limit for earnings estimates is  $\pm 3$  percent.

SOURCE: *The Chronicle of Higher Education*, November 17, 1980, from a survey designed and conducted by Minter Associates, Inc.

**Chart 3.25**  
**Faculty Earnings Beyond the Base Salary**

Eighty percent of faculty members supplemented their salaries by an average of \$4,811, or nearly 22 percent of their average base salary.



**Table 3.26**

**Average annual salaries<sup>1</sup> for faculty members on 9- and 10-month contracts, by academic rank and discipline group: 1980**

Discipline group	All ranks	Professor	Associate professor	Assistant professor
Arts, fine and applied	\$21,942	\$27,979	\$22,846	\$16,770
Business and economics	24,924	30,349	25,872	20,737
Engineering and computer science	26,601	31,305	24,769	21,634
Humanities, languages, <sup>a</sup> literature and communications	22,847	29,108	21,112	17,724
Physical education	20,850	27,566	22,196	16,291
Science and mathematics	24,451	28,570	22,650	18,705
Social sciences	24,377	29,606	22,434	18,140
Vocational education home economics nursing and health	20,550	(2)	21,909	18,257

<sup>1</sup> Estimated mean base salary. Does not include additional earnings or fringe benefits. Does not include data for institutions without academic ranks, law schools, medical schools, proprietary institutions, and colleges with enrollment under 500.

<sup>2</sup> Too little data for reliable estimate.

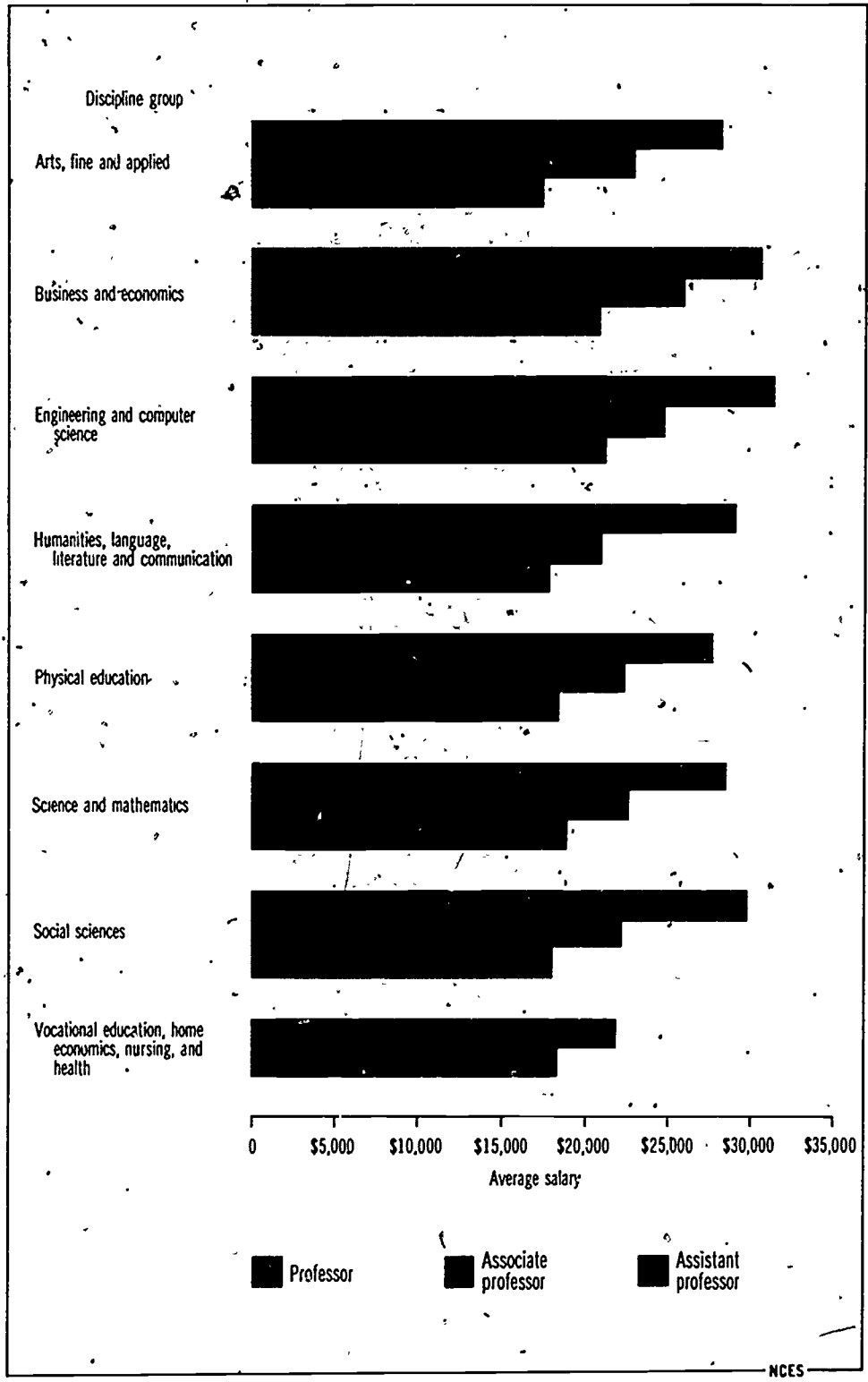
NOTE. The survey's salary estimates for 1980-81 are based on data obtained directly from approximately 2,400 persons in a sample of 4,800 full-time faculty members. Statistical confidence limit for earnings estimate is  $\pm 2$  percent.

SOURCE. *The Chronicle of Higher Education*, November 7, 1980, from a survey designed and conducted by Minter Associates, Inc.



**Chart 3.26**  
**Average Faculty Salaries, by Academic Rank and Discipline Group**

Faculty members teaching in engineering and computer science, and business and economics disciplines earned higher average salaries than those teaching in other disciplines.



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# The Condition of Education

## II Selected Topics in Education

Vocational education is an integral part of American education. Intended to prepare persons for entry into occupations, its goals are consistent with the more generally stated aims of formal education to prepare persons for meaningful and productive lives. Vocational education both complements and builds upon the basic and applied skills emphasized in the early years of formal schooling.

As American education expanded to accommodate society's changing needs for trained manpower, the important role of vocational education was apparent. At the Federal level, the Smith-Hughes Act of 1917 was one of the early programs of aid to States for the purpose of education. The act, which made possible the provision of vocational education through support of facilities and programs, is regarded now as a landmark step in the support of education. It both affirmed the value of vocational education and established a program of Federal support to meet particular educational objectives. The passage of the Vocational Education Act in 1963 initiated more recent efforts to expand and improve vocational education. The act created a permanent authority for Federal assistance to the States to fund types of job training for youth and adults through the schools.

This chapter examines vocational education as it is offered by the formal education system and related institutions. The two sections consider providers and participants. The scope of programs and condition of institutions offering them are reviewed in an institutional perspective. Participants are studied to assess the ability of the network of vocational education to meet its goal in serving the needs of a diverse clientele. Both participant characteristics and employment outcomes are considered.

### **Institutional Perspective**

Vocational education is offered in many settings. While historically the single largest provider has been the traditional educational system providing instruction at the secondary level, other educational institutions offering general or academic instruction are major providers also. Postsecondary institutions are particularly important in considering how successfully vocational education provides specific skills for job entry. In addition, a number of institutions outside of the traditional, formal educational system exist for the express intent of providing job skills, in many cases in highly specialized fields of occupational areas. An examination of those institutions by level and type conveys the diversity of instructional environments that characterize the vocational education component of American education.

Of the 27,753 provider institutions offering vocational programs in 1978-79, approximately two-thirds were at the secondary level (entry 4.1). The largest single type of provider, public comprehensive and vocational high schools, made up more than half of the total, with 15,729 schools. There were almost one-tenth as many public area vocational centers. These 1,395 institutions provided instruction in vocational education on a shared-time basis to students from throughout a school system or region. Among private secondary schools, 586 were identified as offering vocational programs.

The second largest type of provider institution was private noncollegiate postsecondary schools (often referred to as proprietary schools although many are nonprofit institutions). The 6,813 schools in this category made it less than half the size of the largest group. More than 60 percent of these schools were very small, with total enrollments of 100 or fewer students. A sizable share of the Nation's colleges and universities also offered vocational training at the postsecondary level. Of the 1,211 2-year institutions, almost all (1,135) offered vocational programs. Among 4-year institutions, one-third, or 647, offered vocational programs. The 553 State correctional facilities also provided many types of programs.

The schools making up this universe of vocational education providers included institutions offering programs administered under the Vocational Education Act (VEA) as well as others outside the jurisdiction and scope of the Act. All of those institutions were technically eligible to receive Federal funds. Nevertheless, State policy, institutional choice, or other reasons caused approximately one institution in three to receive no financial assistance under the VEA. Coverage at the secondary level was most complete, with all public comprehensive and vocational high schools and the public area vocational centers receiving aid. Private secondary schools were not included.

At the postsecondary level, the receipt of Federal funds was variable depending on the type of institution in each category. It is estimated that over three-fourths of the 2-year institutions of higher education offered VEA-administered programs. Smaller shares of the public noncollegiate schools and correctional facilities had programs covered by State plans of vocational education. A very small share of the 4-year institutions of higher education was included in State plans, only about 5 percent, while virtually none of the private noncollegiate postsecondary schools or correspondence schools was included.

Institutions offering vocational programs enrolled close to 20 million vocational students in 1978 (entry 4.2). The 19,563,175 vocational enrollments reported by secondary and postsecondary schools were divided between the two levels in shares of approximately two-thirds secondary and one-third postsecondary (65 percent and 35 percent, respectively). The division of enrollment by levels was close to the division of institutions, which was 64 percent secondary and 36 percent postsecondary.

However, the distribution of enrollments among the provider institutions differed from the distribution of numbers of institutions. Size differences among the differing types of institutions were responsible for these variations. At the secondary level, the public secondary schools, area centers, and secondary level adult programs accounted for virtually all secondary vocational enrollments; less than a single percentage point of these enrollments were in private schools. Distribution of enrollments at the postsecondary levels departed markedly from the distribution of institutions. The 2-year institutions of higher education accounted for by far the largest single portion of the postsecondary enrollments, enrolling 65 percent of all postsecondary students while constituting only 11 percent of all postsecondary institutions. The remaining 35 percent of postsecondary enrollments were located in the remaining 5 categories of institutions, with private noncollegiate schools enrolling the second largest share, 15 percent of postsecondary students, or 997,196 students.

Not all vocational enrollments were in programs which are administered under the VEA, as amended. Vocational programs in most privately controlled institutions are excluded from coverage in the State Plans for Vocational Education required by the VEA, as are many other programs for reasons ranging from lack of State approval to State policy or jurisdictional anomalies. Approximately 88 percent of vocational students cited earlier were enrolled in programs administered under the VEA in 1978-79.

It is not possible to determine the precise proportions of the enrollments from each type of provider which were administered under the VEA. It appears, however, that virtually all public secondary programs are included in State Plans, while almost all private programs at the secondary level are excluded. At the postsecondary level, it is estimated that almost 80 percent of the vocational students in public non-collegiate postsecondary schools and almost 90 percent of similar students at 2-year institutions of higher education were enrolled in programs administered under the VEA. An estimated 30 percent of the vocational enrollments in State correctional facilities and 5 percent of the enrollments in 2-year vocational programs at 4-year institutions of higher education were included in State Plans. Virtually all private noncollegiate and correspondence school enrollments were excluded.

Vocational education programs offered under the Vocational Education Act are traditionally grouped into nine program areas. The areas used to categorize offerings are:

- agriculture
- distribution
- health
- consumer and homemaking
- occupational home economics
- industrial arts
- office occupations
- technical
- trade and industrial

These program areas provide a basis for reviewing characteristics of students and permit the examination of policy issues related to educational access and labor market distribution. Because of the intentionally close relationship between enrollments and job entry in these fields, vocational education is a focal point for facilitating entry of minorities and females into the labor market, particularly into those areas where their participation has historically been limited.

In 1978-79 VEA programs enrolled 17,268,042 students at all levels (entry 4.3). The three largest program areas, all close in size, were consumer and homemaking, office occupations, and trade and industrial. The two smallest areas of reported enrollments were technical and occupational home economics.

The order of program areas by enrollment size differed markedly for various levels of instruction, demonstrating the need for an enrollment picture by level to describe adequately the character of vocational education. The five instructional levels—below grade 11, grades 11-12, postsecondary, adult (long-term), and adult (short-term)—are intended to differentiate among both the level and the nature of instructional opportunities. At grades 11 and 12, consumer and homemaking and office occupations were the largest areas, accounting for 50 percent of the total enrollments. Trade and industrial was the third largest program area at these grade levels, with 18 percent of the enrollments. The fewest enrollments were in technical programs, which accounted for less than one percent of the total.

At the postsecondary level the comparative enrollment patterns were totally different. Office occupations remained one of the largest areas, but consumer and homemaking became one of the smallest. Trade and industrial continued to account for a large share of the enrollments with 20 percent of the total. Substantial increases in percentage of enrollments were characteristic of distribution, health, office occupations, and technical program areas. Decreases in percentage of enrollments were evident in agriculture, consumer and homemaking, and industrial arts programs.

Adult enrollments are reported using two categories: short-term adults—adults enrolled in programs of under 500 contact hours duration—and long-term adults. Comparisons of enrollment profiles by program areas underscore fundamental differences in these two enrollment categories. Trade and industrial had the largest enrollment for both adult categories. But it made up only 30 percent of short-term adult enrollments, whereas it represented 44 percent of long-term adult enrollments. Consumer and homemaking reemerged as a substantial area for short-term adult instruction, with 22 percent of total short-term enrollments.

The great differences in the size of program areas conceal important differences in their distributions of these areas among the various levels of instruction. Thus a complete picture of enrollments requires inspection of each program area and its enrollment distribution across levels as well as its distributions by level. Most program areas were characterized by enrollment concentrations at either the secondary or postsecondary levels. Three program areas were predominantly secondary (i.e., grade 12 or below): agriculture, consumer and homemaking, and industrial arts. For each of these areas, more than 70 percent of their enrollments were at the secondary level, with shares for the three reported as 72, 76 and 99 percent, respectively. Two other areas had majorities at the secondary level, though they are not as overwhelmingly secondary: occupational home economics, with 61 percent of enrollments and office occupations, with 59 percent of enrollments.

In contrast, instruction in some areas is usually offered after secondary school. Over 64 percent of technical enrollments were in postsecondary programs. If the three post-high-school categories—postsecondary, short-term, and long-term adult—are combined, then health shows a strong concentration at these levels, with nearly 85 percent of area enrollments in these three categories. A majority of trade and industrial enrollments also were reported at these three levels.

The program area differences noted earlier reflected differences in prerequisite requirements as well as in student intent in choosing vocational education instruction. The concept of occupationally specific enrollments permits these differences to be quantified. Occupationally specific programs are those programs offered at or above grade 11 which purport to impart entry level job skills for a specific gainful occupation. Excluded are all programs in industrial arts and consumer and homemaking areas, as well as prevocational, counseling and guidance, and cluster programs. By limiting consideration to occupationally specific enrollments, one can focus on those vocational students who would be expected to have the most immediate and planned impact on the gainful labor market.

Occupationally specific enrollments, which at all levels totaled 7,708,857 in 1978, accounted for 45 percent of all VEA enrollments. As might be expected given the profiles of enrollments across program areas at different levels, the shares of enrollments at each level that are occupationally specific also vary. Those differences are a consequence of the specificity or generality of an area, the range of the offerings that constitute the area, and its prerequisite requirements.

Smaller proportions of secondary enrollments met the conditions of being in occupationally specific programs than did postsecondary enrollments. None of the instruction below grade 11 was included, and just over half, 55 percent, of the enrollment in grades 11 and 12 was identified as occupationally specific. In sharp contrast, 92 percent of postsecondary enrollments were in occupationally specific programs. The difference between long-term and short-term adult enrollment classifications was again notable, as a substantial majority (88 percent) of long-term adult enrollments were occupationally specific compared with the slightly more than half (57 percent) of short-term adults which might be so classified.

The occupationally specific enrollments were also found in varying proportions by program areas. Enrollments in consumer and homemaking and industrial arts areas were excluded by definition. In the remaining areas, occupationally specific enrollments accounted for a range of enrollments, from a low of 50 percent for agriculture to a high of 88 percent for technical. Occupational home economics also had a low share of occupationally specific enrollments, only 57 percent of the program area enrollments.

Access to vocational education is obviously limited by the availability of facilities suitable for offering instructional programs. Construction funds appropriated under the VEA were intended to improve access to vocational education programs for rural populations. Data from area vocational education institutions showed that the VEA has been reasonably successful in achieving this objective. Fewer than 27 percent of the population lived in areas of under 100,000 persons in 1978 (entry 4.4). Yet over 60 percent of the secondary institutions (providing 56 percent of the secondary instructional stations) and 28 percent of the postsecondary institutions (providing 22 percent of the postsecondary instructional stations) served these populations in that year.

Rural students did not have access to the same diversity of institutions that urban students had, however. Vocational providers other than comprehensive high schools or area vocational centers were rarely found in towns of under 25,000 population except on a multi-town or regional basis (entry 4.5). At the secondary level, almost half of the specialized vocational high schools were located in either central cities (28 percent) or multi-town service areas (22 percent). Area vocational centers, which provide secondary level programs to many districts, also were concentrated in multi-town areas though a large proportion did serve towns or districts (29 percent).

Postsecondary schools, offering higher proportions of instruction in occupationally specific programs, were concentrated in multi-town service areas. Among the three types of postsecondary institutions for which location information was available, multi-town areas housed the largest single group each of area vocational schools (40 percent), technical institutes (49 percent) and community colleges (38 percent).

The condition of facilities is important in considering access to vocational education in the future. In terms of population served, facilities in the central city metropolitan areas were in the worst condition. Twenty-two percent of the facilities serving populations over 500,000 and 15 percent of the facilities serving populations between 100,000 and 500,000 needed major repair or replacement (entry 4.6). Recent construction of facilities in suburban and rural areas was reflected in the higher proportion (over 65 percent) of these facilities reported to be in good condition. Overall, access to programs and to instructional facilities appeared to be highly variable by type of area.



The heterogeneity of vocational education programs and institutions was not characteristic of instructional staff. Full-time vocational instructional staff positions in institutions offering five or more programs were predominantly filled by whites. Of the four types of schools for which profiles of staff by racial/ethnic designation and sex are available, comprehensive and vocational high schools in 1979 had the highest percentage of instructional staff who were members of minority groups (entry 4.7). A total of 14 percent of the full-time instructional staff were members of minority groups: 11.3 percent of the total were black, while American Indians/Alaskan Natives comprised 0.3 percent; Asian Americans or Pacific Islanders 0.7 percent; and Hispanics, 1.7 percent. Further scrutiny of racial/ethnic characteristics of vocational staff in comprehensive and vocational high schools suggests that minority staff were concentrated in certain instructional fields. More than 15 percent of the staff were minorities in the fields of occupational home economics, office occupations, and consumer and homemaking. Minorities held smaller percentages of the full-time instructional positions in area vocational centers. Postsecondary institutions showed similar profiles. In both area vocational schools and 2-year institutions of higher education, minority staff had their highest proportions, 9 percent or more of positions, in occupational home economics, consumer and homemaking, and industrial arts.

Instructional staff showed single sex concentrations in program areas at all types of schools. Males held substantial majorities of positions in the program areas of agriculture, distribution, technical, trade and industrial, and industrial arts (entry 4.8). Females held similarly sizable majorities of the instructional positions in the health, occupational home economics, office occupations, and consumer and homemaking program areas. A single exception to the pattern of female majorities was found in 2-year institutions of higher education staff teaching in the area of office occupations, where only 46 percent were female.

#### Student Characteristics and Outcomes

Considerable attention has been directed to assessing the opportunities vocational education provides for females and for racial and ethnic minorities. Enrollment patterns by sex and by racial/ethnic group give one measure of access not only to vocational training but, in many cases, to occupational opportunities as well. The distributions of enrollments in program areas by sex reveal the persistence of definitive patterns of single sex concentration by program area, although enrollments reflected progress from earlier years. Data on sex and racial/ethnic distributions of students are available for secondary and postsecondary institutions offering five or more vocational programs. With the exception of the distribution area, where total enrollments in 1979 were almost evenly divided, each program area displayed considerable imbalance (entry 4.9). The remaining program areas had between 75 and 90 percent of their enrollments comprised of one sex. Females were concentrated in health, consumer and homemaking, occupational home economics, and office occupations. Males were predominant in agriculture, industrial arts, technical, and trade and industrial areas.

Single-sex dominance in program area enrollments was persistent across school types. The patterns of dominance (more than 70 percent enrollments, usually much more, being of one sex) were maintained, however, with only two exceptions. Comprehensive and vocational high schools followed the traditional patterns. Area vocational centers showed a strong female majority (70 percent) in the distribution area, which has more balanced enrollments by sex in other school types and in total. Among postsecondary schools, area vocational schools followed the overall pattern, although 2-year institutions of higher education reported almost evenly divided enrollment in industrial arts (58 percent male, 41 percent female).

The persistence of patterns of single sex concentration by programs was echoed by enrollments of minorities. Minority enrollments in vocational education were generally concentrated in certain program areas. The predominantly female program areas of consumer and homemaking and occupational home economics had the largest share of total enrollments from minorities. Next in order of high minority enrollments was office occupations, also a traditionally female area. The trade and industrial area had the largest minority enrollment of those areas with male concentrations. Agriculture had the smallest share of minority enrollments of any program area.

These data make it possible to consider the extent to which minorities are receiving training that will permit them to enter particular occupational areas. If 20 percent is used as an average figure for minority representation in the population, minority enrollments were disproportionately large in the three traditionally female areas cited earlier, as well as in the trade and industrial area. They were proportionally under-represented in the agriculture and technical areas.

Enrollments by types of provider institutions showed considerable differences in the proportions of minorities. Comprehensive and vocational high schools, at the secondary level, had by far the highest proportion of total enrollments from minority groups, with 27 percent of all vocational students identified as minorities. Minority enrollments even at this type of school did vary widely across program areas, being highest (35 percent) in health and technical, lowest (18 percent) in agriculture. For eight of the nine areas, minority enrollments were more than 20 percent of the total. Area vocational centers, also secondary institutions, had a much smaller proportion of all enrollments from minority groups, 17 percent. For these schools, only distribution, consumer and homemaking, occupational home economics, and office occupations had minority enrollments comprising at least 20 percent of enrollments in these areas.

Postsecondary schools had smaller proportions of enrollments from minority groups than did comprehensive high schools. Area vocational schools enrolled on average 16 percent minorities and 2-year institutions of higher education enrolled 20 percent. Occupational home economics had the largest minority enrollment in area vocational schools (22 percent) and health had the largest minority enrollment in 2-year institutions of higher education (26 percent).

A review of the aspirations of students for vocational education reveals a remarkable constancy in students' perceived interest in vocational education. The relationship of student interest to demographic factors suggests the flexibility in student demand for vocational education and indicates where demographic and social factors may provide some stimulus for growth.

A consistent share of high school seniors aspired to attend technical or vocational schools. In 1980, 26.8 percent of all high school seniors expressed such a desire, down only slightly from 27.0 in 1976 (entry 4.10). Aspirations differed slightly between males and females, with more males than females hoping to secure vocational training, by a steady margin of about 5 percentage points. Racial groups differed from each other in aspirations, with blacks showing increasing interest in vocational education over time. In 1980, more blacks than whites were expressing hopes of vocational training. The only readily apparent regional difference in aspiration for vocational education was a lesser interest among seniors in the Northeast compared with other regions of the country. Differences of from 5 to 8 percentage points have consistently set this group apart from the others.

Students who participated in postsecondary vocational education displayed a serious intent to use their education. The experiences of students enrolled in noncollegiate postsecondary schools with occupational programs showed that education and work were combined for many students. Almost half of the students in these schools were already working (entry 4.11). The proportions of those working ranged from 33 to 69 percent depending on the program area, with the lowest proportion of those working while enrolled occurring in the home economics area and the highest being in the technical area. Of those not working, a larger share declared that they were currently looking for a job, again suggesting that much of postsecondary training is combined with work experience.

Stated work plans of students in noncollegiate schools indicated that nearly 10 percent of these students planned to continue at their present jobs after completing vocational education programs. From one program to the next, students differed markedly in plans to continue working in the same field; this finding probably reflects the fact that entry to some occupational areas requires appropriate education. The overall average of 10 percent of students intending to continue their employment varied across areas, with two areas showing considerable contrast. Whereas in distribution, more than a fourth planned to continue at a present job, in health, fewer than 5 percent cited an intention to do so. Yet more of the students in health than in distribution planned to go into the field in which they were training; the training in the health area appears to supply the necessary credentials for entry-level jobs.

Information on how job placement relates to program enrollments or completions is either not available or is not complete for all vocational education students. Still, the cumulative occupational and training experiences of young people offer considerable insight into how vocational education contributes to career opportunities. Longitudinal data documenting activities of young people more than seven years after high school permit comparisons of their post high school activities, including work and education. These comparisons can be made for groups defined by racial/ethnic background and sex as well as high school program.

Summaries of the educational attainment of young adults reflected differences in high school programs and in post high school work experience. More than 40 percent of the young people who had been in an academic program had completed college after seven and one-half years (entry 4.12). Smaller proportions of students who had been in general or vocational programs had completed college—12 percent and less than 4 percent, respectively. For those in academic programs in high school, a slightly higher proportion of females than males had earned such awards.

High proportions of vocational students entered the labor force soon after high school. However, labor force participation did not keep these students from continuing in school. More than 20 percent of students in vocational programs reported later that they had received at least some vocational training after high school; another portion of that group (over 18 percent) reported attending college. However, more than half of the students in vocational programs reported no further educational attendance or program completion. When this group is broken into subgroups based on sex and racial/ethnic characteristics, the proportions vary only slightly. For all of the subgroups, more than half did not pursue additional education in the seven and one-half years after completing high school. The slight differences in educational attainment between males and females, and between blacks and whites, were minimal compared to the great differences between students in different high school program areas.

The job status of working young adults reflected differences in their occupational and educational training. Clerical workers, craftsmen, and operatives accounted for a total of 58 percent of working young adults from high school vocational programs (entry 4.13). In comparison, 29 percent of those from academic programs held jobs in those categories. Clerical jobs comprised the largest single category for those young adults from general high school programs. Professional jobs were reported by higher proportions of young adults who had had academic programs in high school, 34 percent, compared with 14 percent of those from general programs and 8 percent of those from vocational programs, respectively.

Postsecondary vocational training was positively viewed by employees. Several aspects of job satisfaction were examined among employed young adults seven and one-half years out of high school (entry 4.14). On most aspects of job satisfaction, those who reported some postsecondary vocational training were more satisfied than those with no postsecondary education or those with some college but no vocational training. The adults with some postsecondary vocational training were exceeded only by those who had received bachelor's degrees in the proportions who declared themselves "very satisfied". More than one-fourth of those with postsecondary vocational training indicated that their jobs gave them an opportunity to use their education. While 34 percent of those with bachelor's degrees indicated similar opportunities, only 18 percent of those who had some college but no vocational training expressed the same opinions. In rating their jobs' importance and challenge, and the pride and respect attached to their work, as well as opportunities to develop skills, those young adults with vocational training also ranked above those in other categories, except for those with bachelor's degrees. In rating their present jobs as a whole, those with postsecondary vocational training were close to those with bachelor's degrees, 28 percent and 29 percent, respectively, in stating that they were "very satisfied". These ratings demonstrate that the intentionally close relationship between vocational training and jobs yields positive results in preparing persons for gainful occupations, both in skills and in orientation to the job demands and settings.

Table 4.1

Number of secondary and postsecondary institutions offering vocational education programs,  
by type of institution: 1978-79

Control and type of institution	Number	Percentage distribution
All institutions	27,753	100.0
Public comprehensive or vocational high schools	15,729	56.7
Public area vocational centers (secondary)	1,395	5.0
Private secondary schools	586	2.1
Public noncollegiate postsecondary institutions	812	2.9
Private noncollegiate postsecondary institutions	6,813	24.6
Correspondence schools	83	.3
2-year institutions of higher education	1,135	4.1
4-year institutions of higher education	647	2.3
State correctional facilities	553	2.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, *The Condition of Vocational Education: Review Edition, 1980*

**Chart 4.1  
Providers of Vocational Education**

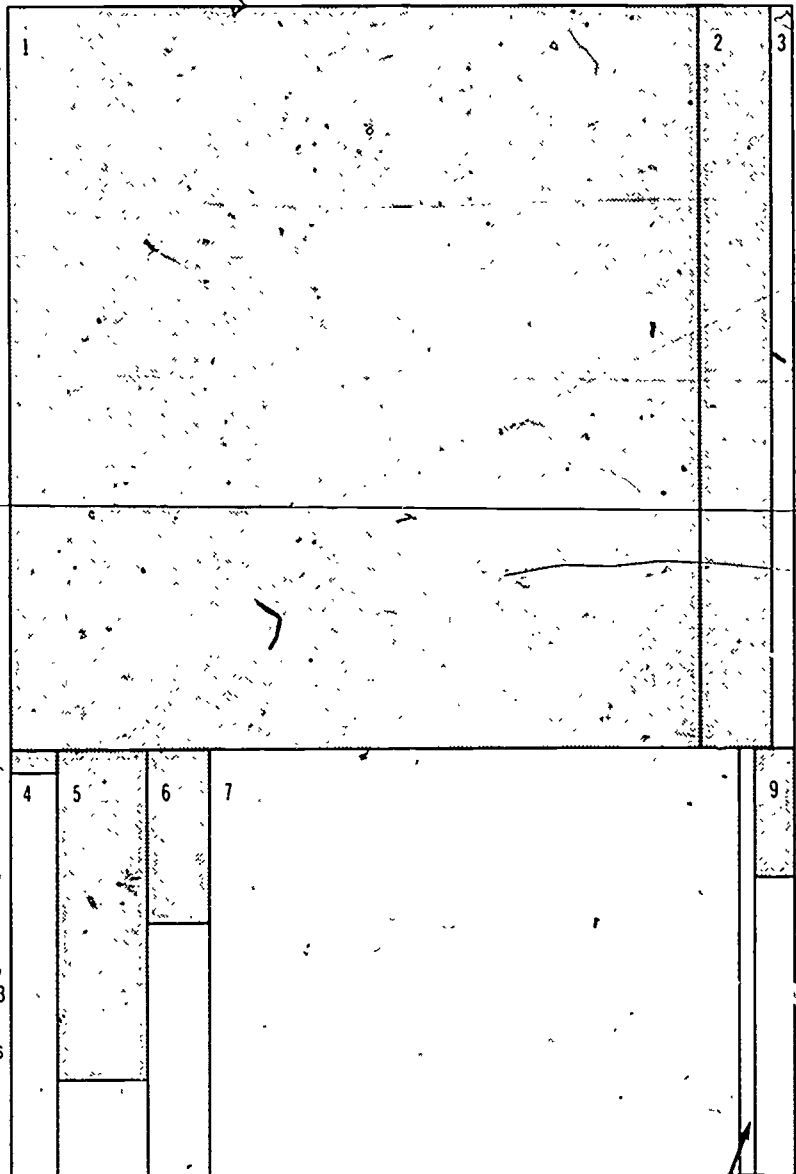
Almost two-thirds of the nearly 28,000 institutions offering vocational programs were at the secondary level. Virtually all of the secondary schools received federal funds under the Vocational Education Act (VEA), while more limited numbers of postsecondary institutions received VEA funds.

**Secondary**

- 1 Public comprehensive and vocational high schools. 15,729
- 2 Public area vocational centers 1 395
- 3 Private secondary schools 586

**Post-secondary**

- 4 4-year institutions of higher education 647
- 5 2-Year institutions of higher education 1,135
- 6 Public noncollegiate postsecondary schools 812
- 7 Private noncollegiate postsecondary schools 6,813
- 8 Correspondence schools 83
- 9 State correctional facilities 553



Providers included in State plans for vocational education (VEA)

NCES

**Table 4.2**  
**Enrollments in vocational education, by program area and provider: 1978**

Type of provider	Total					
	Number	Percentage distribution	Agriculture	Distribution	Health	Occupational home economics
Total	19,563,175	100.0	988,773	1,382,044	1,048,285	627,627
Total secondary	12,743,111	65.1	845,754	503,384	214,652	418,043
Public secondary schools <sup>1</sup>	12,721,142	65.0	845,754	503,384	214,652	418,043
Private secondary schools	21,969	.1	NA	NA	NA	NA
Total postsecondary	6,820,064	34.9	143,019	878,660	833,633	209,584
4-year institutions of higher education	311,634	1.6	11,577	28,925	59,986	20,108
2-year institutions of higher education	4,425,637	22.6	118,259	468,810	604,412	177,750
Public noncollegiate postsecondary schools	743,287	3.8	6,576	18,089	67,651	8,070
Private noncollegiate postsecondary schools	997,196	5.1	2,173	261,868	93,900	969
Correspondence schools	308,423	1.6	4,434	100,968	7,684	2,687
State correctional facilities	33,887	.2	NA	NA	NA	NA

	Office occupations	Technical	Trade and industrial	Consumer and homemaking	Industrial arts	Other
Total	4,014,436	737,360	3,956,547	3,758,020	1,684,746	1,018,430
Total secondary	2,367,187	41,767	2,093,432	3,539,621	1,678,872	1,018,430
Public secondary schools <sup>1</sup>	2,367,187	41,767	2,093,432	3,539,621	1,678,872	1,018,430
Private secondary schools	NA	NA	NA	NA	NA	NA
Total postsecondary	1,646,249	695,593	1,863,115	218,399	5,874	(3)
4-year institutions of higher education	78,306	48,779	63,953	0	0	0
2-year institutions of higher education	1,229,243	478,848	1,124,042	218,399	5,874	(3)
Public noncollegiate postsecondary schools	102,081	27,473	221,296	0	0	0
Private noncollegiate postsecondary schools	215,959	105,265	317,062	0	0	0
Correspondence schools	20,660	35,228	136,762	0	0	0
State correctional facilities	NA	NA	NA	NA	NA	NA

NA: Not available.

<sup>1</sup> Includes individuals enrolled in secondary level programs at adult facilities. Figures represent enrollments covered by the Vocational Education Act only.

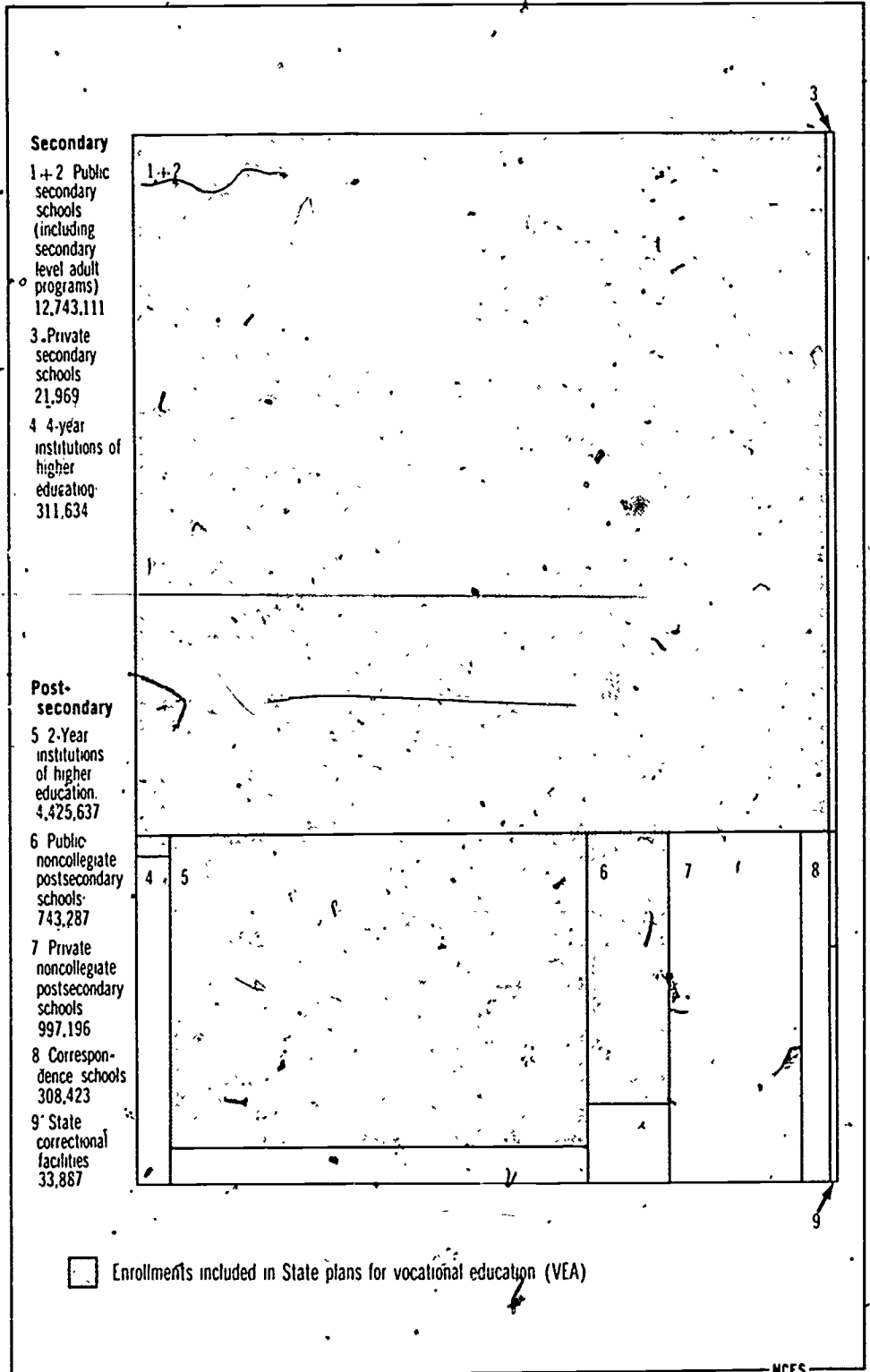
<sup>2</sup> Details across program areas do not add to total, because total includes enrollments for which program area counts are not available.

<sup>3</sup> Enrollment in the "other" category at the postsecondary level have been prorated to the other program areas.

SOURCE: U.S. Department of Education, National Center for Education Statistics, *The Condition of Vocational Education Review Edition, 1980.*

**Chart 4.2**  
**Enrollments in Vocational Education**

Nearly 20 million students enrolled in vocational programs in 1978. Approximately 88 percent of students were enrolled in programs administered under the Vocational Education Act.



Enrollments included in State plans for vocational education (VEA)

NCES



Table 4.3

Enrollments in vocational education programs (VEA) and occupationally specific vocational education programs, by program area and level: 1978-79

Program area	Total	Below grade 11	Grades 11-12	Postsecondary	Adult (long-term)	Adult (Short-term)
All programs	17,268,042	4,977,571	5,483,235	2,027,510	972,790	3,806,936
Agriculture	971,726	364,758	331,680	50,748	22,063	202,477
Distribution	942,057	66,210	303,663	231,963	57,065	283,156
Health	798,520	30,365	90,971	224,593	98,589	354,002
Consumer and homemaking	3,710,246	1,380,630	1,430,556	30,252	47,790	821,018
Occupational home economics	589,878	177,235	182,045	66,789	27,477	136,332
Industrial arts	1,683,902	1,114,672	551,280	1,309	25	16,616
Office occupations	3,469,134	728,713	1,328,475	658,605	204,586	548,755
Technical	484,076	8,987	18,784	310,727	41,497	104,081
Trade and industrial	3,436,089	460,108	989,325	404,867	430,848	1,150,941
Other	1,182,414	645,893	266,456	47,657	42,850	189,558
All occupationally specific programs	7,708,857	...	3,040,449	1,871,974	851,571	1,944,863
Agriculture	488,350	...	313,492	49,144	21,418	104,296
Distribution	776,014	...	289,301	222,193	56,189	208,331
Health	600,783	...	85,290	213,550	95,657	206,286
Occupational home economics	334,018	...	162,114	63,589	24,676	83,639
Office occupations	2,278,057	...	1,098,464	615,062	184,160	360,371
Technical	424,184	...	18,367	291,086	39,602	75,129
Trade and industrial	2,600,520	...	948,799	392,966	418,852	839,873
Other	206,931	...	124,622	24,354	11,017	46,938

NOTE. Occupationally specific enrollments include students above grade 10 enrolled in programs (except consumer and homemaking and industrial arts) which are designed to train individuals for specific occupations.

SOURCE. U.S. Department of Education, National Center for Education Statistics, *The Condition of Vocational Education Review Edition*, 1980.

**Chart 4.3**  
**Vocational Education Enrollments (VEA) by Program Area and Level**

Three of the nine vocational program areas accounted for more than 60 percent of enrollments in VEA programs. The postsecondary level had the highest proportion of occupationally specific enrollments.

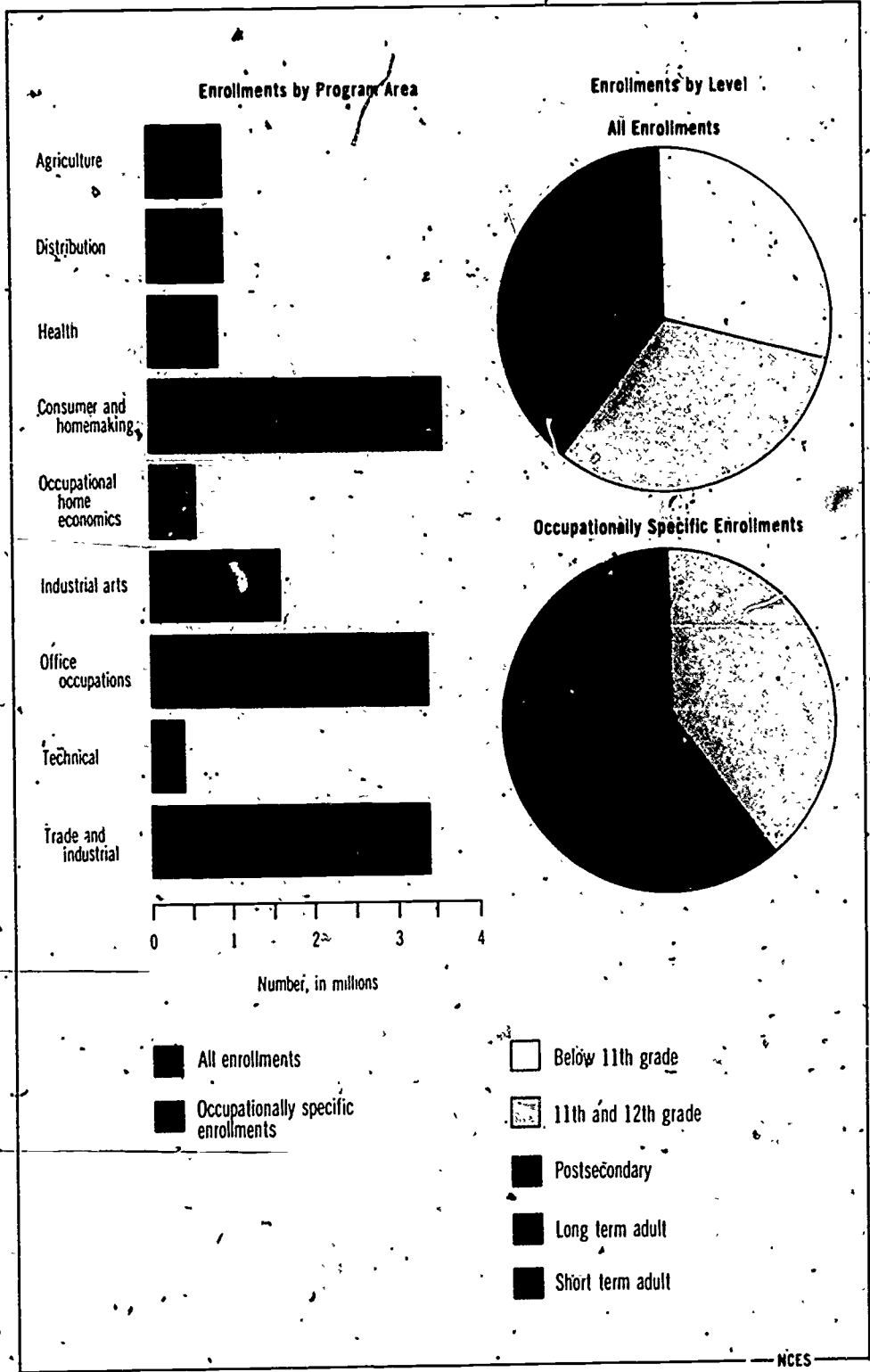


Table 4.4

Institutions and instructional stations compared with population by type of area, for secondary and postsecondary schools: 1977-78

Area	Population	Institutions		Institutional stations
	Percentage distribution	Number	Percentage distribution	Percentage distribution
			Secondary	
Total	100.0	5,568	100.0	100.0
Central city, metropolitan population over 500,000	22.8	453	8.1	10.6
Suburb, metropolitan population over 500,000	38.0	597	10.7	13.5
Central city, metropolitan population 100,000-500,000	8.9	368	6.6	8.2
Suburb, metropolitan population 100,000-500,000	3.6	277	5.0	6.1
City or town, population 25-100,000	3.1	958	17.3	21.4
Town or district population 0-25,000	23.6	2,402	43.2	34.5
Multi-town service area	NA	505	9.1	5.7
			Postsecondary	
Total	100.0	1,180	100.0	100.0
Central city, metropolitan population over 500,000	22.8	103	9.3	13.3
Suburb, metropolitan population over 500,000	38.0	110	10.0	10.5
Central city, metropolitan population 100,000-500,000	8.9	102	9.3	17.1
Suburb, metropolitan population 100,000-500,000	3.6	33	3.1	2.9
City or town, population 25-100,000	3.1	197	17.8	15.5
Town or district population 0-25,000	23.6	115	10.5	6.7
Multi-town service area	NA	440	40.0	34.0

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Planning, Budgeting and Evaluation, *National Survey of Vocational Education Systems and Facilities*, October 1978.

**Chart 4.4  
Population and Instructional Stations in Vocational Education Institutions  
Offering Five or More Programs**

While only 27 percent of the population live in areas of under 100,000 persons, 60 percent of the secondary schools offering 5 or more vocational programs were located in these areas.

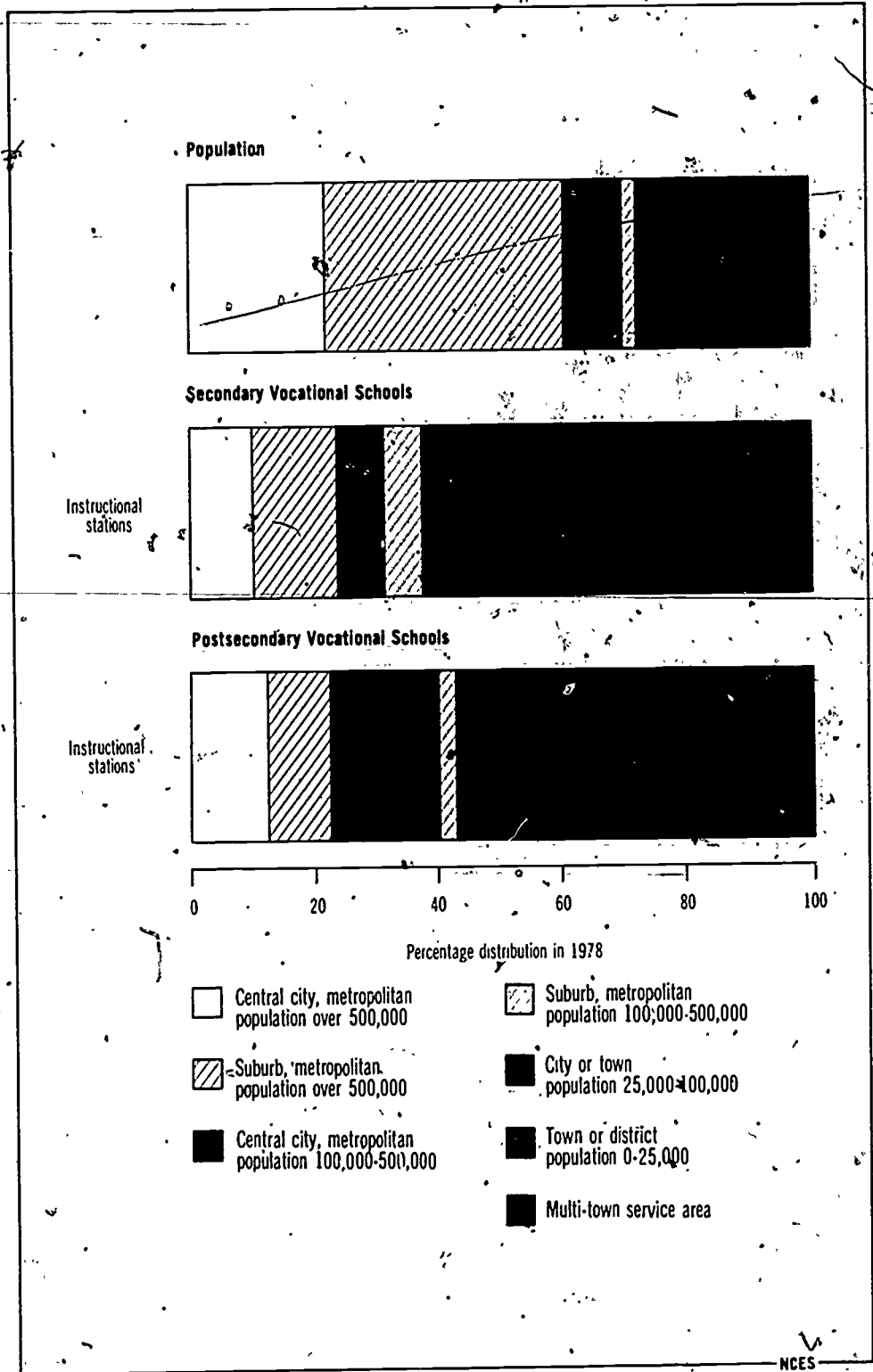


Table 4.5.

Schools with five or more vocational programs, by type of institution and area served: 1977-78

Type of area served	Institutional type						
	All schools	Comprehensive high school	Vocational high school	Area vocational center	Area vocational school	Technical institute	Community college
	Number of schools						
All areas	6,680	4,514	217	829	260	146	694
Central city, metropolitan area population over 500,000	556	363	60	30	12	12	79
Suburb, metropolitan area population over 500,000	707	531	6	60	12	6	92
Central city, metropolitan area population 100,000 to 500,000	470	306	25	37	22	20	60
Suburb, metropolitan area population 100,000 to 500,000	310	226	17	34	25	4	24
City or town population 25,000 to 100,000	1,155	762	38	158	55	23	119
Town or district population under 25,000	2,517	2,135	23	244	49	10	56
Multi-town service area	945	191	48	266	105	71	264
	Percentage distribution						
All areas	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Central city, metropolitan area population over 500,000	8.3	8.0	27.6	3.6	4.6	8.2	11.4
Suburb, metropolitan area population over 500,000	10.6	11.8	2.8	7.2	4.6	4.1	13.3
Central city, metropolitan area population 100,000 to 500,000	7.1	6.8	11.5	4.5	8.5	13.7	8.6
Suburb, metropolitan area population 100,000 to 500,000	4.7	5.0	7.8	4.1	1.9	2.7	3.5
City or town population 25,000 to 100,000	17.3	16.9	17.5	19.1	21.2	15.8	17.1
Town or district population under 25,000	37.8	47.3	10.6	29.4	18.8	6.8	8.1
Multi-town service area	14.2	4.2	22.1	32.1	40.4	48.6	38.0

SOURCE U.S. Department of Health, Education, and Welfare, Office of Planning, Budgeting and Evaluation, *National Study of Vocational Education Systems and Facilities*, October 1978.

**Chart 4.5**

**Institutions with Five or More Vocational Programs by Type and Area Served**

Postsecondary institutions offering vocational programs were predominantly located in multi-town service areas.

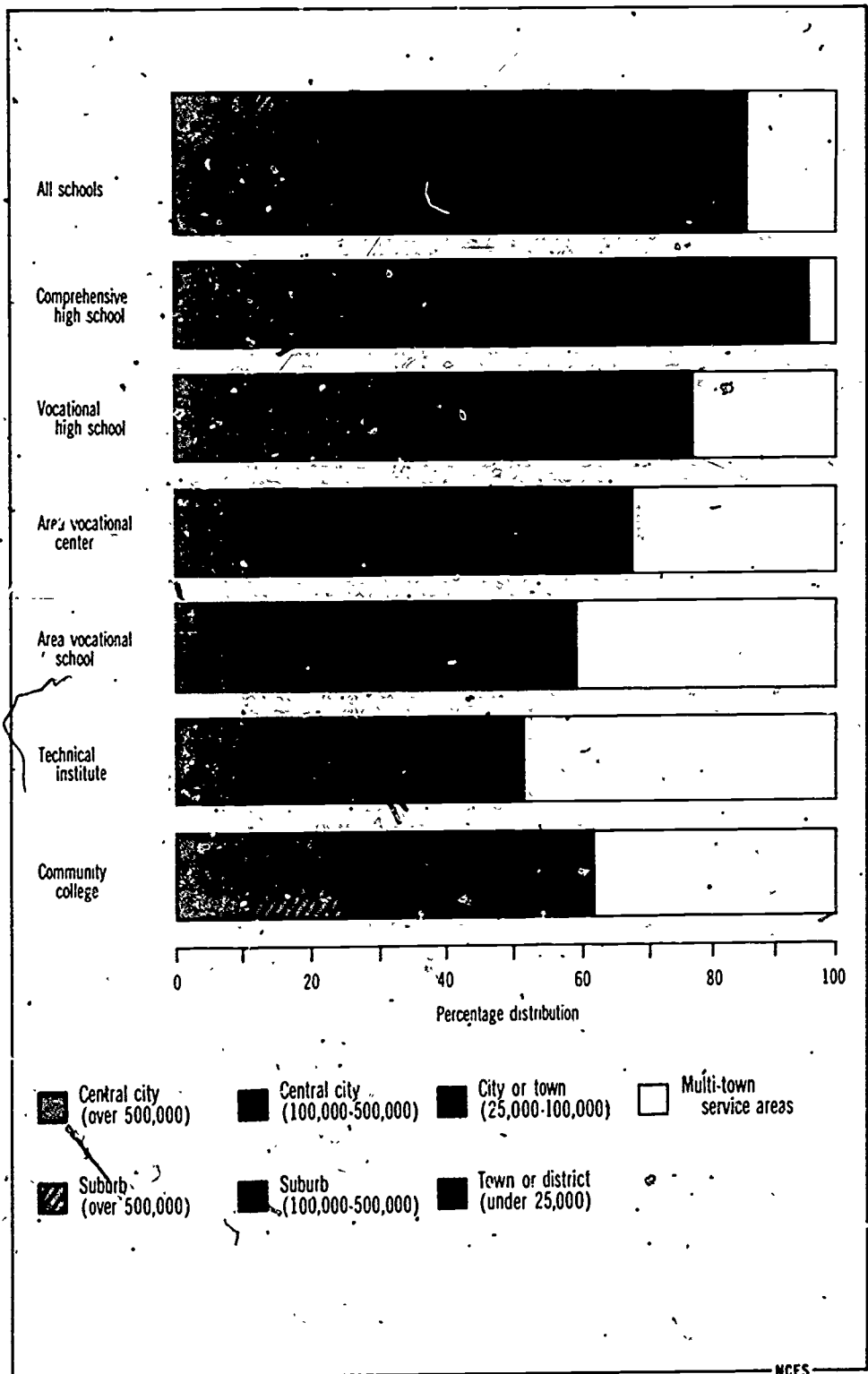


Table 4.6

Institutions and their reported condition, by type of area served: 1977-78

Type of area served	Number of institutions	Reported condition				
		Total	In good condition	In need of minor maintenance	In need of major maintenance	In need of replacement
			Percentage distribution			
All areas	6,660	100	64	24	7	5
Central city, metropolitan population over 500,000	556	100	40	36	13	9
Suburb, metropolitan population over 500,000	707	100	65	26	7	2
Central city, metropolitan population 100,000 to 500,000	470	100	55	30	10	5
Suburb, metropolitan population 100,000 to 500,000	310	100	69	24	4	3
City or town population 25,000 to 100,000	1,155	100	66	23	6	5
Town or district population under 25,000	2,517	100	66	23	5	6
Multi-town service area	945	100	70	20	4	6

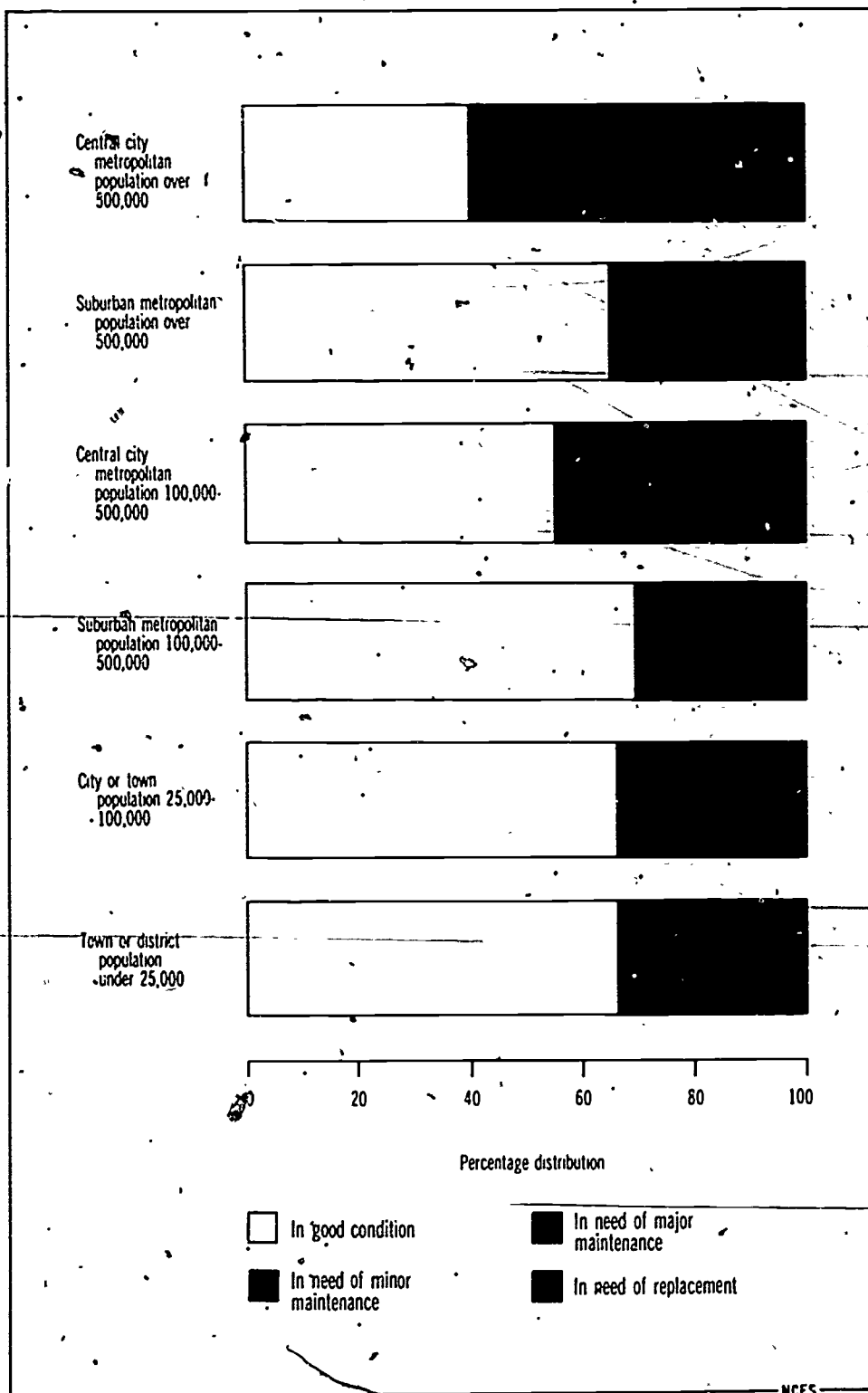
NOTE. Figures in this table are estimated from the responses of 3,984 institutions (approximately 60 percent). No evidence was found to suggest that institutions not responding to the question on which this table is based differ significantly from responding institutions.

SOURCE. U.S. Department of Health, Education, and Welfare, Office of Planning, Budgeting and Evaluation, *National Study of Vocational Education Systems and Facilities*, October 1978.

Chart 4.6

Reported Condition of Vocational Education Institutions by Type of Area Served

The condition of vocational education facilities is worse in central cities than in rural areas.





**Table 4.7**

**Distribution of full-time instructional staff in institutions offering five or more vocational education programs by type of institution and program area and by racial/ethnic group: Fall 1979**

Type of institution and program area	Total	Racial/ethnic group				
		White <sup>1</sup>	Black <sup>1</sup>	Hispanic	Asian American or Pacific Islander	American Indian/Alaskan Natives
Percentage distribution						
Comprehensive and vocational high schools	100.0	86.0	11.3	1.7	0.7	0.3
Agriculture	100.0	89.7	8.2	1.1	.6	.4
Distribution	100.0	91.5	6.5	1.4	.4	.2
Health	100.0	88.4	9.7	1.5	.3	.1
Occupational home economics	100.0	82.4	15.2	1.4	.7	.3
Office occupations	100.0	84.2	13.1	1.4	1.0	.3
Technical	100.0	90.5	5.1	2.0	2.0	.4
Trade and industrial	100.0	86.7	10.0	2.4	.6	.3
Consumer and homemaking	100.0	83.5	14.0	1.4	.9	.2
Industrial arts	100.0	87.1	10.3	1.8	.5	.3
Area vocational centers (secondary)	100.0	93.2	5.4	0.9	0.2	0.3
Agriculture	100.0	96.0	3.1	.3	.4	.2
Distribution	100.0	96.4	1.9	1.0	.1	.6
Health	100.0	92.9	5.7	.5	.5	.4
Occupational home economics	100.0	91.4	7.8	.6	.1	.1
Office occupations	100.0	89.2	8.6	1.4	.3	.5
Technical	100.0	95.7	2.6	1.4	.2	.1
Trade and industrial	100.0	93.7	4.9	.9	.2	.3
Consumer and homemaking	100.0	89.2	9.6	.6	.6	.0
Industrial arts	100.0	94.2	5.8	.0	.0	.0
Area vocational schools (postsecondary)	100.0	92.8	5.9	0.6	0.3	0.4
Agriculture	100.0	98.4	.0	.0	.4	1.2
Distribution	100.0	96.2	1.4	1.3	1.1	.0
Health	100.0	93.7	5.8	.1	.3	.1
Occupational home economics	100.0	83.1	13.3	2.4	1.2	.0
Office occupations	100.0	92.3	7.1	.4	.1	.1
Technical	100.0	97.0	1.9	.5	.4	.2
Trade and industrial	100.0	91.2	7.2	.8	.1	.7
Consumer and homemaking	100.0	83.9	16.1	.0	.0	.0
Industrial arts	100.0	81.8	18.2	.0	.0	.0
Community colleges	100.0	92.5	4.1	1.8	1.2	0.4
Agriculture	100.0	97.3	.7	1.0	.6	.4
Distribution	100.0	96.0	.7	1.0	.6	.4
Health	100.0	91.9	1.6	1.3	.8	.3
Occupational home economics	100.0	90.0	5.2	1.4	1.2	.3
Office occupations	100.0	91.3	6.0	1.9	1.0	.2
Technical	100.0	94.3	5.5	1.4	1.4	.4
Trade and industrial	100.0	91.8	3.6	2.9	1.2	.5
Consumer and homemaking	100.0	89.6	6.3	2.3	1.4	.4
Industrial arts	100.0	86.8	8.7	2.7	1.8	.0

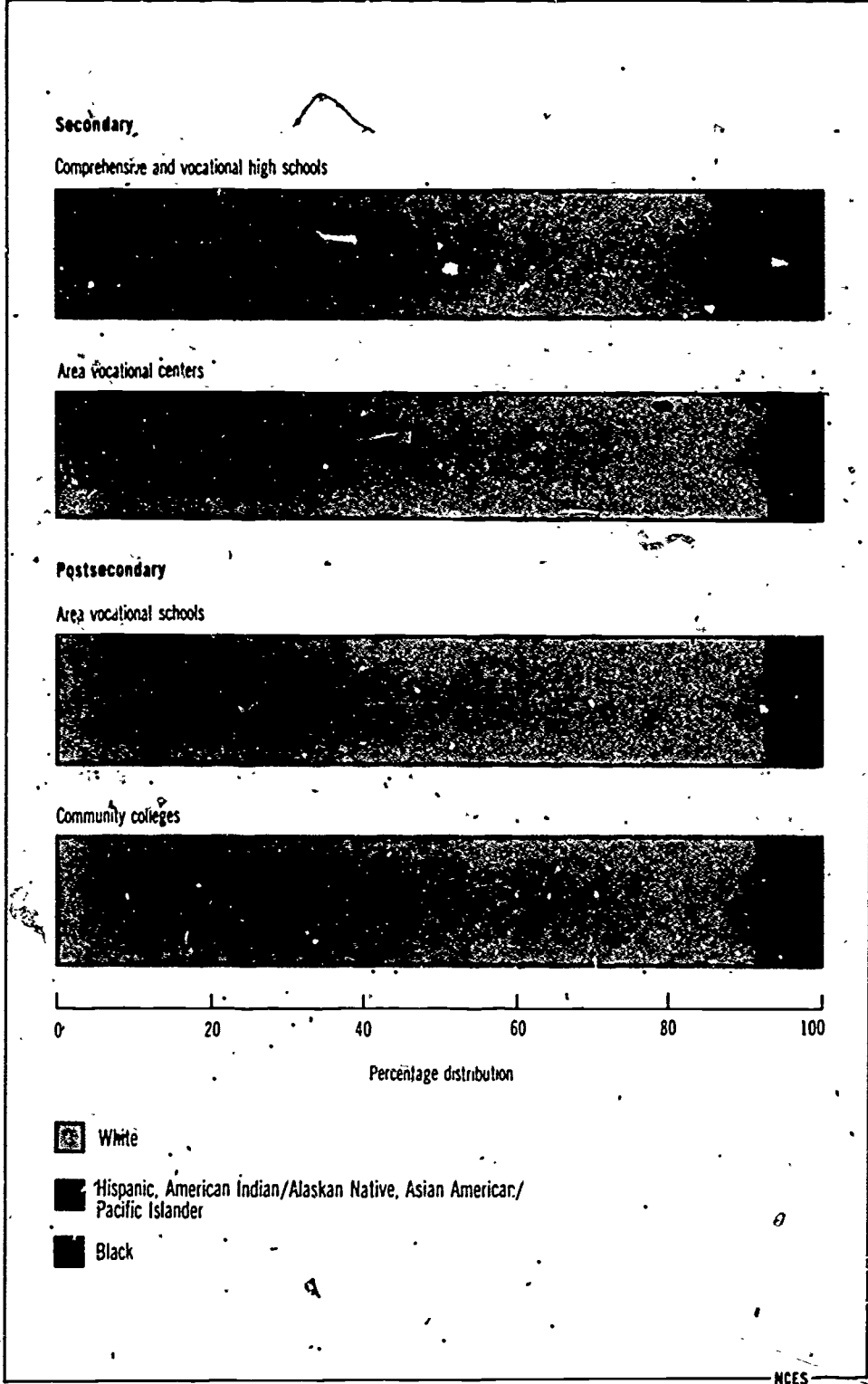
<sup>1</sup> Non-Hispanic.

NOTE: Figures are based on full-time staff at institutions with five or more vocational programs only. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

**Chart 4.7**  
**Racial/Ethnic Distribution of Instructional Staff in Institutions Offering**  
**Five or More Vocational Education Programs**

Minorities had the highest representation among full-time vocational instructional staff in comprehensive and vocational high schools, where they were 14 percent of the total.



NCES

**Table 4.8**  
**Distribution of full-time instructional staff in institutions offering five or more**  
**vocational education programs, by sex: Fall 1979**

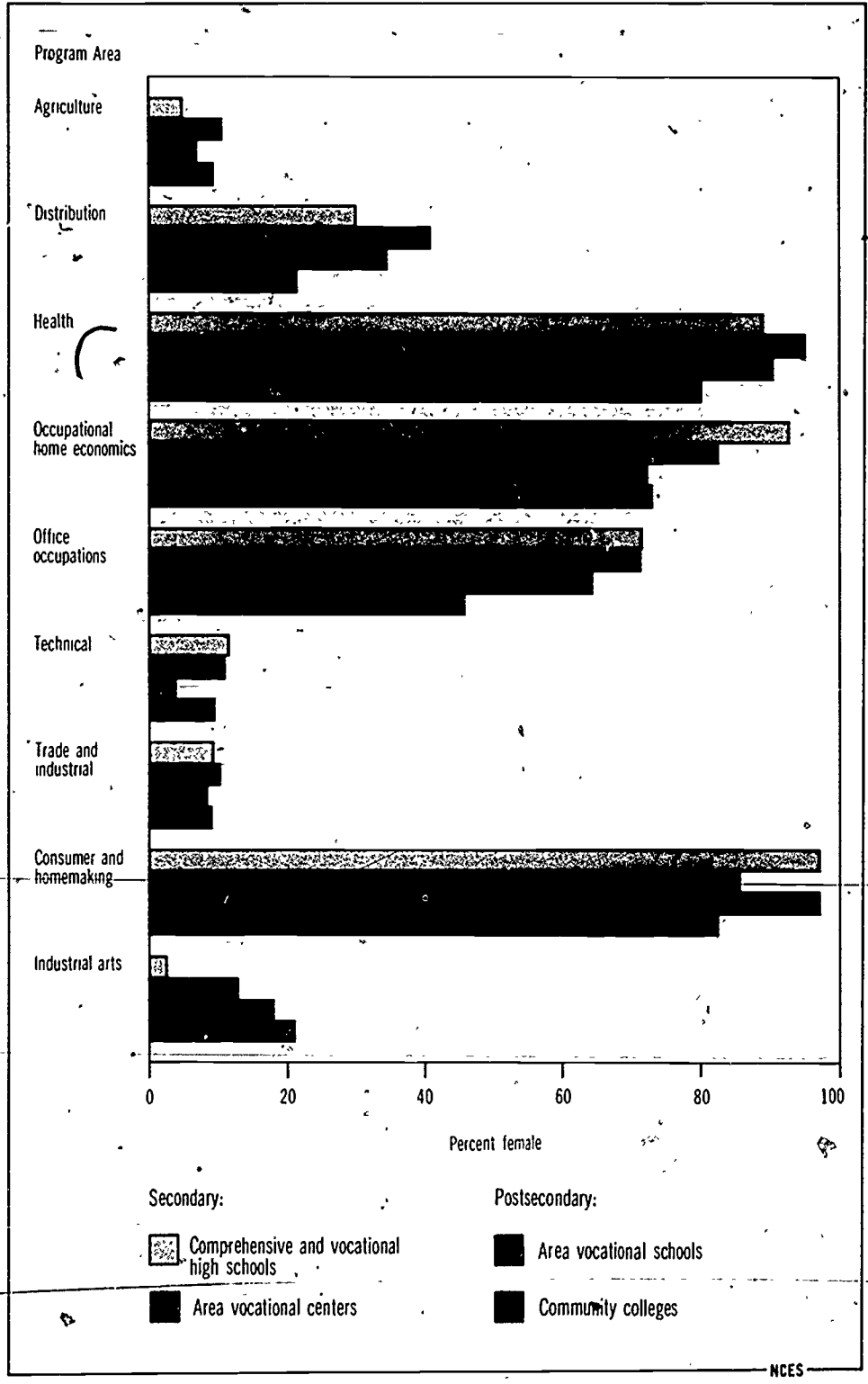
Type of institution and program area	Total	Sex	
		Male	Female
Comprehensive and vocational high schools	100.0	53.5	46.5
Agriculture	100.0	95.4	4.6
Distribution	100.0	70.1	29.9
Health	100.0	10.8	89.2
Occupational home economics	100.0	6.4	93.6
Office occupations	100.0	27.3	72.7
Technical	100.0	87.6	12.4
Trade and industrial	100.0	91.0	9.0
Consumer and homemaking	100.0	3.1	96.9
Industrial arts	100.0	97.1	2.9
Area vocational centers (secondary)	100.0	67.2	32.8
Agriculture	100.0	89.1	10.9
Distribution	100.0	59.3	40.7
Health	100.0	3.9	96.1
Occupational home economics	100.0	17.1	82.9
Office occupations	100.0	27.4	72.6
Technical	100.0	88.5	11.5
Trade and industrial	100.0	89.7	10.3
Consumer and homemaking	100.0	14.2	85.8
Industrial arts	100.0	86.9	13.1
Area vocational schools (postsecondary)	100.0	68.1	31.9
Agriculture	100.0	92.3	7.7
Distribution	100.0	65.2	34.8
Health	100.0	8.7	91.3
Occupational home economics	100.0	27.7	72.3
Office occupations	100.0	35.7	64.3
Technical	100.0	96.8	3.2
Trade and industrial	100.0	92.0	8.0
Consumer and homemaking	100.0	3.2	96.8
Industrial arts	100.0	81.8	18.2
Community colleges	100.0	63.1	36.9
Agriculture	100.0	90.7	9.3
Distribution	100.0	78.2	21.8
Health	100.0	19.9	80.1
Occupational home economics	100.0	17.4	82.6
Office occupations	100.0	54.1	45.9
Technical	100.0	90.6	9.4
Trade and industrial	100.0	91.1	8.9
Consumer and homemaking	100.0	16.5	83.5
Industrial arts	100.0	79.0	21.0

NOTE: Figures are based on full-time staff at institutions with five or more vocational programs only. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey, preliminary data.

**Chart 4.8**  
**Female Full-time Instructional Staff by Program-Area in Institutions**  
**Offering Five or More Vocational Education Programs**

Instructional staffing for vocational programs showed strong single-sex bias in almost all program areas and at all school types.



**Table 4.9**  
**Distribution of vocational students in institutions offering five or more vocational education programs, by type of institution and program area and by sex and racial/ethnic group: Fall 1979**

Type of institution and program area	Total	Racial/ethnic group and sex <sup>1</sup>									
		White <sup>1</sup>		Black <sup>1</sup>		Hispanic		Asian American or Pacific Islander		American Indian/Alaskan Native	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
		Percentage distributions									
Comprehensive and vocational high schools	100.0	34.9	37.7	8.2	10.4	2.9	3.4	0.6	0.8	0.6	0.6
Agriculture	100.0	68.0	13.6	11.2	2.0	1.9	.7	.4	.2	1.6	.3
Distribution	100.0	34.3	41.3	7.8	10.5	1.8	2.6	.4	.6	.3	.4
Health	100.0	11.1	54.5	4.2	21.8	1.3	4.8	.2	.6	.3	1.2
Consumer and homemaking	100.0	13.5	54.9	5.6	17.8	1.3	4.3	.4	1.0	.5	.9
Occupational home economics	100.0	11.6	55.1	5.4	19.0	1.4	5.1	.2	.6	.3	1.1
Industrial arts	100.0	69.2	7.7	11.6	1.7	6.7	.9	1.0	.1	1.0	.1
Office occupations	100.0	17.6	55.7	4.2	12.6	1.5	5.5	.5	1.4	.3	.7
Technical	100.0	53.1	12.8	14.9	4.8	7.2	2.3	3.7	.6	.6	.1
Trade and industrial	100.0	61.8	9.8	15.5	3.3	6.2	1.1	.9	.1	1.1	.2
Area vocational centers (secondary)	100.0	51.4	32.3	5.3	5.0	2.1	2.2	0.4	0.4	0.5	0.4
Agriculture	100.0	63.4	25.7	5.3	1.3	1.8	1.1	.3	.1	.7	.2
Distribution	100.0	23.3	54.6	2.9	6.5	2.4	7.9	.4	.6	.5	1.0
Health	100.0	5.4	76.5	1.3	10.5	.6	3.8	.1	.7	.2	.9
Consumer and homemaking	100.0	13.0	62.5	3.1	19.0	.3	.7	.2	.7	.1	.2
Occupational home economics	100.0	13.9	63.2	3.3	14.9	.7	2.9	.1	.2	.1	.6
Industrial arts	100.0	77.8	9.2	8.1	1.6	2.4	.1	.7	(2)	.1	(2)
Office occupations	100.0	13.1	65.4	1.8	10.5	1.0	5.4	.2	1.6	.1	.8
Technical	100.0	65.3	23.4	6.4	2.2	1.5	.5	.2	.1	.3	.1
Trade and industrial	100.0	71.4	14.7	7.0	1.6	2.7	1.1	.4	.1	.7	.1
Area vocational schools (postsecondary)	100.0	45.4	38.5	6.5	6.2	1.1	0.8	0.5	0.3	0.5	0.4
Agriculture	100.0	70.0	27.4	6.6	4.4	.5	.3	.1	.0	.7	.1
Distribution	100.0	32.8	56.9	2.2	3.7	.6	1.2	.3	1.5	.3	.5
Health	100.0	10.5	74.9	.9	11.7	.1	1.3	(2)	.2	.1	.4
Consumer and homemaking	100.0	8.1	88.4	.1	3.2	.0	.1	.0	.1	(2)	.1
Occupational home economics	100.0	7.7	70.6	3.4	17.7	.1	.2	.1	.1	.0	.1
Industrial arts	100.0	74.8	23.3	.2	.5	.5	.7	.0	.0	.0	.0
Office occupations	100.0	15.3	65.4	1.8	14.1	.2	1.5	.2	.3	.1	1.0
Technical	100.0	76.6	9.6	8.8	1.8	1.2	.2	1.1	.2	.5	(2)
Trade and industrial	100.0	70.3	11.2	12.2	1.9	2.1	.4	.7	.1	.8	.1
Community colleges	100.0	39.5	39.9	4.9	5.9	3.0	2.9	1.6	1.3	0.5	0.5
Agriculture	100.0	60.8	29.9	2.3	.9	2.6	.8	.9	.4	1.1	.3
Distribution	100.0	41.1	61.8	3.7	3.7	2.9	2.6	1.8	1.4	.4	.4
Health	100.0	14.1	49.7	1.6	7.8	1.0	3.1	.4	1.4	.2	.7
Consumer and homemaking	100.0	28.2	59.5	.9	2.9	.9	5.1	.6	.3	.2	.6
Occupational home economics	100.0	11.5	64.0	1.9	12.3	.9	6.3	.4	1.6	.2	1.0
Industrial arts	100.0	44.7	30.9	6.5	7.4	4.3	1.4	1.6	.2	1.7	1.5
Office occupations	100.0	27.3	49.0	4.4	9.4	1.9	4.0	1.2	1.8	.3	.7
Technical	100.0	66.0	14.9	7.6	3.1	3.7	1.0	2.2	.5	.8	.2
Trade and industrial	100.0	58.2	18.6	7.8	2.5	6.3	1.8	2.8	.9	.9	.3

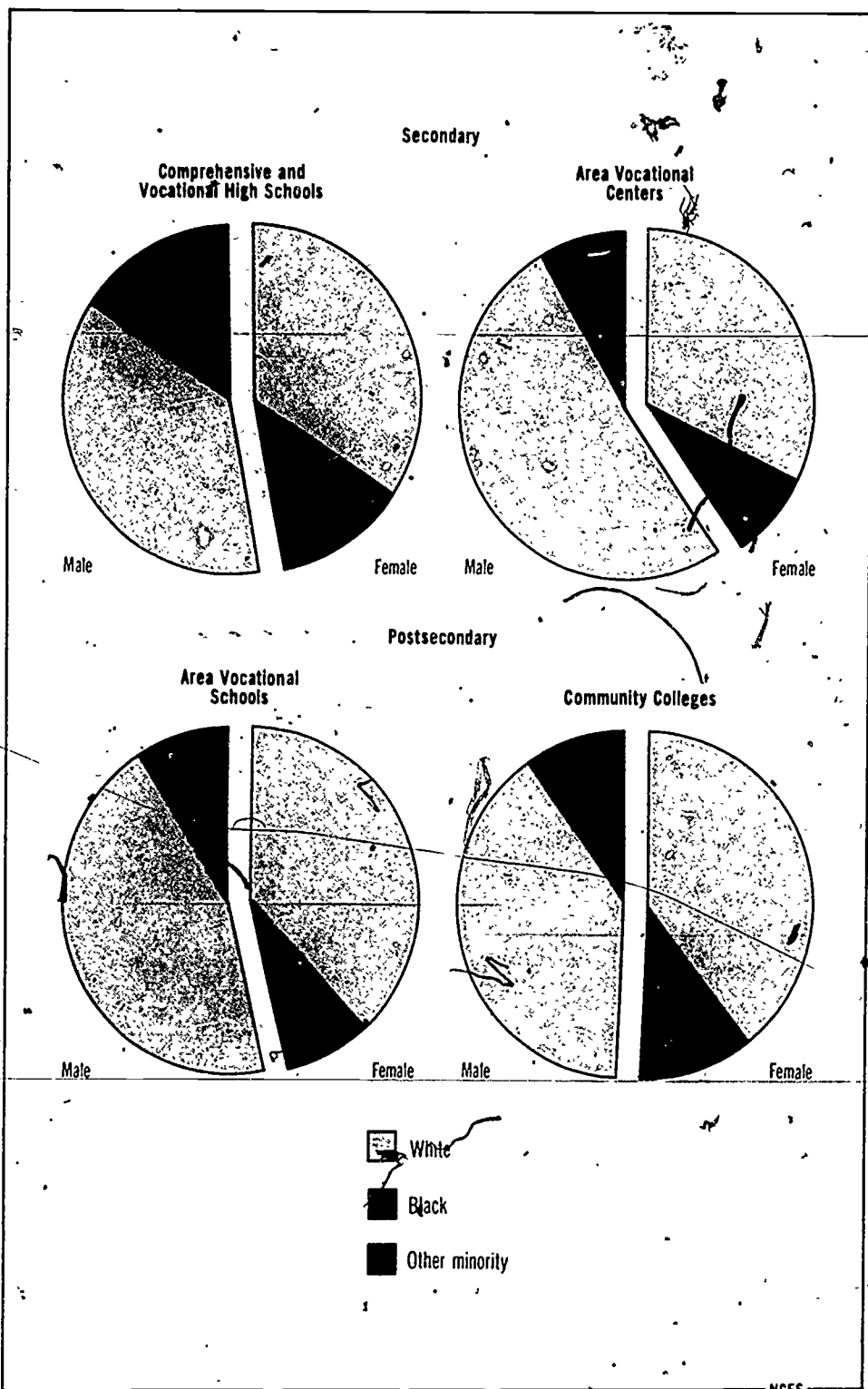
<sup>1</sup> Non-Hispanic  
<sup>2</sup> Less than 0.05 percent.

NOTE: Figures are based on enrollments at institutions with five or more vocational programs only. Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, Vocational Education Civil Rights Survey preliminary data

**Chart 4.9**  
**Distribution of Vocational Students by Racial/Ethnic Group and Sex**

More than one-fourth of the vocational students who attended comprehensive and vocational high schools were from minority groups. Minorities accounted for smaller proportions of vocational education enrollments in postsecondary institutions.



**Table 4.10**

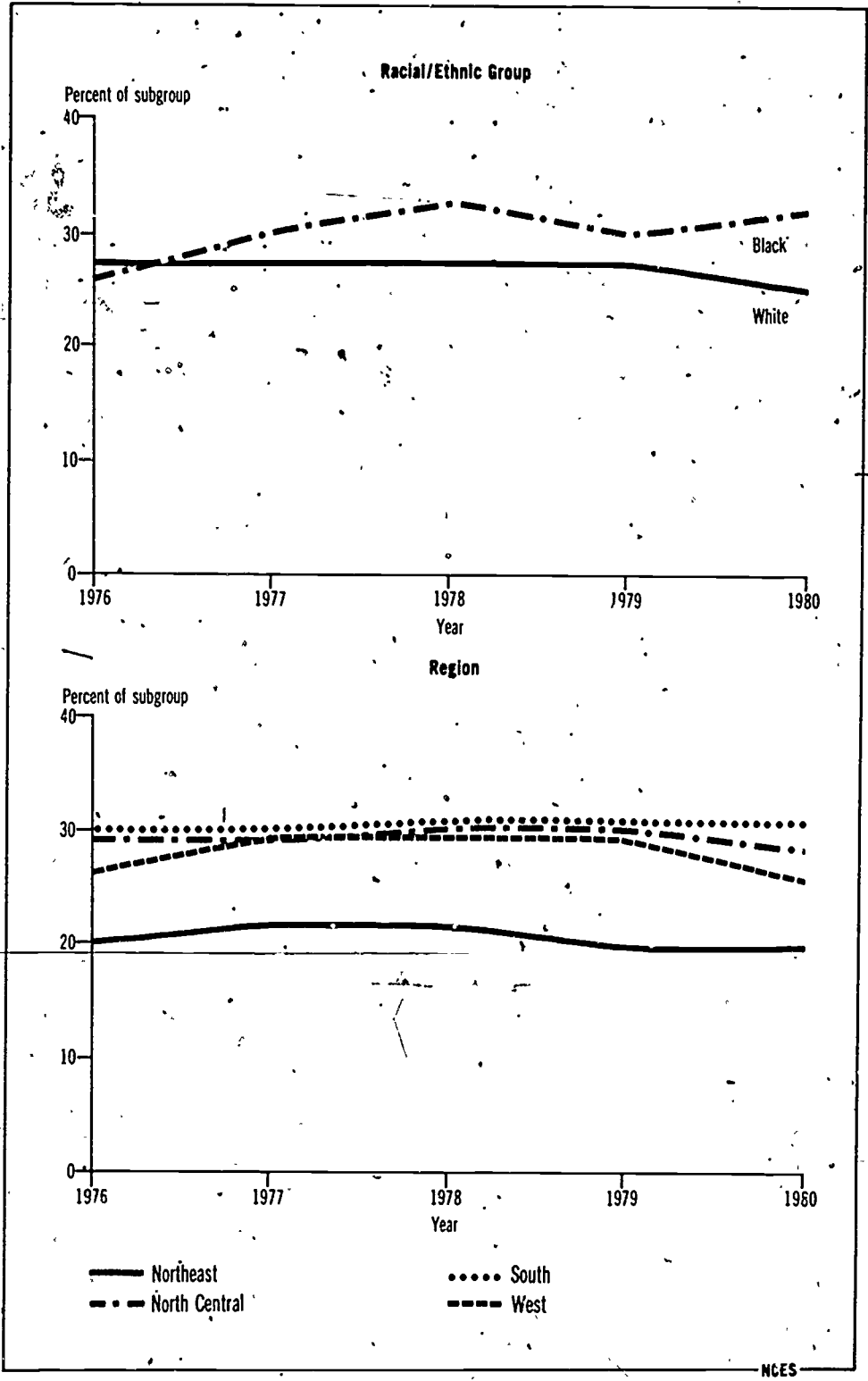
**Aspirations of high school seniors to attend technical or vocational schools, by sex, race, and region: 1976 to 1980**

Item	1976	1977	1978	1979	1980
"Suppose you could do just what you'd like and nothing stood in your way. Would you want to attend a technical or vocational school?"					
			Percent		
Total	27.0	27.7	28.4	27.9	26.8
Sex					
Male	29.1	30.3	30.6	30.6	29.6
Female	24.8	25.3	26.1	21.1	24.0
Race					
White	27.1	27.1	27.2	27.4	25.8
Black	26.0	30.2	33.9	30.2	32.1
Region					
Northeast	20.6	22.0	22.3	20.2	20.2
North Central	29.1	29.4	30.2	30.5	28.2
South	29.3	29.4	30.5	30.3	30.4
West	27.8	29.9	29.2	29.5	25.9

SOURCE: The University of Michigan, Institute for Social Research, *Monitoring the Future*, 1976, 1977, 1978, 1980.

**Chart 4.10**  
**High School Seniors Aspiring to Attend Technical or Vocational School**

Slightly higher proportions of blacks than whites hoped to attend technical or vocational school after high school in 1980. Students from the Northeast showed less interest in attending vocational school than students from other regions.



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**Table 4.11**  
**Work status and work plans of students in noncollegiate postsecondary schools with occupational programs, by area of program: 1979**

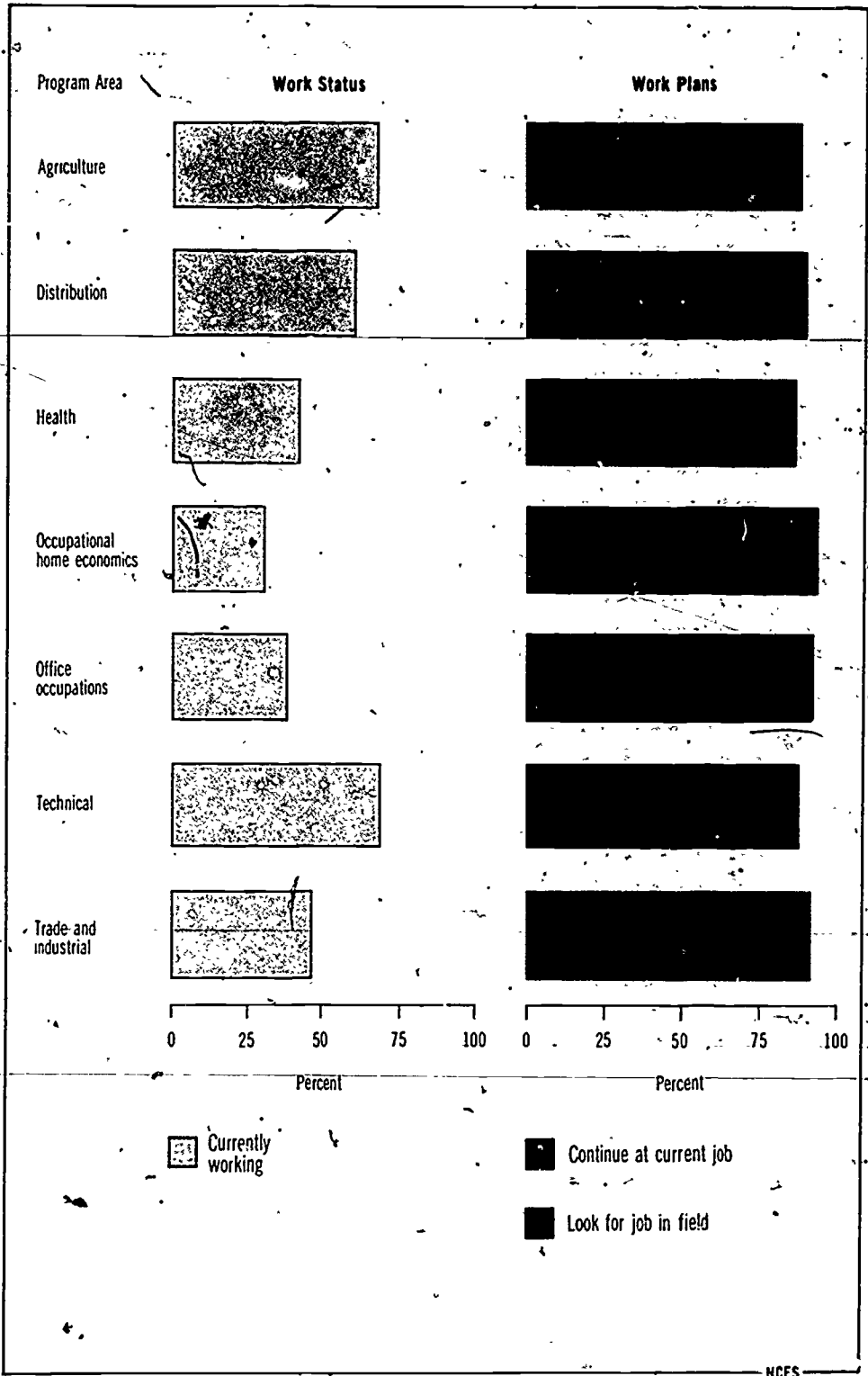
Item	Area of current program							
	Total	Agriculture	Distribution	Health	Occupational home economics	Office occupations	Technical	Trade and industrial
Percentage distribution								
<b>Work status:</b>								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Currently working	47.9	67.5	61.2	44.6	32.8	42.5	68.8	47.6
Job for pay	44.8	47.1	58.6	42.5	32.8	41.0	62.5	43.8
Unpaid family worker	1.3	17.9	0	1.6	0	1.0	1.4	1.4
Self employed	1.8	2.5	2.6	.6	0	.6	4.9	2.4
Not currently working	52.1	32.5	38.8	55.4	67.2	57.5	31.2	52.4
Looking for job	24.0	11.4	24.6	17.7	30.8	28.9	18.8	24.4
Not looking for job	28.1	21.1	14.2	37.8	36.3	28.6	12.4	28.0
<b>Hours per week for those working:</b>								
Total	47.9	67.5	61.2	44.6	32.8	42.5	68.8	47.6
Less than 15 hours	8.2	13.1	8.6	16.9	2.8	6.3	6.4	6.3
15-34 hours	19.8	21.3	21.7	19.4	16.4	21.3	32.0	16.2
35 hours or more	19.8	33.1	30.9	8.3	13.7	4.9	30.4	25.1
<b>Work plans:</b>								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Continue at current job	9.6	19.0	25.2	5.0	7.6	7.5	13.2	11.2
Look for job in field	82.7	75.9	66.3	89.2	88.1	83.3	80.4	81.9
Look for job not in field	1.7	.9	1.8	.8	.1	2.0	1.0	2.0
Enter military service	.3	.0	0	.5	0	.2	.1	.4
Don't plan to work	1.3	.8	.8	1.3	.8	1.7	1.3	1.0
Don't know	4.4	3.5	5.9	3.1	3.4	5.4	4.0	4.3
Other	0	0	0	.1	0	0	0	0

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Survey of Students in Noncollegiate Postsecondary Schools, unpublished tabulations.

**Chart 4.11**  
**Work Status and Plans, of Students in Noncollegiate Postsecondary Schools**

Work and education were combined for many students in noncollegiate postsecondary schools. Virtually all students planned to seek jobs in their chosen field.



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Table 4.12

Highest level of education of young adults seven and one-half years out of high school, by high school program, sex and race: October 1979

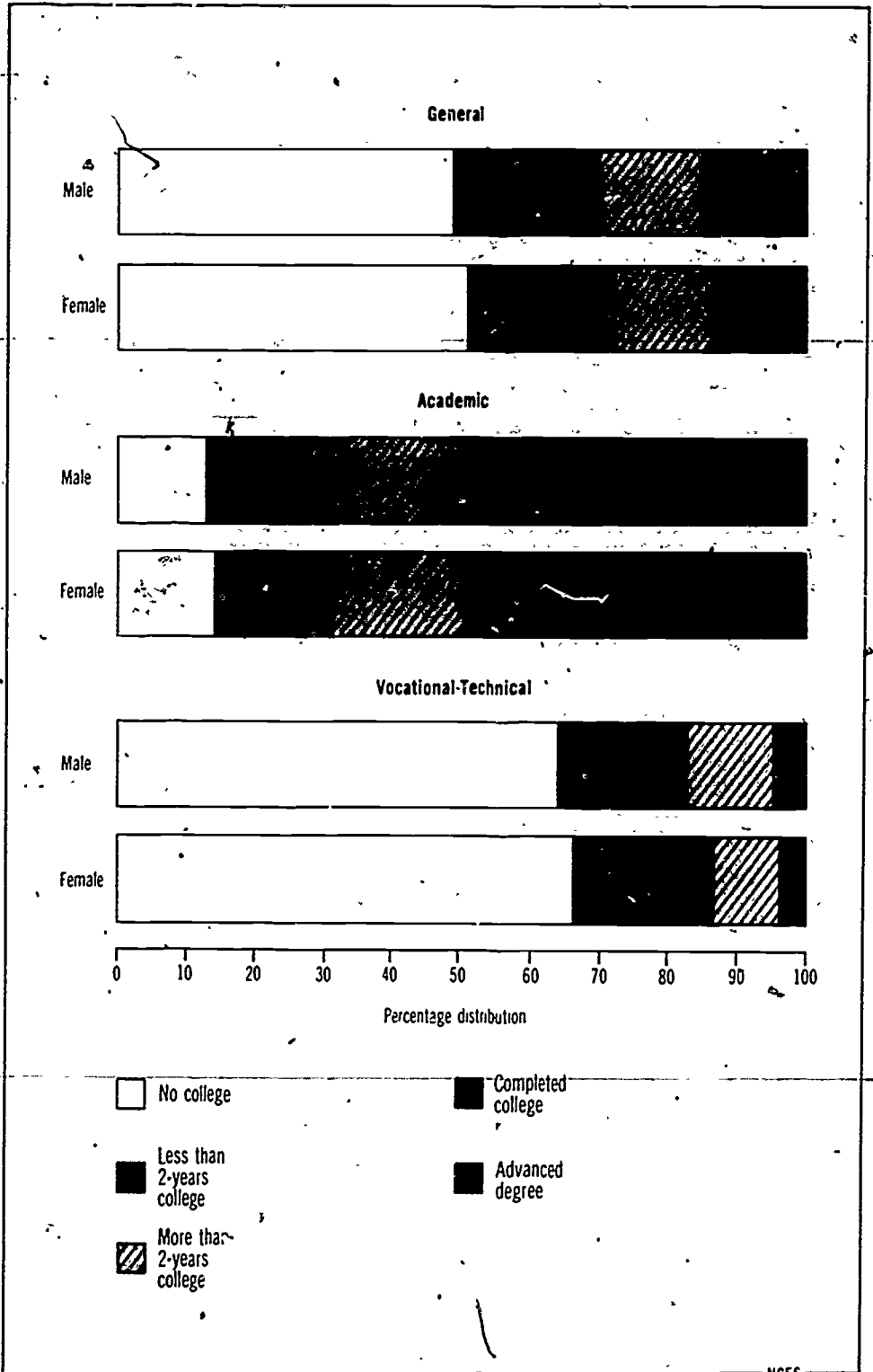
Item	Total	No college	Less than 2 years of college	More than 2 years of college	Completed college	Advanced degree
Percentage distribution						
Total:						
General	100.0	50.1	21.2	15.3	12.3	1.1
Academic	100.0	13.7	15.8	21.3	41.3	7.9
Vocational-technical	100.0	65.9	19.7	10.6	3.6	.2
Male:						
General	100.0	48.9	20.4	16.2	13.4	1.0
Academic	100.0	12.9	14.8	21.8	41.3	9.2
Vocational-technical	100.0	64.0	19.5	12.2	4.2	.1
Female:						
General	100.0	50.6	21.8	14.5	13.8	1.3
Academic	100.0	14.3	16.5	20.4	42.1	6.8
Vocational-technical	100.0	66.9	20.1	9.5	3.3	.2
White:						
General	100.0	49.6	21.1	15.1	13.0	1.2
Academic	100.0	12.8	15.5	20.4	42.8	8.4
Vocational-technical	100.0	66.3	19.6	10.3	3.7	.1
Black:						
General	100.0	46.7	22.3	16.1	14.2	.8
Academic	100.0	20.3	16.7	24.5	31.7	6.7
Vocational-technical	100.0	57.2	23.0	14.1	5.3	.4

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study, *Tabular Summary of the Fourth-Follow-up Questionnaire Data*.

Highest Level of Education Received by Young Adults by High School Program

Post high-school educational activities varied considerably for students in different high school programs; males and females reported similar experiences.



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**Table 4.13**

**Jobs held by young adults seven and one-half years after high school, by high school program and sex: October 1979**

Job	High school program		
	General	Academic	Vocational
	Percentage distribution		
Total	100.0	100.0	100.0
Professional	13.6	34.2	7.8
Managers	10.6	14.5	8.8
Sales	5.7	7.1	4.7
Clerical	20.5	17.7	30.8
Craftsman	14.2	7.4	14.3
Operative	12.4	4.2	12.5
Transportation	3.4	1.5	3.5
Laborers, nonfarm	3.8	2.2	2.9
Service	11.0	7.1	11.2
Other <sup>1</sup>	4.7	4.2	3.0

<sup>1</sup> Includes farmers, farm labor, household, military and not reported.

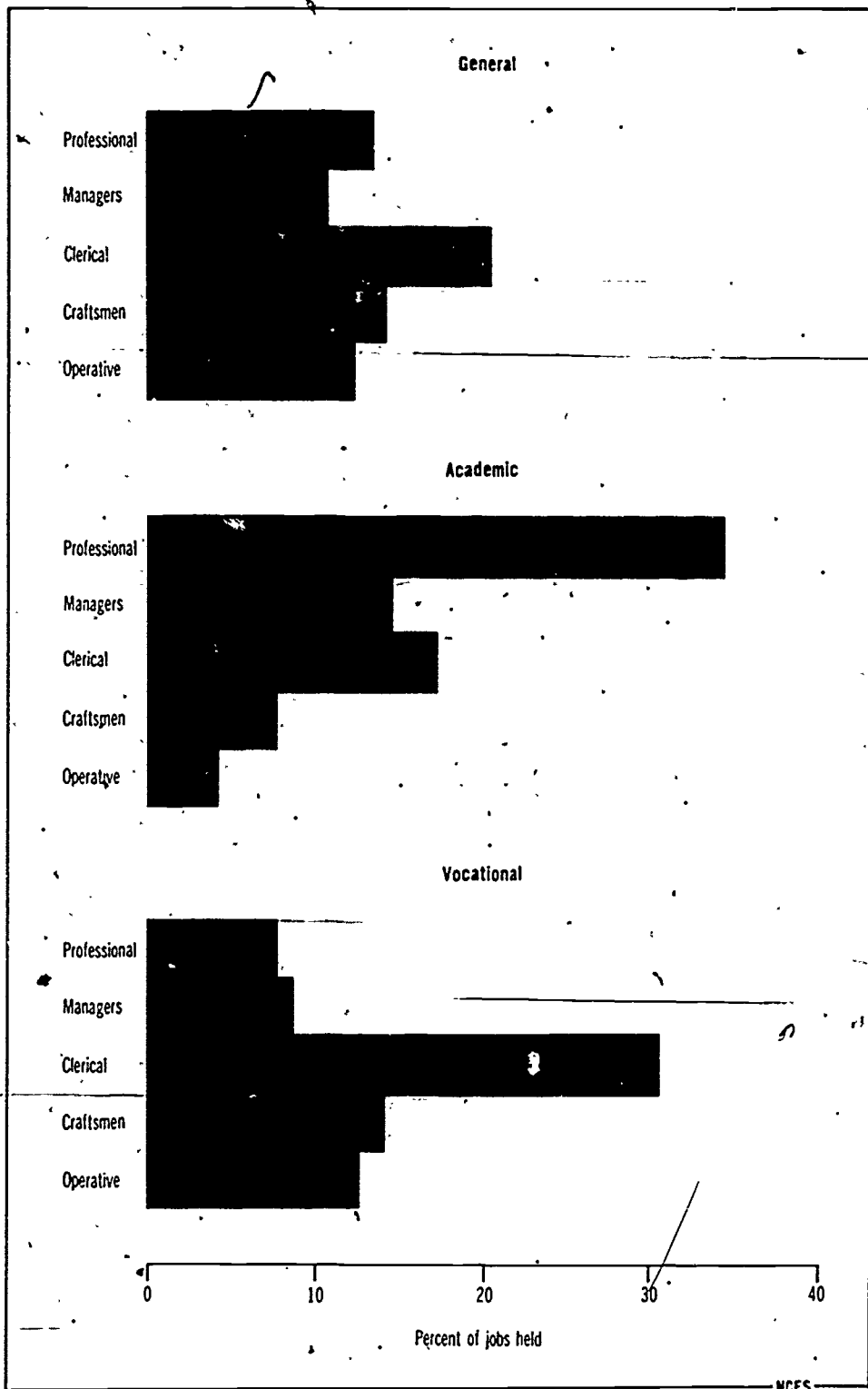
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study, *Tabular Summary of the Fourth Follow-up Questionnaire Data*, 1981.

**Chart 4.13**

**Jobs Held by Young Adults Seven and One-Half Years After High School**

More than half the students who were in vocational programs in high school were working in clerical, craftsman, or operative jobs seven and one-half years later.



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**Table 4.14**

**Job satisfaction of the high school class of 1972 working full-time in 1979,  
by educational attainment**

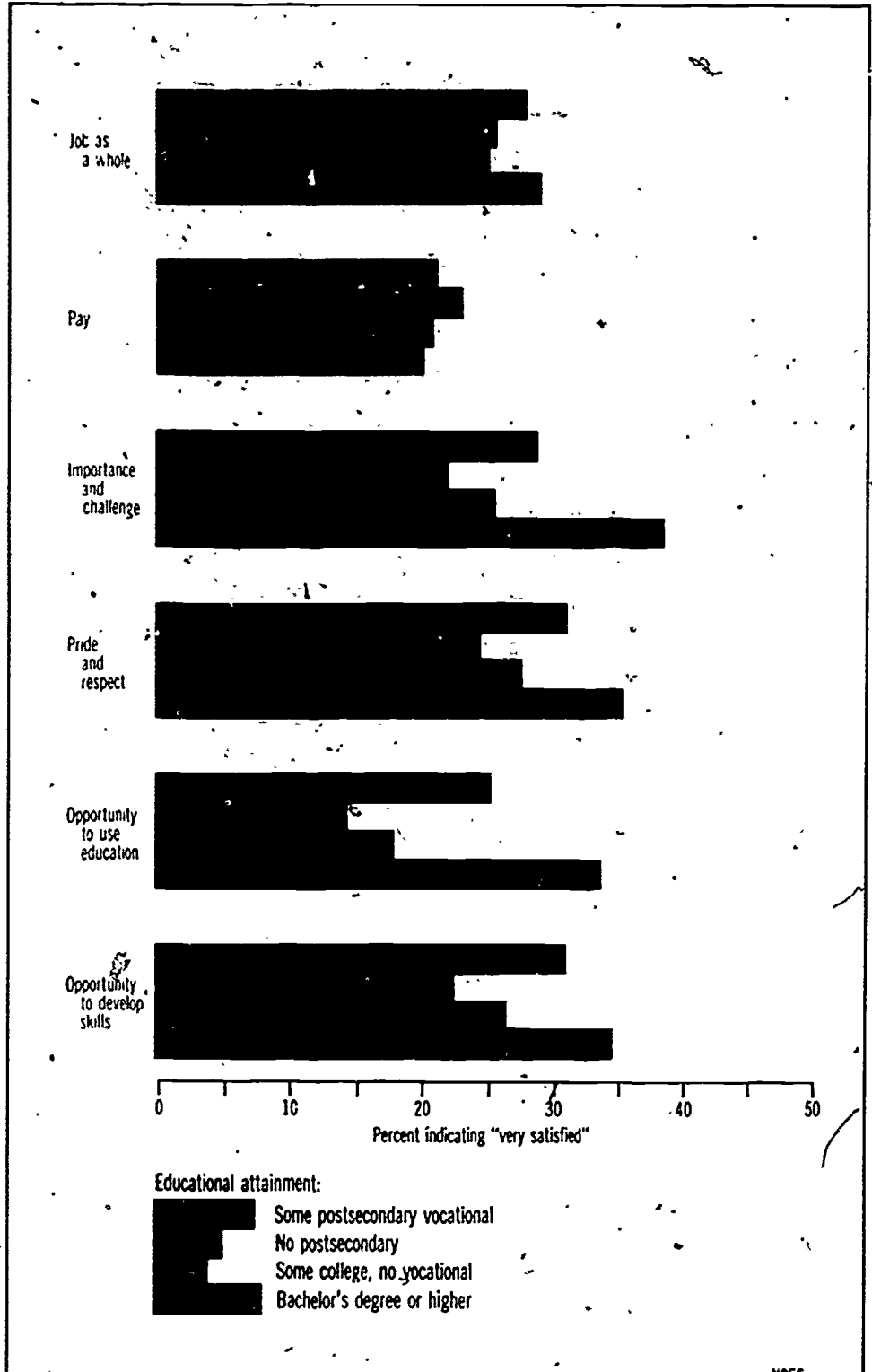
Job aspect	Educational attainment			
	Some postsecondary vocational	No postsecondary	Some college, no vocational	Bachelor's degree or higher
	Percent indicating "very satisfied" with job aspect			
Job as a whole.	28.3	25.8	25.3	29.2
Working conditions	25.8	22.9	25.2	31.3
Pay	21.3	23.1	21.0	20.1
Supervisor	27.7	25.3	28.5	29.8
Security and permanence	29.4	24.9	29.6	26.0
Importance and challenge.	29.0	21.9	25.6	34.5
Pride and respect	31.3	24.6	27.8	35.5
Opportunities:				
With employer	22.3	18.0	20.7	22.1
In current line of work	23.9	17.8	22.6	28.3
To use education	25.4	14.7	18.2	33.8
To develop skills	31.0	22.5	26.8	34.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972, unpublished tabulations.

**Chart 4.14**

**Job Satisfaction of Young Adults Seven and One-Half Years After High School**

Except for persons with bachelor's degrees, employees who had had some postsecondary vocational training were more likely to express satisfaction with many aspects of their jobs than others.





Education is valued by Americans because of the outcomes associated with it, not the least of these being the provision of a suitably skilled labor force. From the perspective of the individual, education is a means of acquiring those skills that provide the transition to employment. This chapter explores aspects of the relationship between education and work, focusing on the transition phase and youth employment.

The chapter opens with an examination of the educational status of the labor force and how it has changed over time for various subgroups of the population. The section on the transition from education to work includes a discussion of work experiences of youth still in high school, high school graduates, and college graduates, as well as assessments by students of the relevance of their education to their work. The problem of youth unemployment is examined in the last section.

#### Educational Status of the Labor Force

The American work force is better educated today than ever before. Over the past two decades, the median number of years of school completed by civilians in the labor force has increased from 12.0 years in 1959 to 12.6 years in 1979 (entry 5.1). This trend reflects the increase in the rate of high school graduation and college attendance among persons in the work force. In 1959, just over 30 percent of civilian workers had completed their formal education after receiving a high school diploma, and an additional 19 percent had some college education. By 1979, those proportions had increased to 40 percent and 35 percent respectively. During the same period there was a decrease in the relative number of school dropouts. In 1959, over half of the labor force had not completed high school; by 1979, that proportion had decreased to just under one-fourth.

Comparisons by sex and race indicate that differences in the educational attainment of labor force participants are more marked between racial groups than between the sexes. Although the average level of schooling of both whites and blacks has increased over the past 20 years, whites still attain generally higher levels of education than do blacks. However, the differences are less pronounced today than they were 20 years ago. Whereas in 1959 the median number of years of school completed by whites in the labor force was 12.1 years, it was only 8.6 years for blacks and other races. That gap had narrowed substantially by 1979 when the average educational attainment level was 12.7 years for whites and 12.3 years for blacks in the work force. (NOTE: the latter figure includes blacks only). In the same 20 year period, the proportion of blacks who completed high school, attended college, and completed college, had increased over 100 percent in each of these groups. Even so, the proportions of whites in the work force who held college degrees was over twice as great as that for black workers in 1959 (10 percent versus 4 percent, respectively), and remained so in 1979 (18 percent for whites and 9 percent for blacks).

In spite of the overall decrease in the school dropout rate, greater proportions of blacks than whites in the labor force have been and continue to be school dropouts. The proportion of black civilian workers with less than eight years of school has declined substantially in the past two decades (from 53 percent to 15 percent), but it is still almost twice as great as that for white workers who had dropped out before high school. The difference in the proportions of black and white high school dropouts in the labor force was less substantial, but trends show decreases for whites and very little change for blacks since 1959.

In the past, slight differences existed between the sexes in the median number of years of schooling completed by those in the civilian labor force. These differences largely reflect the greater propensity of women to stay in school at least through the secondary level. Over the past 20 years, women in the labor force have been less likely than their male counterparts to have dropped out of school and more likely to have completed high school. And, while sex differences in proportions who attended at least some college are slight, greater proportions of men than women in the labor force held college degrees. And, remarkably, the gap has widened in the past 20 years. In 1959, 10 percent of males in the work force held college degrees and 8 percent of females did. By 1979, those proportions had increased to nearly 20 percent for men and 15 percent for women. Despite these variations, the differences in average educational attainment that existed between the sexes in 1959 have been eliminated and civilian workers of both sexes had completed a median of 12.6 years of schooling by 1979.

Differences in educational attainment as they relate to involvement in the world of work reflect, to some degree, differences in training requirements for various occupations. One reason that people receive varying amounts of education is that the qualifications for their desired line of work differ. In general, the more years of schooling completed, the more likely an individual will enter a white collar occupation, in particular as a professional or technical worker or as a manager or administrator (entry 5.2). However, sex differences in occupational group participation persist in spite of educational attainment level and seem to reflect traditional sex roles which follow men and women into the work place.

In general, high school dropouts of both sexes were most likely to be in blue collar occupations in 1979. Female dropouts were most likely to be employed as operatives (31 percent), but nearly as likely to be service workers (30 percent). Men who dropped out of school were most likely to be in craft occupations (29 percent) and were somewhat less likely to be employed as operatives (19 percent). Two-thirds of women with a high school education were in white collar jobs, the major portion of these being clerical and kindred workers. But over half of men with high school diplomas were in blue collar jobs, most of them employed as craftsmen.

Increases in participation in higher education were related to larger proportions of both men and women in white collar jobs. For women, these proportions reflected their greater participation in professional and technical occupations rather than any substantial numbers employed in managerial or administrative positions. Women with any college experience were more likely than men to be professional and technical workers, but men at similar levels of college education were at least twice as likely as women to be managers or administrators. In addition, a full 44 percent of women with some college and 21 percent who held college degrees were employed as clerical workers in 1979.

It is clear that education is instrumental in gaining employment. In general, the higher the level of education completed, the lower the likelihood of unemployment. Further, movement into the work force is facilitated if one at least completes high school. In 1979, among young adults (16- to 24-year-olds) who were just beginning their work experiences, school dropouts were more than twice as likely as high school graduates to be unemployed, 19 percent versus 9 percent, respectively (entry 5.3). And, greater proportions of high school graduates than school dropouts were labor force participants: 86 percent as compared with 67 percent.

Subgroup comparisons by sex and race reveal that differences in labor force participation rates were more pronounced between the sexes, whereas unemployment figures reflected greater racial disparities in 1979. Among school dropouts, substantially greater proportions of men than women were participating in the labor force. Over four-fifths of male dropouts, but less than one-half of female dropouts, were in the work force in 1979. And, while the gap narrowed for those who had at least obtained a high school diploma, men were still more likely than women to be in the labor force, regardless of the amount of additional education received.

Unemployment figures for blacks at all levels of educational attainment reflect the difficulties they face in obtaining a job. Black dropouts were twice as likely as white dropouts to be unemployed in 1979: 32 percent versus 16 percent for each group, respectively. Even black high school graduates were over two-and-one-half times as likely as their white counterparts to face unemployment. It seems that, while additional schooling does partially offset unemployment difficulties, it does not have the same impact for blacks as it does for whites. Even though unemployment rates for both groups generally decreased with higher levels of education, still about the same proportion of blacks with four or more years of college were unemployed as were whites with eight years of schooling or less.

### **Transition from Education to Work**

American high school students are actively involved in the world of work, perhaps more so today than ever before. In 1980, over half of high school sophomores and about three-fourths of seniors were participating in the work force while they were in school (entry 5.4). As might be expected, labor force participation rates were higher and unemployment rates were lower for seniors than for sophomores. But within both grade levels, the patterns of participation by sex and high school program groups were very similar.

In both sophomore and senior years, males were more likely than females to be participating in the labor force. Also in both grades, students in vocational curricula were the most likely and college preparatory students the least likely of all curricular groups to be labor force participants. More specifically, the highest participation rates were for male vocational students (69 percent for sophomores and 85 percent for seniors) and the lowest rates were for female students in college preparatory programs (54 percent for sophomores and 73 percent for seniors).

Seniors of both sexes who were employed averaged a greater number of hours at their jobs per week than male and female sophomores who worked (entry 5.5). And, on the average in each class, males worked longer hours per week than females. Similarly, seniors averaged a higher hourly wage than sophomores, and males earned more per hour on the average than did females. Although wage differences for the two classes are understandable, the pay differentials between the sexes not only reflect differences in the various types of jobs held by males and females, but also salary advantages for males. More specifically, greater proportions of young men than young women were in the higher paying jobs, while relatively more young women than young men were concentrated in jobs at the lower end of the pay scale. And, even for similar work, males were generally better paid than females.

For example, the highest proportion of sophomore females who were employed were concentrated in babysitting jobs (50 percent), by far outnumbering males who babysit (under 3 percent). Pay for female babysitters averaged \$1.61 per hour while pay for males was \$1.77 per hour. These jobs were the lowest paying of any job type. On the other hand, the highest rate of pay for any job worked by sophomores was for those in skilled trades, and males were about nine times as likely as females to have those jobs. Furthermore, among sophomores who did work in the skilled trades, males were, on the average, better paid than females, \$3.38 per hour versus \$3.12 per hour, respectively. Sex differences in pay at the senior year level were not as striking as sophomore differentials, overall down from a difference of \$.78 to \$.29 per hour. But in spite of a shift by females from lower paying babysitting jobs to higher paying types of jobs, the same general pattern was evident. Males were generally higher paid than females for similar jobs and they were also more likely than young women to be in the higher paying types of jobs.

As mentioned earlier, obtaining some education beyond high school can be a worthwhile investment in furthering one's career. Indeed, for many, obtaining a college degree is a means for moving into higher status, better salaried occupations. Data reporting 1978 employment of 1976-77 graduates indicate that recipients of bachelor's degrees were more likely to obtain employment in higher status professional, managerial, or technical occupations than in jobs of a nonprofessional nature (entries 5.6 and 5.7).

This was true both for majors in the professional fields as well as for arts and sciences majors, although not to the same degree. In the professions, overall placement percentages in professional, managerial and technical fields were relatively high, ranging from 43 percent for majors in public affairs and social services to 84 percent for health professionals. The corresponding proportions for arts and sciences graduates although substantial, were lower, ranging from 37 percent for psychology majors to 58 percent for those in mathematics and physical sciences. Bachelor's recipients in the professional fields were also more likely than arts and sciences graduates to enter the specific occupations for which they were trained in college. In almost every field of study, about half, and in some cases about two-thirds, of professional graduates obtained employment in the specific occupations corresponding with their training. And, while arts and sciences majors did enter occupations consonant with their major fields of study, their placement percentages were somewhat lower, ranging between 10 and 20 percent.

One factor which may account for these differences in occupational status is that job opportunities in arts and sciences fields are more likely to be available to those with master's or doctoral degrees. Thus, bachelor's recipients are less likely than those with advanced degrees to obtain professional employment in their major fields of study. This factor is partially supported by the fact that the relative proportions of arts and sciences majors who were not in the labor force in February 1978 were much higher than the corresponding percentages for majors in the professions. Only 6 and 7 percent of bachelor's recipients in the five professional areas of study given were out of the labor force in February 1978. But between 14 and 33 percent of majors in the five arts and sciences fields were not participating in the labor force at that time. These higher proportions may reflect the relatively greater numbers of arts and sciences majors who were seeking advanced degrees, and thus were not in the labor force (if only temporarily).

A further comparison of the occupational status among bachelor's recipients in professional and arts and sciences fields deals with the unequal representation by men and women in the various major fields of study and the corresponding proportions of those graduates who enter professional versus nonprofessional occupations. Certain fields of study are clearly dominated by one sex or the other. For example, in the professions, education and health are predominantly female, while engineering and business/management are, by and large, male fields. And in arts and sciences, humanities and psychology enroll mostly women, whereas biological sciences and mathematics/physical sciences attract more men.

Differences between men and women in the various professional fields of study are generally not associated with substantial differences in occupational status. This is perhaps because relatively large numbers of female majors in education and health professions obtain employment as elementary and secondary school teachers, nurses, or health practitioners or technicians. However, differences in occupational status among bachelor's recipients of arts and sciences degrees are more apparent, and, to some degree, correspond to the relative numbers of men and women in the various fields of study. For example, humanities and psychology, the fields which largely attract women, are also those in which greater proportions of graduates enter nonprofessional clerical occupations. Twenty-three percent of psychology majors and 12 percent of humanities graduates were employed as clericals in 1978. This is contrasted with the male-dominated fields of biological sciences and mathematics/physical science, where the respective percentages employed in clerical occupations were 5 and 9 percent.

This observation supports data presented earlier that showed greater proportions of women than men at the higher levels of educational attainment employed in nonprofessional clerical occupations. In fact, women who held college degrees were about three times as likely as men at the same educational level to be in clerical occupations.

From an objective standpoint the foregoing data support the contention that the type and amount of education one obtains does indeed impact upon later labor force involvement and occupational attainments. By contrast, it is also worthwhile to consider how those involved in the work force subjectively assess the relevance of their education and training to their current jobs.

Persons who were high school seniors in 1972 were asked, seven years later in 1979, how their schooling related to their current work experiences (entry 5.8). Overall, without regard to level of educational attainment, moderate percentages of respondents reported that their training had some relationship to what they did at work. About one-half considered obtaining their education or training a wise choice, and nearly that number said they were able to apply most of their school learning on the job. About 42 percent of the respondents felt they could have obtained their jobs without the training, and nearly 30 percent said that most of what they did on the job they learned in school.

However, there were differences in responses among persons possessing different levels of academic degrees and among those who did or did not obtain vocational training. In general, those who had obtained academic degrees of any kind were more likely than those without academic degrees to experience a relationship between their schooling and their work, disregarding those having some vocational training. More specifically, persons who held advanced degrees were the most likely of all educational attainment groups to experience a strong relationship between their education or training and their work. That is, greater proportions of these individuals responded that they were able to apply most of what they learned in school (76 percent), that most of what they did on the job they learned in school (55 percent), and considered getting the additional education a wise choice (81 percent). Similarly, they were least likely to say they could have gotten their job without training (19 percent). For the most part, the lower the level of academic degree attainment, the smaller the proportions who reported that their training related to their work.

However, below the baccalaureate level, there were clear differences between individuals who had some postsecondary vocational training and those who did not. In general, job experiences were least likely to be related to schooling among those who had no vocational with little or no college experience. But those who had obtained some vocational training, in addition to some postsecondary/academic experience, were more likely than their counterparts without vocational training to respond that their job experiences utilized their school learning. Apparently, a lack of vocational training, coupled with limited academic experiences, results in employment in jobs of a nonspecialized type.

Another indication of the relevance of schooling to work is seen in the responses of the same individuals when asked if they felt the need for additional education, training, or schooling in order to obtain a desired job or to advance as they would like in their career (entry 5.9). Fifty-three percent reported the need for more schooling, whereas only 38 percent said they did not need it. In general, students who had completed academic programs in high school were the most likely and vocational students the least likely to say they needed additional education or training. In nearly all categories of educational attainment for which data are given, between one-half and two-thirds of respondents expressed a need for additional education or training in order to facilitate their job or career advancement. The notable exceptions were for those at the extreme ends of the continuum. Slightly over a third of those with no postsecondary education and somewhat less than a half of those with advanced degrees said they did not need more schooling to improve their job situation.

A different perspective on the need for more schooling is revealed in the variations of response among racial/ethnic groups and among ability and socioeconomic status (SES) groupings (entry 5.10). In general, blacks were more likely than either Hispanics or whites to express a need for more schooling to further their career goals. And whites were the least likely of the three racial/ethnic groups to express that need. But more specifically, Hispanics at the highest ability levels were the most likely of any racial/ethnic or ability groups to say they needed more education or training (81 percent). And whites at the lowest ability level were the least likely of all such groups to feel they needed more schooling (40 percent). For racial/ethnic groups, increases in ability level corresponded to increasing proportions who felt they needed more schooling. Similarly, as SES increased within each racial/ethnic group, increased proportions said they needed additional education to progress in their careers.

It seems reasonable that these differences in expressed desire for more education may not only reflect vocational objectives, but may also indicate general characteristic differences in viewpoint among various individuals who see schooling as an avenue to occupational mobility and are willing to make that investment.

Another factor which may affect students' decision to pursue further education after high school is the advice of their high school guidance counselor. From an institutional perspective, counseling of some type is available to most high school students to assist them in planning their postsecondary activities. However, from the student's viewpoint, such services may or may not seem accessible and the degree of influence of the counselor may be limited.

Seniors in the high school class of 1980 were asked to rate the influence of their high school guidance counselor on their future plans (entry 5.11). Nearly one-half responded that their guidance counselor had no influence on their plans for after high school. Just a little more than a third said the counselor had some influence, and only 10 percent felt their guidance counselor had exerted a great deal of influence on their future plans. These ratings of counselor influence differed only slightly among students in the various curricular programs, and basically seem to reflect differences between academic and general program students.

However, further evidence of the extent of counselors' influence is revealed in responses of students when asked what their counselors thought they should do after high school. Over one-fourth of the students in the general population did not know and 7 percent said the counselors did not care. Thus, fully one-third of these high school students appear to be out of touch with their high school counseling services. Here curricular differences are more noticeable. A little more than a sixth of the academic students did not know what the counselors thought they should do after high school, whereas almost twice as many general and vocational students did not know. Furthermore, students in the nonacademic curricula were more likely than academic students to feel that the counselors did not care.

Dissimilarities among students in different high school program groups are again apparent when considering the type of advice given to students by counselors. By far, the most common suggestion by guidance counselors for postsecondary activity, according to students, was to go to college. In the general population, nearly half of the respondents said that the counselors advised them in that direction. Not surprisingly, academic students were about twice as likely as either vocational or general students to have received that advice. But remarkably small percentages of all students said that their guidance counselors thought they should get a full-time job (less than 2 percent), go to trade school or take an apprenticeship (4 percent), or enter the military (under 1 percent). Predictably, vocational and general students were much more likely than academic students to have received such advice. But the proportions were still very small, (in most cases less than 5 percent).

For many young people, high school is the last formal support system available to them before they plunge into an economically and socially competitive society. It is interesting to examine, again from a student perspective, whether or not their high school experiences facilitated their movement into the world of work or higher education. Students in the high school classes of 1972 and 1980 were asked to assess different aspects of their high school experience relating to course offerings, counseling, and school-sponsored work experiences. Those in the class of 1972 were resurveyed in 1976 to elicit their retrospective assessments of the same dimensions (entry 5.12).

Overall, in all years for which data are given, the aspect of high school about which students were most likely to indicate strong agreement was that high school should have placed more emphasis on vocational and technical programs. About a fourth of the students in 1972 and nearly as many in 1976 expressed this attitude. Seniors in 1980 were somewhat more likely than those from the class of 1972 (29 percent) to agree strongly that greater emphasis should have been placed on vocational and technical programs. Patterns of response by the three program groups were identical in all years. Vocational students were about twice as likely as those in academic programs and slightly more likely than general students to express the attitude that high school should have placed greater emphasis on vocational and technical programs.

As might be expected, nearly the same degree of agreement was expressed by students with respect to school-sponsored work experiences. About a quarter of the respondents surveyed in each year felt strongly that high school did not provide enough practical work experience. Again, response patterns of the three curricular groups are strikingly similar in 1972, 1976, and 1980. Of all students, those in general programs were the most likely and academic students were the least likely to agree strongly with the statement that high school did not provide enough practical work experience.

Assessments of high school counseling services by the students are consistent with findings noted above regarding the impact of guidance counselors. It appears that, from the perspective of the average student, less of the counselors' time is devoted to employment counseling than on directing students toward further education. Fewer than 10 percent of the seniors in 1972, and even smaller proportions of those resurveyed in 1976, agreed strongly that high school provided counseling that assisted them in finding employment. But seniors in 1980 were slightly more likely (15 percent) than their 1972 counterparts to feel that way. Compared with these percentages nearly twice as many students, proportionately, expressed strong agreement with the statement that high school provided counseling that assisted them in continuing their education. Eighteen percent of the high school seniors in 1972, and 10 percent in 1976, were in strong agreement. The seniors in 1980 were more likely than their 1972 counterparts to strongly agree (25 percent) that their high school provided counseling which assisted them in furthering their education. Again, responses among the three curricular groups reinforce data discussed earlier. Academic students appear to have greater access to counseling for continuing their education, and vocational students more frequently receive employment counseling.



### Youth Unemployment

Youth unemployment is a problem in today's society which touches the lives of many young people. Certain individuals, however, appear to be at a greater disadvantage than others with respect to finding and securing employment. As indicated earlier, high school seniors had higher labor force participation rates and lower levels of unemployment than sophomores in 1980. This is not surprising in light of the nature of these measures. Labor force participation rates reflect that proportion of the total student population who are either working or looking for work. By the last year of high school it seems reasonable that students would be not only more willing to work (and perhaps more compelled economically), but also less encumbered by parental restrictions and by minimum age and work experience requirements of employers. On the other hand, unemployment rates represent the percentage of those students participating in the labor force who are, in fact, jobless. Although, predictably, these rates for seniors were lower than those for sophomores, differences among students within each grade level with respect to race/ethnicity, type of community, and sex perhaps indicate the extent to which various subgroups experience obstacles to employment.

In the general population, sex differences in the employment status of high school students were relatively small. Although males and females were about equally likely to be unemployed in both grade levels, labor force participation rates were slightly higher for males than females in both years. In the sophomore year, 62 percent of males were participating in the labor force as opposed to 55 percent of females; the figures for seniors were 78 percent for males and 74 percent for females (entry 5.13).

More substantial disparities in employment status exist when race/ethnicity is taken into account. In general, minority groups had lower labor force participation rates but higher unemployment than whites. The unemployment figures for minorities were particularly striking. Nearly half of blacks and more than a third of Hispanic sophomores who were participating in the labor force were unemployed, as compared with less than a fourth of whites in that same age group. At the senior year level, almost a third of blacks and a fifth of Hispanic were without jobs, whereas the unemployment rate for whites was 15 percent. It appears that, although blacks as a group were about twice as likely as whites to be unemployed, the gap between blacks and Hispanics became more pronounced than comparable differences between Hispanics and whites by the senior year.

These differences among racial/ethnic subgroups are even more pronounced when sex differences are considered, particularly in the case of Hispanics. The highest labor force participation rates of all subgroups in both years were for male Hispanics. Among sophomores, almost two-thirds were labor force participants, and for seniors, over three-fourths were. It should be noted that the latter figure is only slightly higher than that for white male seniors. On the other hand, female Hispanics had the lowest labor force participation rates among sophomores, and the second lowest among seniors. Black females were the least likely of all subgroups to be participating in the work force in the senior year (67 percent).

The highest unemployment rates among both sophomore and senior labor force participants were for black females, with half of sophomores and a third of seniors unemployed. These rates were greater than those for black male sophomores (44 percent) and seniors (27 percent), though both substantially exceeded the rates for their Hispanic and white counterparts. Sex differences in employment status among whites were much lower than comparable rates for either blacks or Hispanics.

Another perspective on the problem of youth unemployment is seen in the variations among racial/ethnic groups in different types of communities (entry 5.14). The highest rates of labor force participation were for suburban youth—60 percent for sophomores and 78 percent for seniors. And the lowest participation rates in both years were for rural youth, where 56 percent of sophomores and 72 percent of seniors were in the work force. Within all types of communities, whites had the highest labor force participation rates and blacks had lower rates than either Hispanics or whites. And the lowest rates of labor force participation of any racial/ethnic group within the various types of communities were for blacks in rural areas—47 percent for sophomores and 65 percent for seniors.

Overall, in both grades for which data are available, unemployment rates of young labor force participants in different types of communities were highest among urban youth. Over one-third of urban sophomores, but 28 percent of suburban and 25 percent of rural sophomores, were unemployed. And, while one in five urban seniors was jobless, less than one in six suburban seniors and approximately the same proportion of rural seniors were without jobs. Within all types of communities, unemployment rates for blacks were about twice as great as for whites and substantially exceeded the Hispanic unemployment rates. More specifically, urban blacks experienced the most severe unemployment of any racial/ethnic group within the various community types. Over one-half of black sophomores and fully one-third of black seniors in urban areas were unemployed. Whites, in general, had the lowest unemployment rates within all types of communities.

These data seem to underscore the difficulties facing blacks as they attempt to obtain employment. The situation is aggravated for those in urban areas, where unemployment is generally higher than in rural or suburban communities, as well as for those in rural areas, where jobs are not as plentiful and accessibility to the work force is generally limited.

It is because of such difficulties that the Federal Government has sponsored several programs designed to provide work experiences for high school students so as to assist them in making the transition from education to work. Overall, the percentages of employed students who participated in any government-sponsored work program, (i.e., CETA, the Comprehensive Employment and Training Act, work study, or cooperative education) were relatively low, in most cases 10 percent or less (entry 5.15). But because these programs were targeted for special populations, rates of participation varied greatly between sophomores and seniors, as well as among groups varying in racial/ethnic background, high school program, family income, and type of community.

Seniors were more likely than sophomores to be participating in government-sponsored work programs. Their highest rate of participation was in work-study (13 percent) and the lowest was in CETA programs (under 9 percent). Sophomore participation rates were highest in CETA programs (6 percent) and lowest in cooperative education (less than 3 percent).

Consistent with earlier indications, blacks, who generally face greater difficulties in employment, were more likely than either Hispanics or whites to be working in government-sponsored programs. And, differences among racial/ethnic groups were more marked in CETA program participation than in cooperative education and work-study programs. Blacks were about four times as likely as whites and over one-and-one-half times as likely as Hispanics to be working in CETA programs. Whites were the least likely of all racial/ethnic groups to be in any government-sponsored work programs.

Of all curricular groups, vocational students were the most likely and college preparatory students the least likely to work in programs available through the government. Among both sophomores and seniors, vocational students were about twice as likely as academic students to be in CETA, and between three and five times as likely to be in cooperative education plans and work-study. Participation rates by general program students were most similar to those in the general population. Higher rates of participation were also found in low income families than in either middle or high income families, and, again, differences were more apparent in CETA program participation. For both sophomores and seniors, low income students were over four times as likely as high income and nearly three times as likely as students from middle income families to be in CETA programs.

Variations in participation rates by students in the different types of communities reflect the difficulties faced by urban and rural students in obtaining employment. Proportionately more urban youth than students from suburban or rural areas participated in CETA programs. And greater percentages of rural youth had work-study jobs than did urban or suburban youth. Suburban youth were the least likely of the three community groups to participate in any government sponsored work program.

Employment disparities among students from different socioeconomic and racial/ethnic backgrounds are further evidenced in the percentage distributions of those who were employed by private business or government (entry 5.16). Employed students were generally more likely to have jobs in private businesses than with the government, overall participation rates in government programs being relatively small. However, as suggested by the data presented above, blacks who worked were about twice as likely as Hispanics and five times as likely as whites who had jobs to be working in CETA or other government jobs. In fact, employment with the government was relatively more common than work in private business for black sophomores, whereas the opposite was true for Hispanic and white sophomores. Less than one-fifth (17 percent) of black sophomores had employment in private business, but 23 percent were government employed. Comparable figures for Hispanics were 30 percent in private employment and 12 percent in government jobs, and for whites 37 percent working in private businesses and only 4 percent in CETA or other government jobs.

Among high school seniors, even though all racial/ethnic groups had relatively higher employment rates in private businesses than in government, the differences were not uniform across all three groups. Blacks were still about five times as likely as whites and twice as likely as Hispanics to be employed by the government. And proportionately fewer black seniors were employed by private businesses (35 percent) than either Hispanic (43 percent) or white (58 percent) seniors.

Income disparities on this dimension are again similar to results reported earlier with respect to participation in government-sponsored work programs. Low income students were about two to five times as likely as middle or high income students to be in CETA or other government jobs and less likely than the other income groups to be employed by private businesses. The trend shows increased rates of participation in private business and decreased proportions employed in government jobs as level of family income increased.

The problem of youth unemployment does not lend itself easily to solutions. While government-sponsored job programs seek to extend employment opportunities to minorities and low-income youth and thus to distribute jobs more equitably, large proportions of unemployed youth still exist. Some have argued that lowering the minimum wage specifically for youth would encourage more businesses to hire young people. In 1980, high school sophomores and seniors were asked the lowest wage they would accept while in high school. This "reservation wage" was compared with earned wages of those who were employed (entry 5.17).

Within all racial/ethnic groups, for both male and female seniors and for sophomore males, the mean reservation wage, regardless of employment status was lower than the average earned wage of employed students. The exception was for all female sophomores, regardless of employment status, whose mean reservation wage was, in general, higher than the average earned wage of sophomore females. It is important to note, however, that these young women were, by far, the lowest paid of any student group. Also, within each racial/ethnic group, students who were unemployed or out of the labor force would generally accept a lower hourly wage than employed students. And, in most cases, persons out of the labor force had a lower mean reservation wage than their counterparts who were labor force participants. For all groups except employed black and Hispanic male seniors, the reservation wage was lower than the spring 1980 minimum wage of \$3.10. That is, nearly all groups were willing to work for less than the minimum wage even though, at least among seniors, those already employed had higher hourly wages. However, it is worth noting that, because the average wage earned by seniors and some sophomores was only slightly higher than the minimum wage, many students were already working for lower wages. This is partly because many jobs they held were not covered by minimum-wage laws, e.g., babysitting, lawn work, odd jobs.

It appears from the data presented above that high school students in general do want to work and are willing to accept a job that pays less than the average earned wage, if necessary. And, in spite of the hurdles that some must sometimes overcome to secure employment, it is likely that their work experiences during high school enable them to make the transition into the adult world of work with more competence and confidence.

Table 5.1

Years of school completed by the civilian labor force<sup>1</sup>, by sex and race: March of 1959 to 1979, selected years

Sex, race, and year	Percentage distribution						Median school years completed
	Total	Elementary 8 years or less <sup>2</sup>	High school 1 to 3 years	High school 4 years	College 1 to 3 years	College 4 years or more	
<b>All persons</b>							
1959	100.0	30.5	19.8	30.7	9.3	9.6	12.0
1964	100.0	24.6	19.2	34.5	10.6	11.2	12.2
1969	100.0	18.6	17.8	38.4	12.6	12.5	12.4
1974	100.0	12.7	18.1	39.2	15.1	15.0	12.5
1979	100.0	8.9	15.9	40.0	17.5	17.6	12.6
<b>Whites</b>							
1959	100.0	27.7	19.6	32.5	9.8	10.3	12.1
1964	100.0	22.5	18.5	36.0	11.1	11.9	12.2
1969	100.0	17.1	16.9	39.7	13.0	13.4	12.4
1974	100.0	11.7	17.4	39.8	15.4	15.7	12.5
1979	100.0	8.2	15.2	40.5	17.7	18.4	12.7
<b>Blacks<sup>3</sup></b>							
1959	100.0	53.3	21.1	16.5	4.9	4.1	8.6
1964	100.0	40.8	24.7	22.2	6.6	5.7	10.1
1969	100.0	31.2	24.7	28.4	9.0	6.7	11.3
1974	100.0	20.9	23.6	34.1	12.1	9.3	12.2
1979	100.0	15.0	23.0	37.5	15.5	9.0	12.3
<b>Males</b>							
1959	100.0	33.0	20.2	27.2	9.1	10.4	11.5
1964	100.0	26.9	19.4	31.1	10.6	12.1	12.1
1969	100.0	20.2	18.1	34.4	12.6	13.9	12.3
1974	100.0	14.7	18.0	36.0	14.9	16.4	12.5
1979	100.0	10.4	16.0	36.7	17.4	19.6	12.6
<b>Females</b>							
1959	100.0	25.0	19.1	38.1	9.7	8.1	12.2
1964	100.0	20.2	18.8	40.9	10.6	9.5	12.3
1969	100.0	14.9	17.3	45.0	12.4	10.4	12.4
1974	100.0	9.7	18.1	44.2	15.2	12.8	12.5
1979	100.0	6.8	15.9	44.6	17.8	14.9	12.6

<sup>1</sup> Includes persons 18 years and over for 1959, 1964, and 1969; 16 years and over for 1974 and 1979.<sup>2</sup> Includes persons reporting no school years completed.<sup>3</sup> Prior to 1979, data are for blacks and other races.SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *Handbook of Labor Statistics*, 1980.

**Chart 5.1**  
**Years of School Completed by the Civilian Labor Force**

The proportion of the civilian labor force completing less than 4 years of high school decreased from half to less than one-quarter between 1959 and 1979.

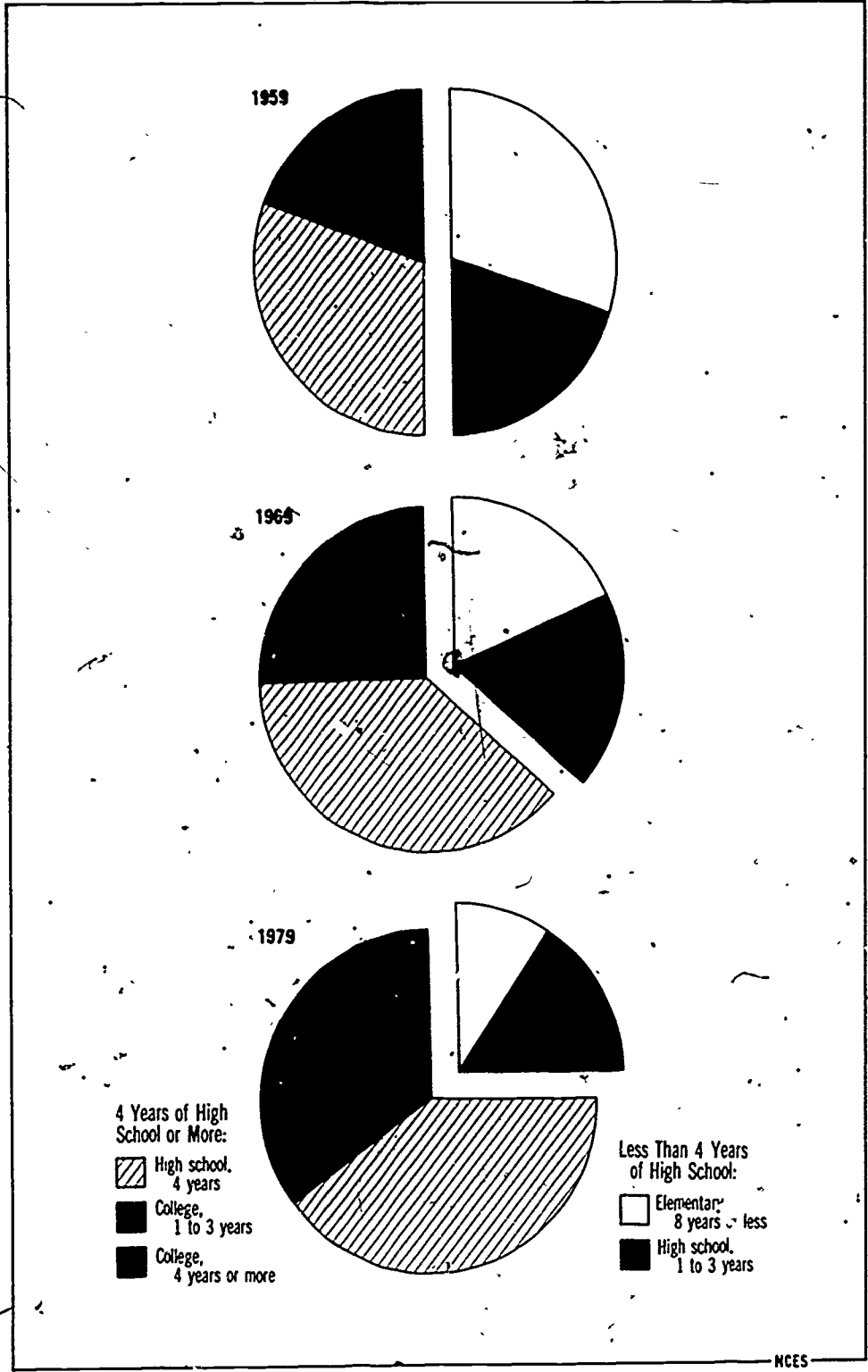


Table 5.2

## Occupation of employed persons 25 to 64 years old, by years of school completed and sex: March 1979

Occupation group <sup>1</sup> and sex	Total	Less than <sup>2</sup> 4 years of high school	High school, 4 years	College		
				1 to 3 years	4 years	5 years or more
Males, total in thousands	42,349	9,557	15,090	7,414	5,464	4,823
			Percentage distribution			
All groups	100.0	100.0	100.0	100.0	100.0	100.0
White collar workers	46.3	14.3	31.9	55.9	85.7	94.8
Professional, technical, and kindred workers	17.8	1.5	5.4	16.5	38.5	67.7
Managers and administrators, except farm	16.7	7.8	14.2	21.3	28.7	20.9
Sales workers	5.9	1.9	5.2	9.3	11.7	4.1
Clerical and kindred workers	5.9	3.1	7.1	8.8	6.8	2.1
Blue collar workers	43.4	69.1	56.5	34.9	9.6	3.2
Craft and kindred workers	22.2	29.3	30.6	21.0	6.3	1.9
Operatives, except transport	10.5	18.6	13.5	7.1	1.6	.5
Transport equipment operatives	6.0	11.5	7.1	4.0	1.1	.4
Laborers, except farm	4.7	9.7	5.3	2.8	.6	.4
Service workers	7.0	10.1	8.0	7.1	3.2	1.4
Private household workers	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Service workers, except private household	7.0	10.1	8.0	7.1	3.2	1.4
Farm workers	3.3	6.4	3.6	2.0	1.7	.5
Farmers and farm managers	2.3	3.3	3.0	1.7	1.3	.4
Farm laborers and supervisors	1.0	3.1	.6	.3	.4	.1
Females, total in thousands	29,150	5,465	13,203	5,042	3,094	2,166
			Percentage distribution			
All groups	100.0	100.0	100.0	100.0	100.0	100.0
White collar workers	66.0	24.6	66.7	81.2	92.4	97.2
Professional, technical, and kindred workers	18.7	2.0	6.3	20.7	56.9	78.8
Managers and administrators, except farm	7.2	3.7	6.9	9.4	9.7	9.8
Sales workers	6.0	5.1	6.9	6.8	5.1	2.2
Clerical and kindred workers	34.1	13.8	46.6	44.3	20.7	6.4
Blue collar workers	14.9	36.9	14.5	5.4	2.7	.8
Craft and kindred workers	1.8	3.1	1.9	1.4	.8	.5
Operatives, except transport	11.3	30.6	10.5	2.9	1.4	.2
Transport equipment operatives	.7	9	9	.7	1	.1
Laborers, except farm	1.1	2.3	1.2	4	4	( <sup>2</sup> )
Service workers	18.0	36.8	17.9	12.7	4.4	1.5
Private household workers	2.2	6.5	1.6	9	.3	.1
Service workers, except private household	15.8	30.3	16.3	11.8	4.1	1.4
Farm workers	1.0	1.6	1.0	.7	.5	.4
Farmers and farm managers	.3	4	.3	2	.3	.1
Farm laborers and supervisors	.7	1.2	.7	5	2	.3

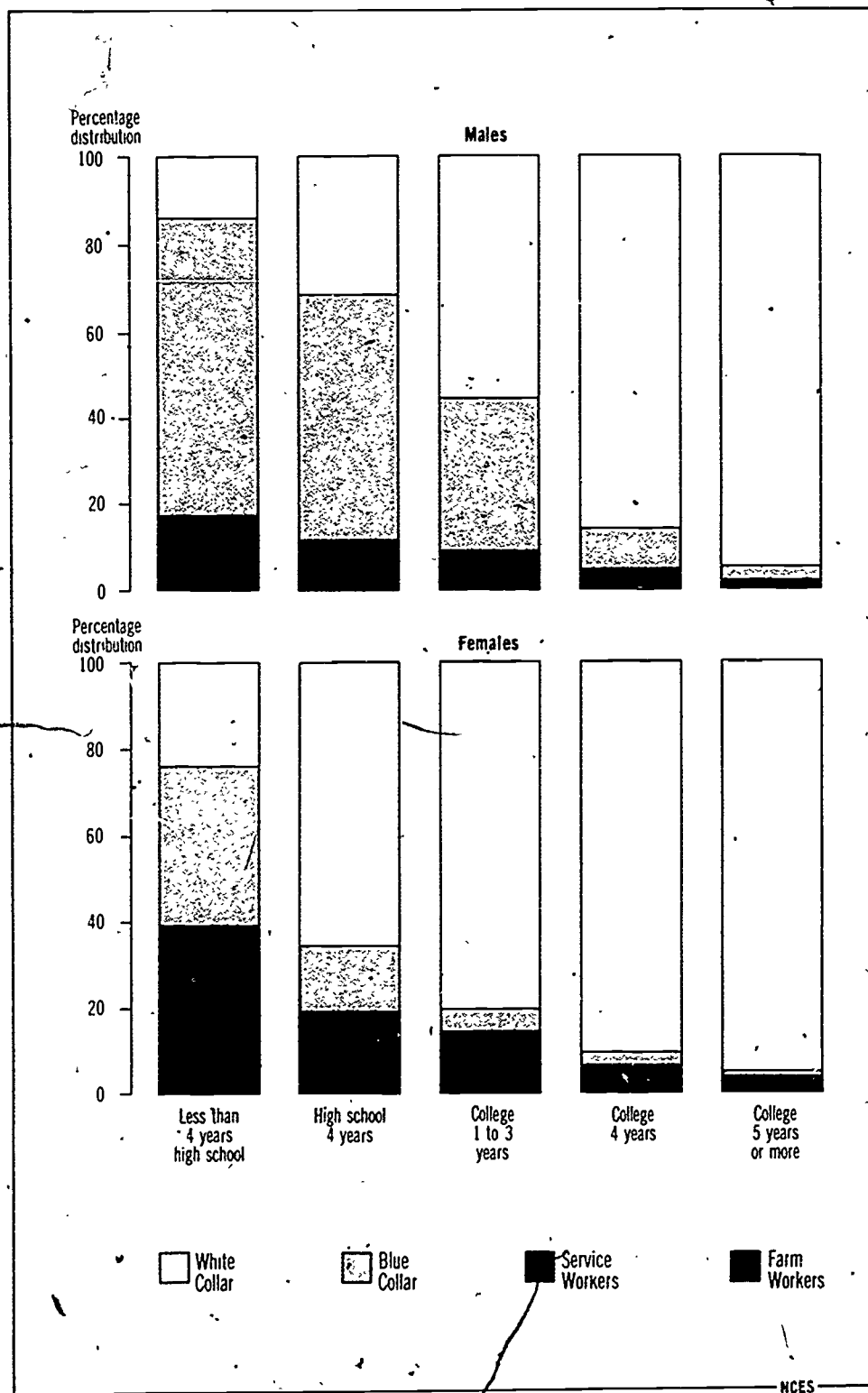
The major groups used here are generally the major groups used in the 1970 Census of Population. The composition of these groups is shown in 1970 Census of Population, Vol. 1, *Characteristics of the Population, U.S. Summary*.

<sup>2</sup> Represents zero.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-20, No. 356, *Educational Attainment in the United States: March 1979 and 1978, 1980*.

**Chart 5.2**  
**Occupation Group of Employed Persons by Years of School Completed**

Both males and females were more likely to be employed in white collar jobs at the higher levels of educational attainment in 1979.





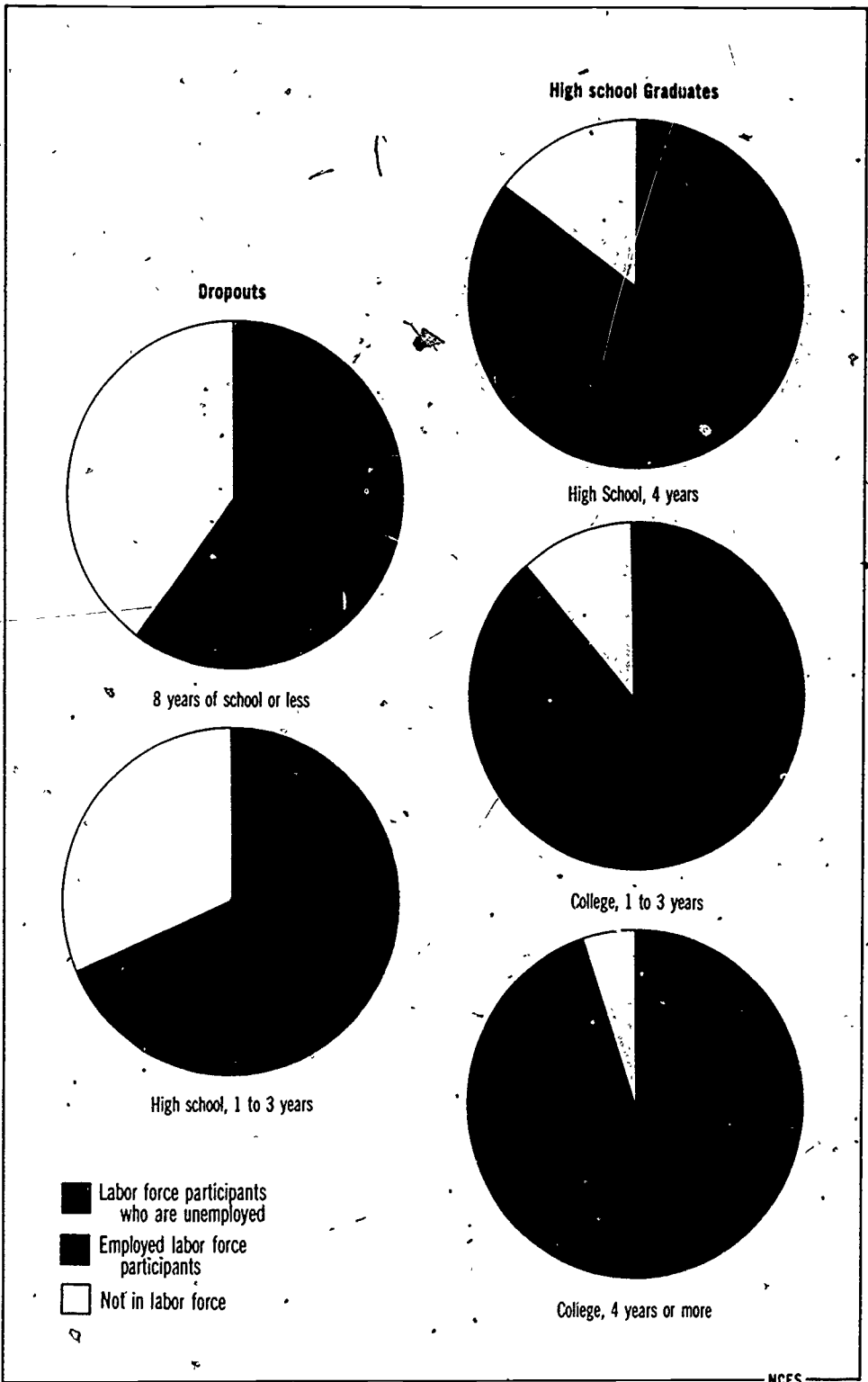
**Table 5.3****Employment status of the civilian noninstitutional population 16 to 24 years old, not enrolled in school, by educational attainment, sex, and race: October 1979**

Educational attainment, sex, and race	Population, in thousands	Labor force participation rate	Unemployment rate
Total	20,869	81.5	10.8
Dropouts	5,265	66.7	19.0
8 years of school or less	1,191	59.9	18.0
1 to 3 years of high school	4,074	68.7	19.3
High school graduates	15,605	86.4	8.7
4 years of high school only	11,094	84.6	9.8
1 to 3 years of college	3,017	88.9	6.5
4 or more years of college	1,493	95.2	4.9
Males	9,848	92.5	9.4
Dropouts	2,650	84.8	15.9
8 years of school or less	650	76.8	16.2
1 to 3 years of high school	2,000	87.4	15.7
High school graduates	7,197	95.4	7.3
4 years of high school only	5,159	95.2	8.0
1 to 3 years of college	1,365	94.9	5.8
4 or more years of college	673	97.5	5.3
Females	11,022	71.6	12.4
Dropouts	2,614	48.4	24.7
8 years of school or less	541	39.5	22.2
1 to 3 years of high school	2,073	50.7	25.2
High school graduates	8,407	78.8	10.0
4 years of high school only	5,935	75.3	11.8
1 to 3 years of college	1,652	83.9	7.1
4 or more years of college	820	93.4	4.6
Whites	17,819	83.1	9.2
Dropouts	4,166	69.0	16.4
8 years of school or less	989	61.9	16.9
1 to 3 years of high school	3,177	71.2	16.3
High school graduates	13,653	87.5	7.5
4 years of high school only	9,670	85.6	8.5
1 to 3 years of college	2,617	90.2	5.8
4 or more years of college	1,366	95.3	4.0
Blacks	2,662	71.1	23.0
Dropouts	987	57.3	31.6
8 years of school or less	171	50.4	28.6
1 to 3 years of high school	816	58.8	32.2
High school graduates	1,675	79.1	19.4
4 years of high school only	1,245	77.4	21.3
1 to 3 years of college	328	80.8	13.3
4 or more years of college	102	94.8	17.1

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, *October Employment Report*, 1980

**Chart 5.3**  
**Employment Status of 16- to 24-Year-Olds Not Enrolled in School by Educational Attainment**

Young adults who were school dropouts had lower labor force participation rates and higher unemployment rates in 1979 than those with higher levels of educational attainment.



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**Table 5.4**

**Employment status of sophomore and senior high school students, by school program and sex:  
Spring 1980**

School program and sex	High school population	Labor force participation rate <sup>1</sup>	Unemployment rate <sup>2</sup>
Sophomores			
General	1,575,994	60.0	29.1
Males	761,907	<del>64.0</del>	29.6
Females	807,813	56.1	28.6
College preparatory	1,175,290	54.1	25.2
Males	533,047	54.4	27.9
Females	640,003	53.7	23.0
Vocational	694,007	62.9	29.5
Males	347,468	69.2	27.1
Females	340,497	56.5	32.2
Seniors			
General	1,063,336	76.2	18.3
Males	525,253	79.1	16.7
Females	538,083	73.3	19.9
College preparatory	1,115,415	73.0	17.0
Males	539,820	73.5	17.4
Females	575,595	72.6	16.7
Vocational	702,852	81.2	15.6
Males	318,676	85.0	14.3
Females	384,176	78.0	16.7

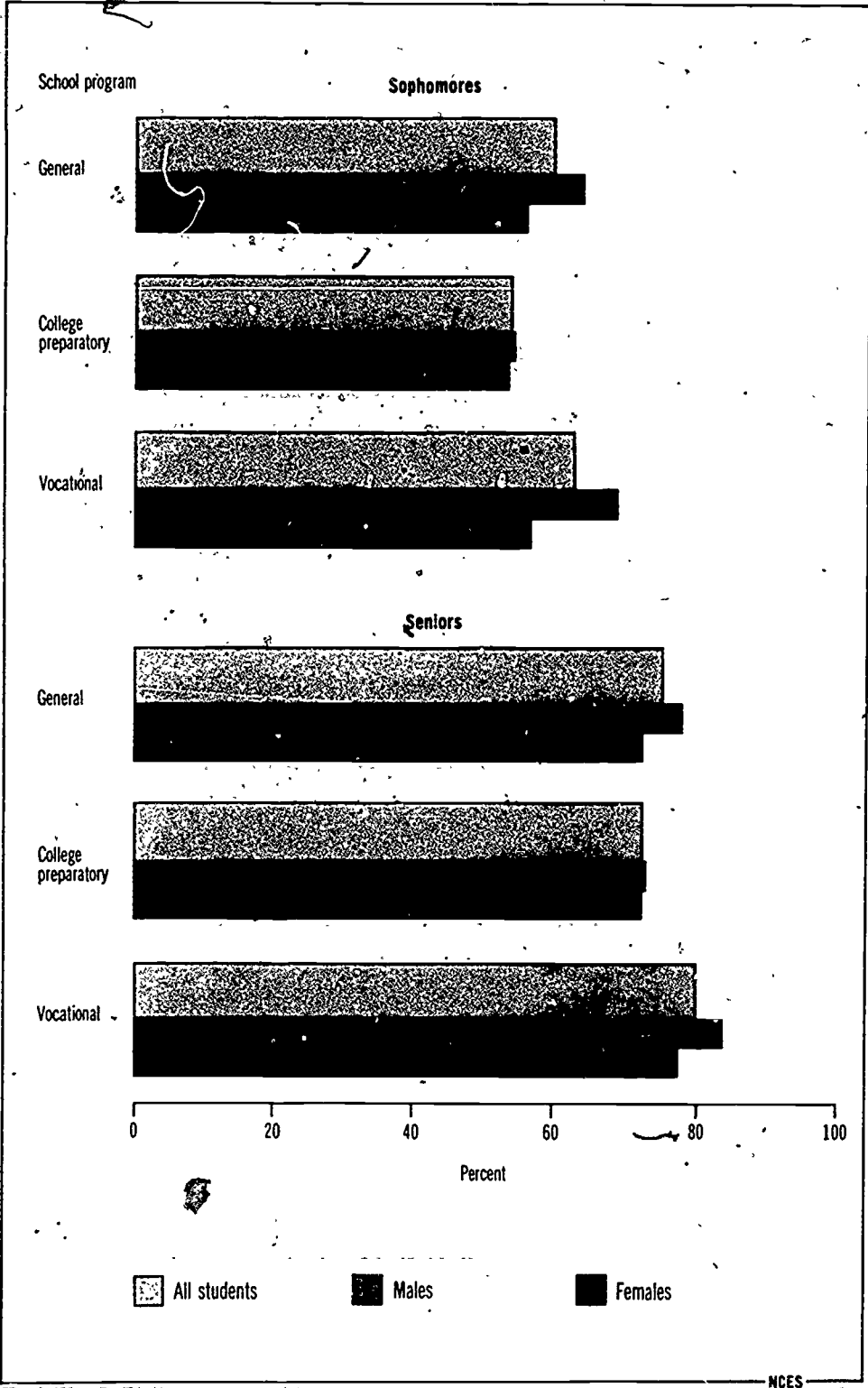
<sup>1</sup> Labor force participation rate is the total number of students, employed and unemployed, participating in the labor force as a percent of the total population of students.

<sup>2</sup> Unemployment rate is the number of students in the labor force who are unemployed as a percent of all students in the labor force.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, *Youth Employment During High School*, forthcoming.

**Chart 5.4**  
**Labor Force Participation Rates of High School Students by School Program**

Labor force participation rates were highest for students enrolled in vocational programs and lowest for those in college preparatory programs.



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**Table 5.5**

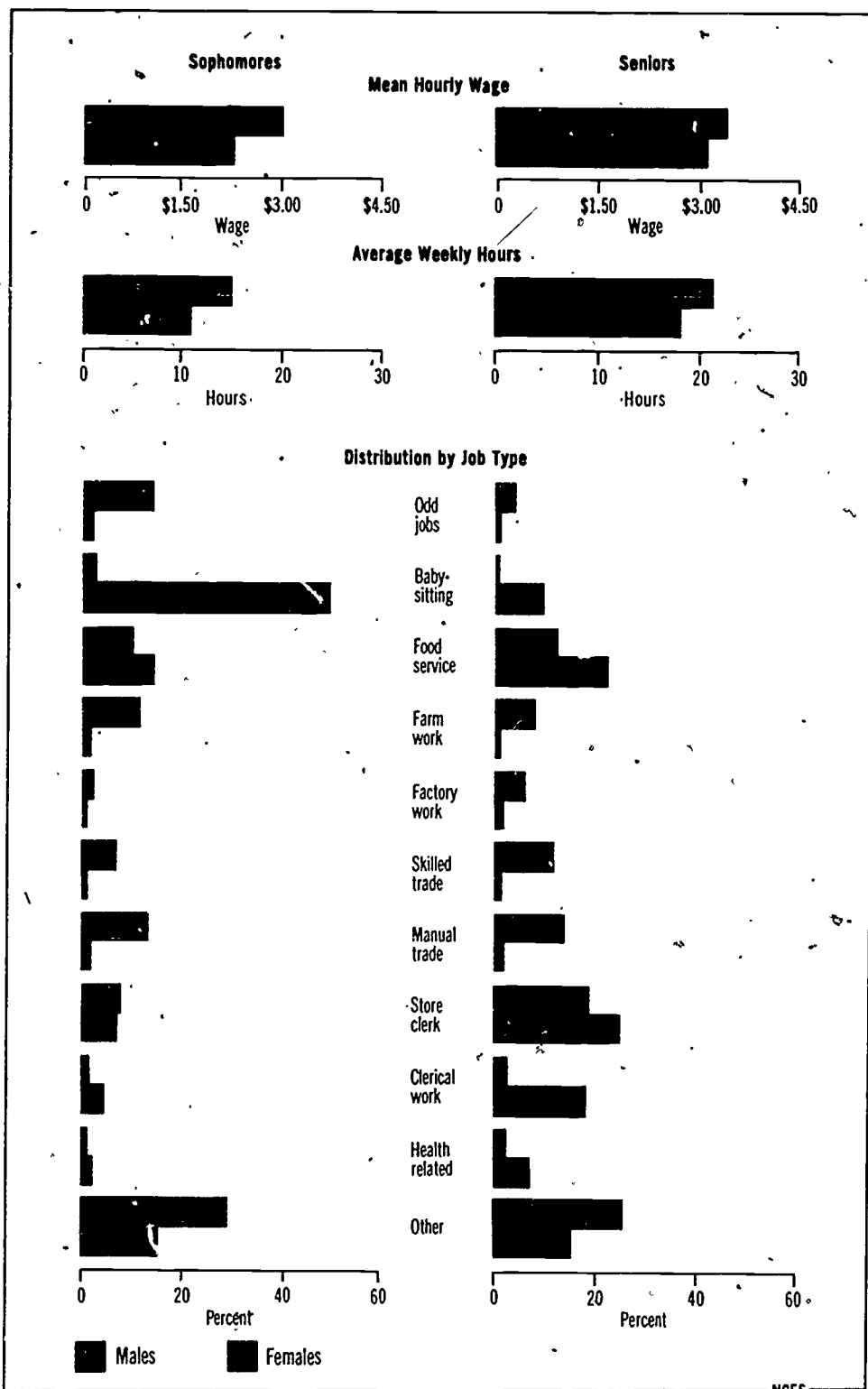
**Sophomore and senior high school students presently employed, average hours worked, and mean hourly wage, by sex and type of job: Spring 1980**

Type of job	Percentage distribution		Average hours worked		Mean hourly wage	
	Males	Females	Males	Females	Males	Females
Sophomores						
Total	100.0	100.0	14.8	10.5	\$3.02	\$2.24
Odd jobs	14.1	2.1	7.6	6.9	2.86	2.55
Babysitting	2.7	50.3	7.8	7.4	1.77	1.61
Food service	9.9	14.3	19.0	17.2	3.07	2.88
Farm work	11.4	1.7	19.0	13.8	2.90	2.62
Factory work	2.3	.5	17.9	16.9	3.29	3.20
Skilled trade	6.6	.7	17.9	10.1	3.20	3.12
Manual trade	12.7	1.9	14.7	11.4	3.16	3.05
Store clerk	7.6	6.7	18.2	16.5	3.01	2.96
Clerical work	1.1	4.3	12.5	14.1	3.17	3.03
Health related	.8	1.8	19.5	16.0	3.33	3.34
Other	30.3	15.0	14.7	10.5	3.10	2.92
Seniors						
Total	100.0	100.0	21.1	17.8	\$3.42	\$3.13
Odd jobs	3.1	.7	12.0	8.5	3.30	2.86
Babysitting	.5	8.8	13.2	9.9	2.30	2.00
Food service	11.5	22.1	21.4	19.7	3.32	3.07
Farm work	7.0	.9	21.4	17.6	3.18	2.82
Factory work	5.3	1.5	24.9	22.9	3.62	3.46
Skilled trade	11.3	1.1	22.2	16.8	3.65	3.32
Manual trade	13.6	1.7	20.2	15.0	3.46	3.32
Store clerk	18.1	25.0	22.4	19.6	3.41	3.28
Clerical work	2.1	17.5	19.1	18.2	3.52	3.32
Health related	2.0	6.6	22.4	20.3	3.56	3.42
Other	25.5	14.5	20.7	16.2	3.42	3.28

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, *Youth Employment During High School*, forthcoming.

**Chart S.5**  
**Characteristics of Jobs Held by High School Students**

Sophomore males were primarily employed in odd jobs and sophomore females in baby-sitting. The largest proportion of senior males and females were employed as store clerks. Males generally worked longer hours and for higher hourly wages than did females.



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**Table 5.6**  
**Occupations of bachelor's degree recipients of 1976-77 in February 1978, by major field of study**  
**in the professions**

Occupation	Major field of study in the professions				
	Business and management	Education	Engineering	Health professions	Public affairs/social services
Number	162,179	138,155	54,421	61,294	21,106
	Percentage distribution				
Total	100	100	100	100	100
Professional, managerial, and technical	57	73	74	84	43
Business persons and managers	47	4	6	4	11
Accountants	26	(1)	0	(1)	0
Management and administration	19	3	6	3	9
Other	2	(1)	0	(1)	2
Educators	2	65	1	4	1
Elementary/secondary teachers	1	62	(1)	3	1
College teachers	1	1	.1	1	0
Other	(1)	1	0	0	0
Engineers	2	(1)	58	0	4
Civil	(1)	(1)	15	0	0
Electrical	(1)	0	17	0	0
Other	1	(1)	27	0	4
Health professionals	0	1	0	64	2
Registered nurses	0	(1)	0	43	0
Practitioners	0	0	0	13	0
Other	0	1	0	8	2
Public affairs and services	(1)	1	0	(1)	22
Social workers	(1)	(1)	0	(1)	16
Other	0	1	0	(1)	6
Biological and physical scientists <sup>1</sup>	(1)	(1)	0	1	0
Fine arts	(1)	(1)	(1)	0	0
Social scientists and psychologists	2	(1)	(1)	0	0
Research workers	1	(1)	1	1	0
Communications	(1)	1	0	0	0
Computer specialists	1	(1)	2	(1)	0
Technicians	1	(1)	3	9	2
Health	(1)	(1)	0	9	0
Engineering and sciences	1	(1)	3	0	1
Other	(1)	1	0	0	1
Other professional, managerial, technical	(1)	1	12	5	40
Nonprofessional, nonmanagerial, nontechnical	32	16	2	(1)	4
Sales	13	2	2	2	14
Clerical	13	9	4	2	5
Crafts	3	1	4	(1)	5
Operatives	1	1	1	0	2
Laborers, including farm	1	(1)	1	0	2
Service	2	2	1	2	13
Armed forces	2	1	2	1	5
Unemployed	3	4	5	4	5
Not in the labor force	6	6	7	7	6

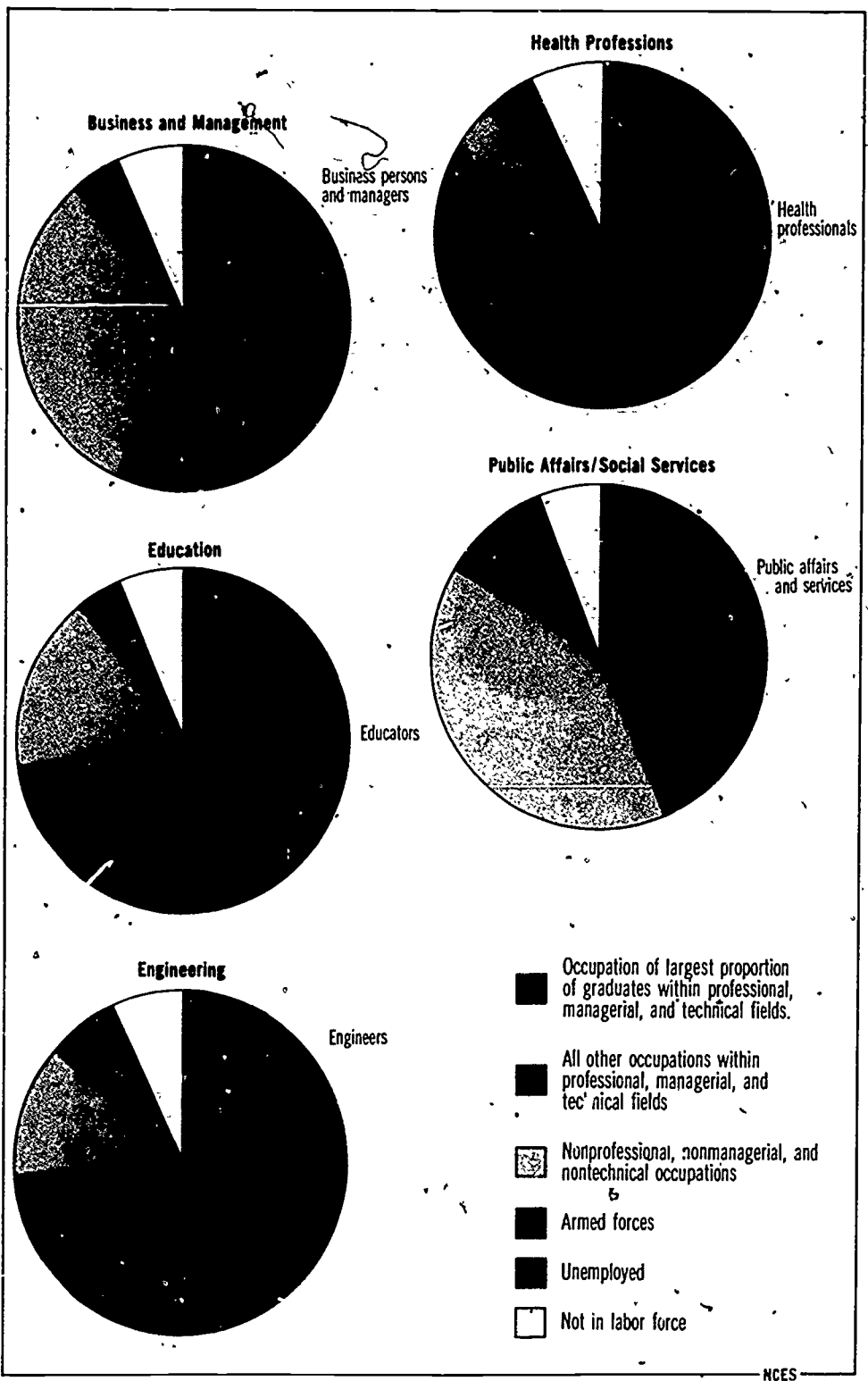
<sup>1</sup> Less than 0.5 percent.  
<sup>2</sup> Includes mathematicians.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Survey of Recent College Graduates, unpublished tabulations.

**Chart 5.6 : Occupations of Recent College Graduates by Major Field of Study in the Professions**

Recent college graduates who majored in the professions were more likely to be employed in a closely related field than in a field unrelated to their college majors.



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**Table 5.7**  
**Occupations of bachelor's degree recipients of 1976-77 in February 1978, by major field of study**  
**in arts and sciences**

Occupation	Major field of study in arts and sciences				
	Biological sciences	Mathematical and physical sciences	Social sciences	Humanities	Psychology
Number	64,069	36,384	118,096	88,063	57,840
	Percentage distribution				
Total	100	100	100	100	100
Professional, managerial, and technical	38	58	38	41	37
Business persons and managers	4	4	14	8	12
Accountants	0	1	1	1	(1)
Management and administration	4	3	13	7	10
Other	0	0	(1)	(1)	1
Educators	5	16	8	17	7
Elementary/secondary teachers	3	5	6	12	5
College teachers	3	10	1	2	1
Other	(1)	1	1	3	1
Engineers	(1)	4	(1)	0	(1)
Civil	0	0	0	0	0
Electrical	0	1	0	0	0
Other	(1)	4	(1)	0	(1)
Health professionals	3	1	1	(1)	3
Registered nurses	(1)	0	(1)	(1)	2
Practitioners	2	0	0	0	0
Other	1	1	(1)	0	1
Public affairs and services	1	1	4	4	10
Social workers	0	0	3	1	9
Other	1	1	1	3	1
Biological and physical scientists <sup>2</sup>	3	13	(1)	0	(1)
Fine Arts	0	1	1	7	(1)
Social scientists and psychologists	(1)	1	2	0	1
Research workers	1	1	2	(1)	2
Communications	1	0	3	1	(1)
Computer specialists	0	10	1	1	1
Technicians	20	7	1	(1)	1
Health	11	0	(1)	(1)	0
Engineering and sciences	9	7	1	0	1
Other	(1)	0	0	0	(1)
Other professional, managerial, technical	0	1	1	2	(1)
Nonprofessional, nonmanagerial, nontechnical	21	17	32	34	37
Sales	4	2	6	8	5
Clerical	5	9	15	12	23
Crafts	4	3	3	5	1
Operatives	1	(1)	2	3	2
Laborers, including farm	1	1	1	1	1
Service	5	2	5	5	6
Armed forces	1	5	2	(1)	1
Unemployed	7	1	7	9	4
Not in the labor force	33	19	21	14	20

<sup>1</sup> Less than 0.5 percent.

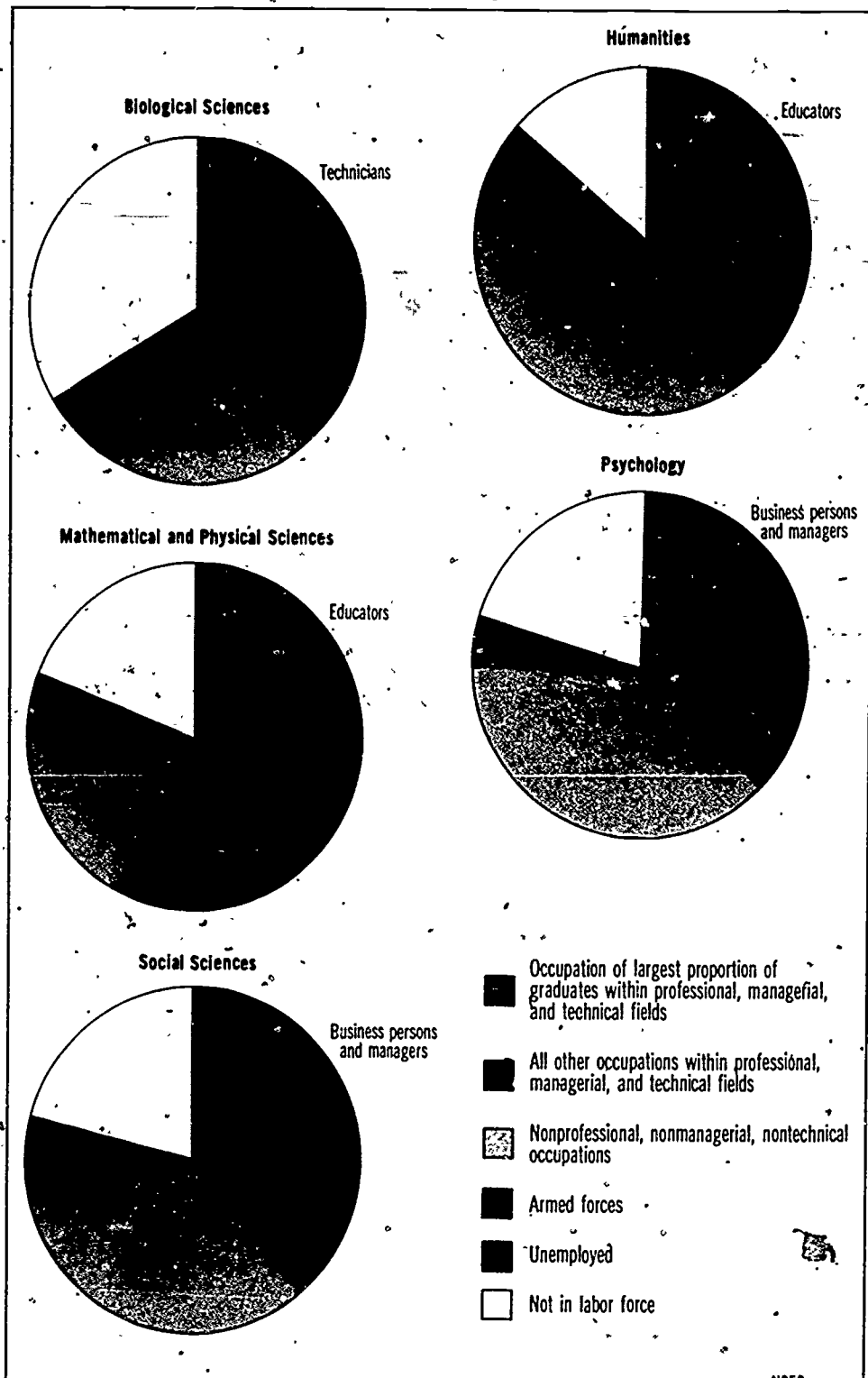
<sup>2</sup> Includes mathematicians.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Survey of Recent College Graduates, unpublished tabulations.

**Chart 5.7**  
**Occupations of Recent College Graduates by Major Field of Study in Arts and Sciences**

Recent college graduates who majored in the arts and sciences were more likely to be employed in fields unrelated to their college majors. A larger proportion of these graduates than those who majored in the professions were not in the labor force.



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**Table 5.8**  
**Relationship of schooling to the current job of 1972 high school seniors in 1979, by educational attainment**

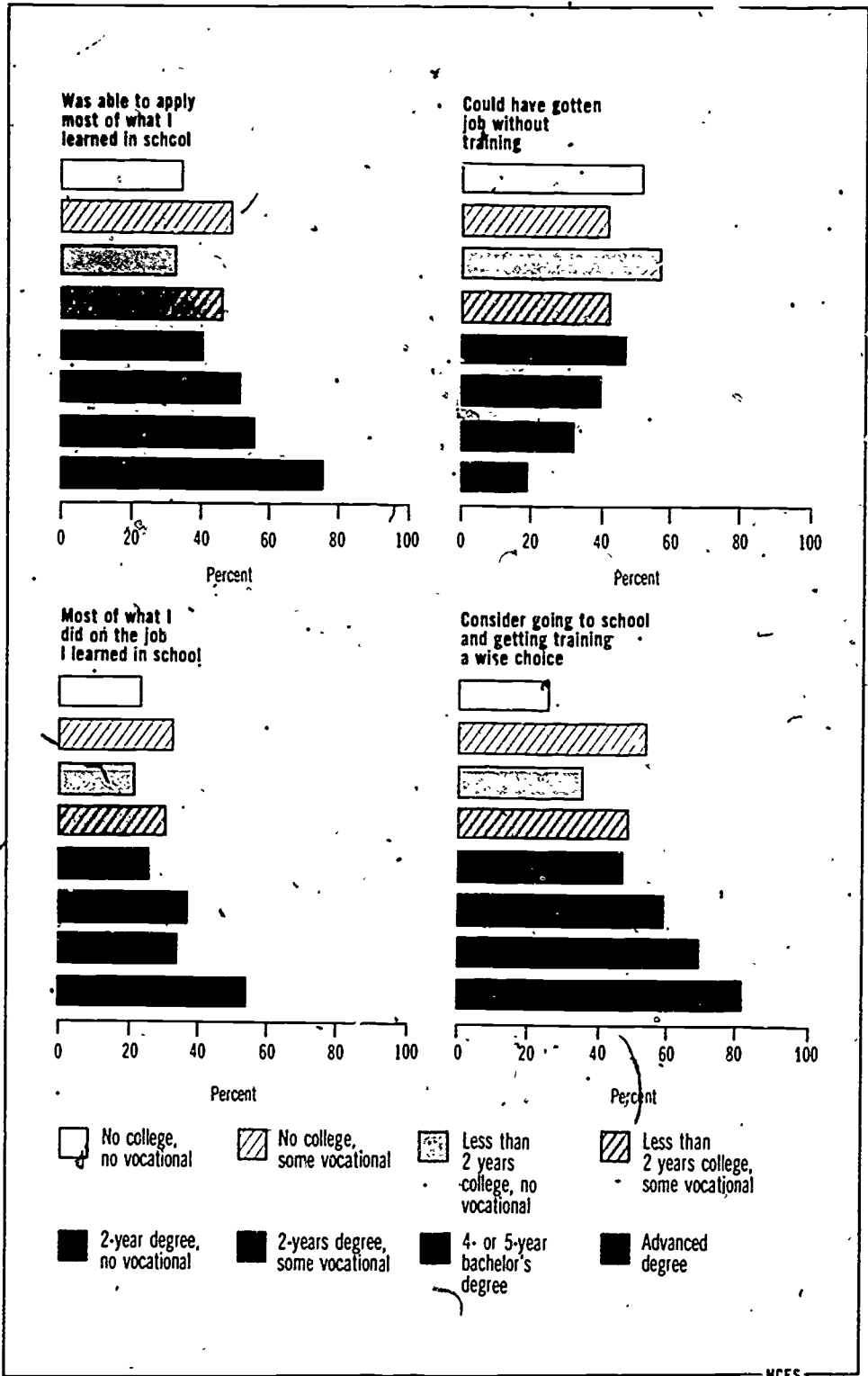
Educational attainment	"How did your schooling relate to your experiences on this <sup>1</sup> job?"			
	Experience			
	Was able to apply most of what I learned in school	Could have gotten the job without the training	Most of what I did on the job I learned in school	Consider going to school and getting training a wise choice
	Percent having the experience			
Total	45.9	41.5	29.5	49.1
No college, no vocational	34.9	50.2	21.8	25.5
No college, some vocational	49.7	40.9	33.2	53.9
Less than 2 years college, no vocational	33.6	48.6	20.9	34.8
Less than 2 years college, some vocational	46.6	41.5	30.7	49.6
2-year degree, no vocational	40.5	46.5	25.5	47.0
2-year degree, some vocational	52.6	39.7	36.9	59.2
4- or 5-year bachelor's degree	55.5	31.5	34.2	69.8
Advanced degree	75.8	19.3	54.9	80.9

<sup>1</sup> Current job in October 1979.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972, unpublished tabulations.

**Chart 5.8**  
**Relationship of Schooling to the Current Job of 1972 High School Seniors in 1979**

1972 high school seniors who had some vocational training and those with advanced degrees cited closer relationships between their jobs and schooling than did others.



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**Table 5.9**

**Assessment of the high school class of 1972 toward the need for more education or training in order to obtain or advance in desired career, by high school program and educational attainment: 1979**

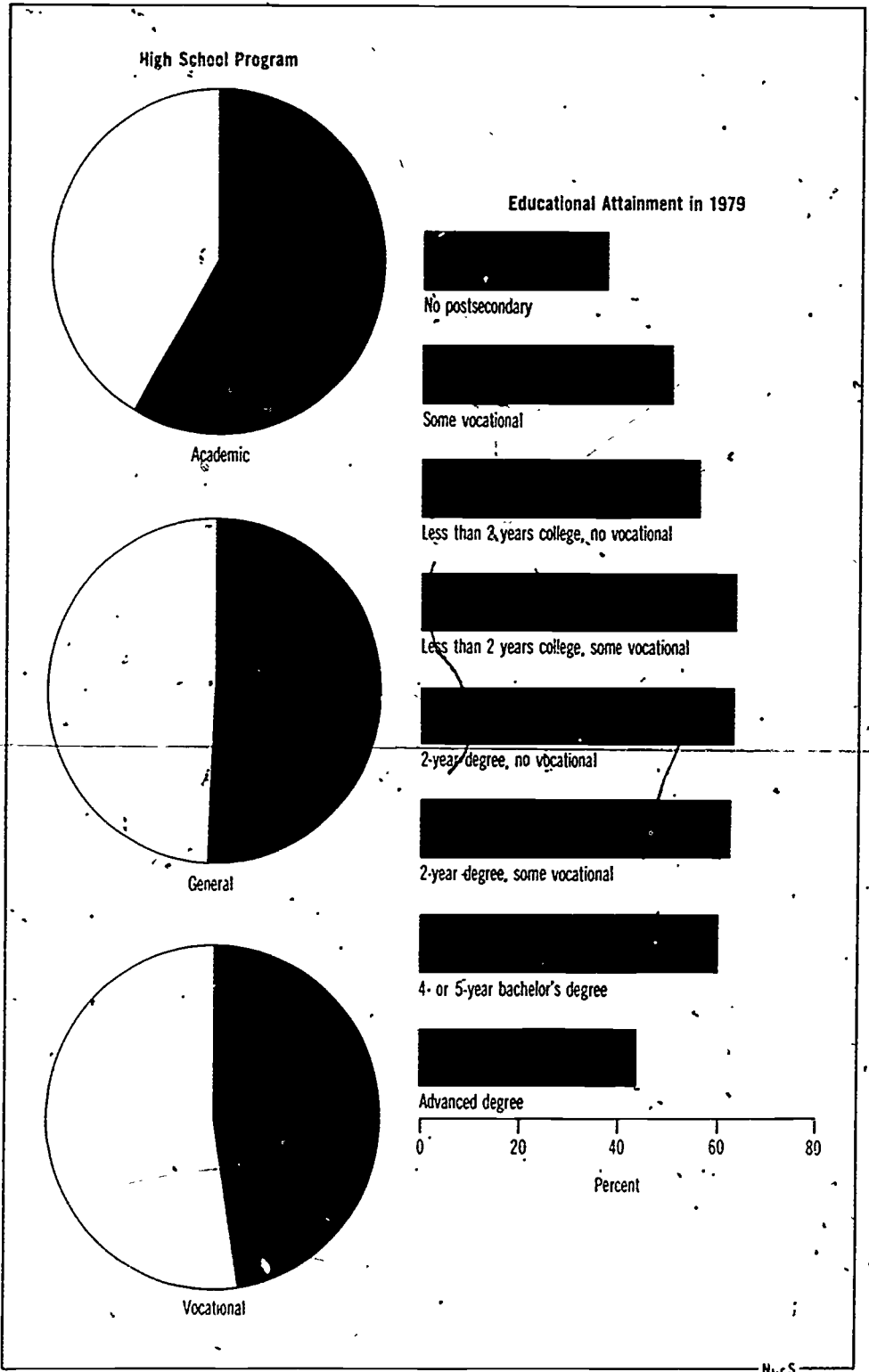
"Do you think you will need more education, training, or schooling than what you have at present in order to obtain this kind of work (work you expect to be doing when you are 30 years old) or to advance as you would like in your job or career?"

Subpopulation	Estimate of subpopulation size	Percentage distribution			
		Total	Yes	No	Don't know
Total	2,876,613	100.0	53.3	37.5	9.3
High school program:					
Academic	1,188,902	100.0	59.1	33.3	7.7
General	993,527	100.0	51.0	38.7	10.2
Vocational	689,173	100.0	46.4	43.0	10.6
Educational attainment:					
No postsecondary	734,160	100.0	36.0	51.3	12.8
Some vocational	380,160	100.0	51.1	39.8	9.1
Less than 2 years of college, no vocational	236,264	100.0	55.3	34.8	9.8
Less than 2 years of college, some vocational	297,799	100.0	65.1	26.7	8.2
2-year degree, no vocational	239,635	100.0	64.9	28.6	6.5
2-year degree, some vocational	237,952	100.0	63.8	29.4	6.8
4- or 5-year bachelor's degree	672,998	100.0	60.5	31.6	7.9
Advanced degree	75,057	100.0	44.3	49.1	6.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972, unpublished tabulations.

**Chart 5.9**  
**Percent of the High School Class of 1972 Citing Need for More Education in 1979**  
**by High School Program and Educational Attainment**

In 1979 more than half of the 1972 high school seniors expected they would need more education in order to meet career goals. The proportion was lower for those with no postsecondary training and for those with advanced degrees.



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**Table 5.10**

**Assessment of the high school class of 1972 toward the need for more education or training in order to obtain or advance in desired career, by race/ethnicity, ability, and socioeconomic status (SES): 1979**

"Do you think you will need more education, training, or schooling than what you have at present in order to obtain this kind of work (work you expect to be doing when you are 30 years old) or to advance as you would like in your job or career?"

Ability and SES levels	Race/ethnicity		
	Black	Hispanic	White
	Percent responding "yes"		
Ability <sup>1</sup>			
Lowest quartile	70.2	57.5	40.4
Middle 2 quartiles	79.0	64.1	50.7
Highest quartile	79.9	81.2	56.2
SES <sup>2</sup>			
Lowest quartile	68.7	63.4	43.5
Middle 2 quartiles	75.2	59.7	50.0
Highest quartile	80.0	70.7	56.3

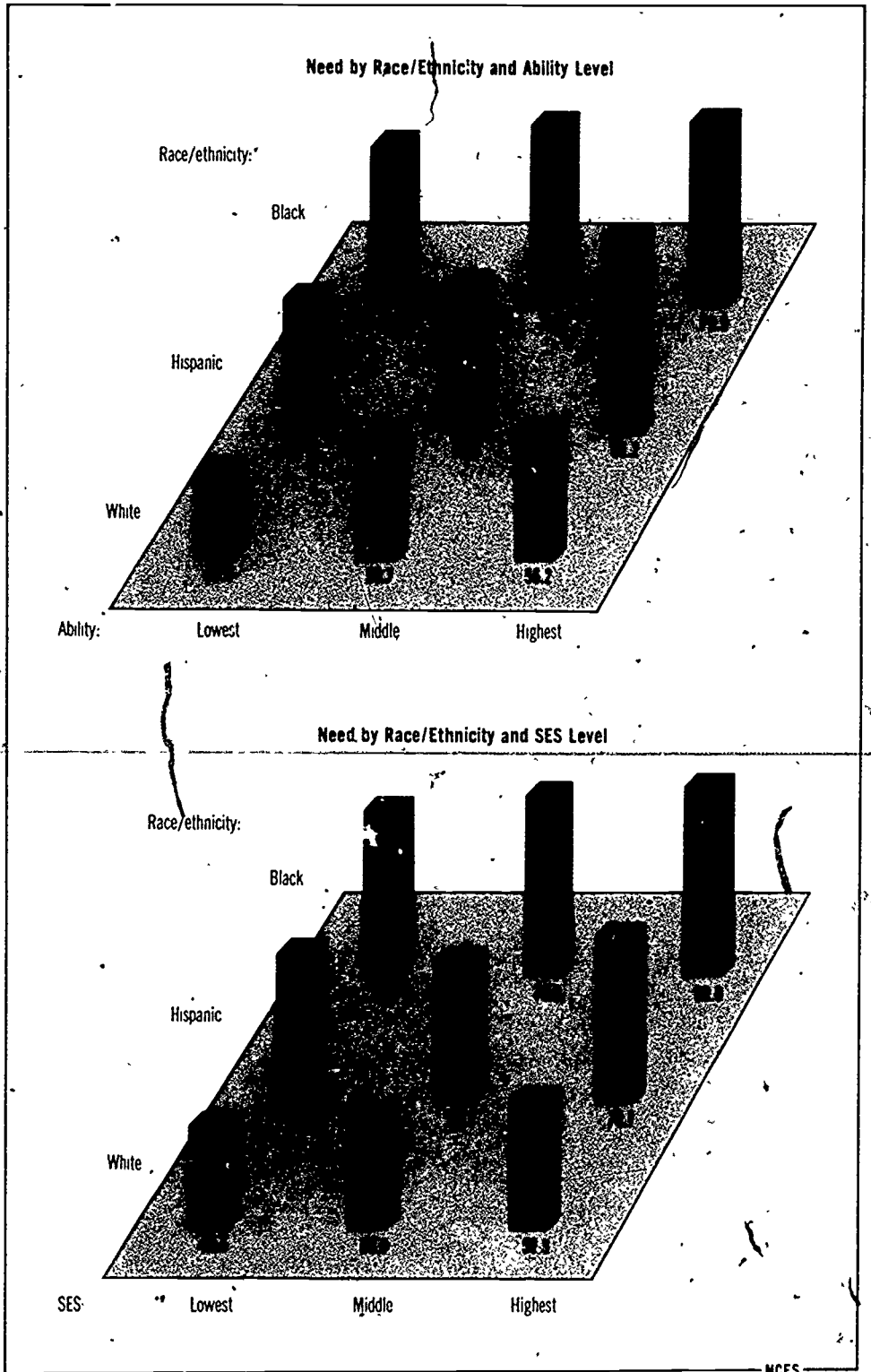
<sup>1</sup> The general academic ability index was derived from four base-year "Test Book" scores: vocabulary, reading, letter groups, and mathematics.

<sup>2</sup> The SES index was based upon a composite score involving 5 components: father's education, mother's education, parental income, father's occupation, and a household items index.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972, unpublished tabulations.

**Chart 5.10**  
**Percent of the High School Class of 1972 Citing Need for More Education in 1979**  
**by Race/Ethnicity and Ability and by Race/Ethnicity and SES**

Blacks of every ability level and SES level were more likely than Hispanics or whites to cite the need for more education in order to meet career goals.





**Table 5.11**

**High school seniors assessment of guidance counselor's influence on after high school plans, by high school program: 1980**

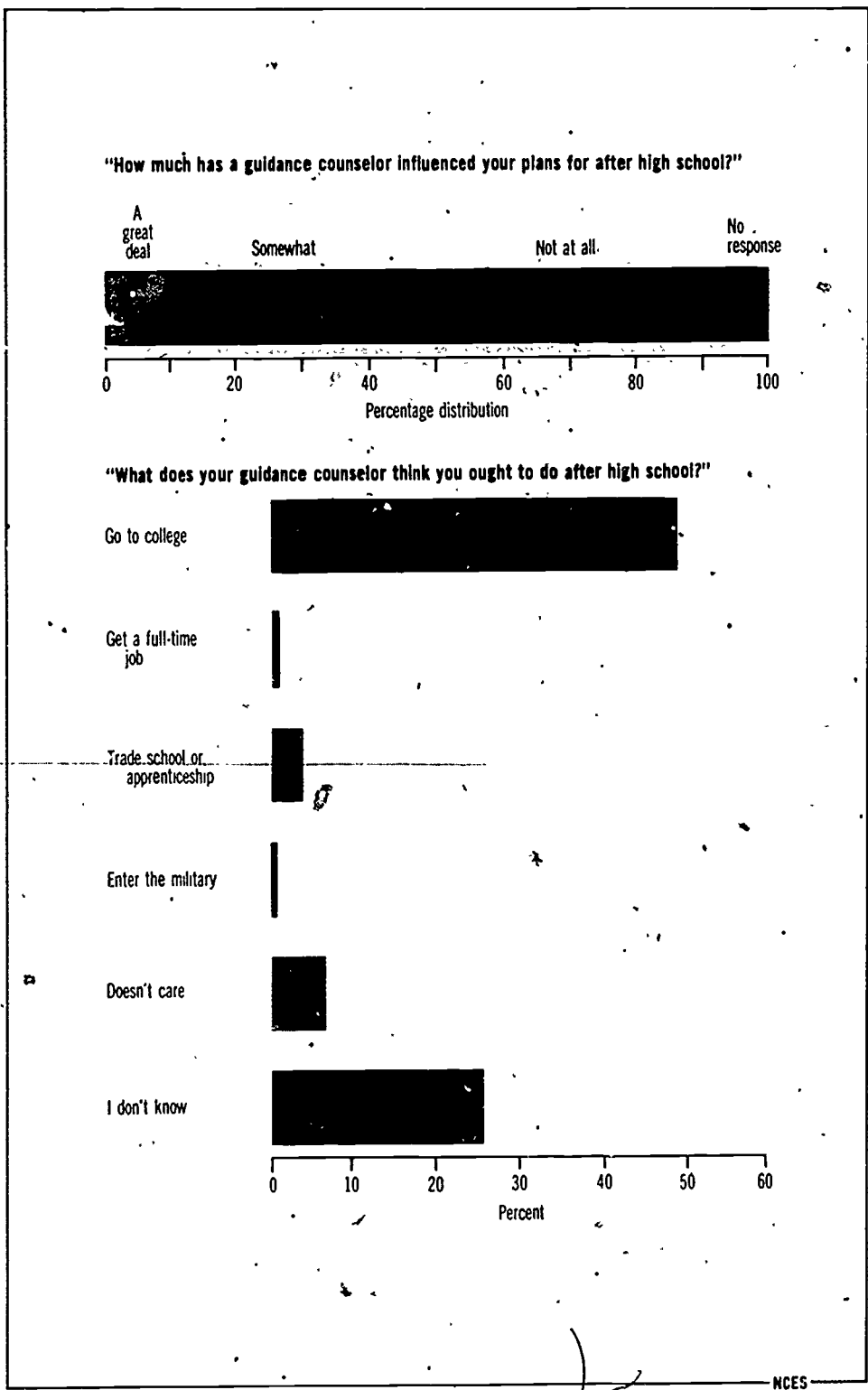
Response	Total	High school program		
		Academic	General	Vocational
"How much has a guidance counselor influenced your plans for after high school?"				
Percentage distribution				
Total	100.0	100.0	100.0	100.0
A great deal	10.3	11.6	9.1	10.3
Somewhat	37.2	41.0	34.5	35.7
Not at all	47.9	44.8	51.4	47.8
No response	5.6	2.5	5.0	6.2
"What does your guidance counselor think you ought to do after high school?"				
Percentage distribution				
Total	100.0	100.0	100.0	100.0
Go to college	48.0	68.5	37.4	33.6
Get a full-time job	1.4	.2	1.6	2.9
Enter a trade school or apprenticeship	4.1	1.2	4.8	7.2
Enter the military	.6	.4	.8	.7
Doesn't care	6.8	5.3	7.8	7.6
I don't know	26.4	17.2	32.0	32.0
No response	12.8	7.3	15.7	16.0

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, unpublished tabulations.

**Chart 5.11**  
**Guidance Counselor's Influence on After High School Plans**

Forty-seven percent of high school students felt that guidance counselors had "a great deal" or "somewhat" of an influence on after high school plans. A nearly equal proportion said guidance counselors had no influence on plans.



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**Table 5.12**  
**Attitudes of young adults toward high school, upon graduation in 1972, and 4 years after graduation,<sup>1</sup>**  
**and attitudes of seniors toward high school in 1980, by high school program**

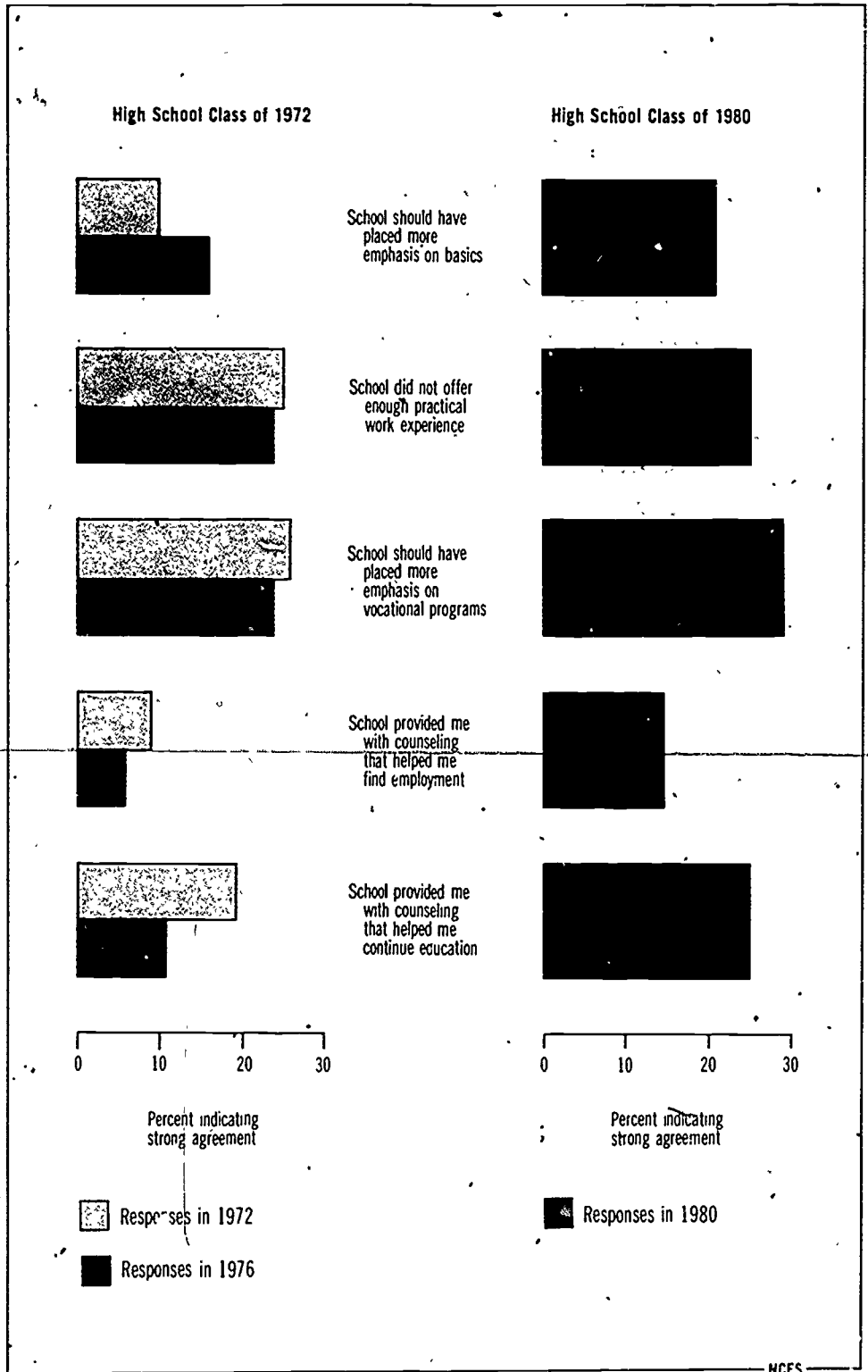
Item	High school program			
	Total	General	Academic	Vocational/ technical
	Percent indicating strong agreement			
<b>Seniors in 1972:</b>				
School should have placed more emphasis on basic academic subjects	10.0	11.0	9.3	9.2
School did not offer enough practical work experience	25.1	29.4	21.2	26.8
School should have placed more emphasis on vocational and technical programs	26.0	30.6	16.7	37.2
School provided me with counseling that helped me find employment	9.1	9.1	4.6	17.3
School provided me with counseling that helped me continue my education	18.5	16.6	20.2	17.5
<b>Seniors of 1972 responding in 1976:</b>				
School should have placed more emphasis on basic academic subjects	16.7	16.5	16.7	16.9
School did not offer enough practical work experience	24.5	26.7	22.9	24.0
School should have placed more emphasis on vocational and technical programs	24.8	28.8	18.3	30.1
School provided me with counseling that helped me find employment	6.7	6.0	4.8	11.0
School provided me with counseling that helped me continue my education	10.4	8.2	13.2	8.7
<b>Seniors in 1980:</b>				
School should have placed more emphasis on basic academic subjects	20.3	19.0	22.9	18.0
School did not offer enough practical work experience	25.6	29.1	20.4	28.2
School should have placed more emphasis on vocational and technical programs	28.7	31.8	17.4	41.2
School provided me with counseling that helped me find employment	14.7	13.3	10.4	23.3
School provided me with counseling that helped me continue my education	25.4	25.9	30.3	24.1

<sup>1</sup> Differs from previously published data in that the earlier tabulations prorated the not-applicable responses while these tabulations do not.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Longitudinal Study of the High School Class of 1972 and High School and Beyond Study, unpublished tabulations.

**Chart 5.12:  
Attitudes of Young Adults Toward High School**

More than one-quarter of high school seniors in 1972 and in 1980 strongly agreed with the statements that "school should have placed more emphasis on vocational and technical programs".



**Table 5.13**

**Employment status of sophomore and senior high school students, by racial/ethnic group and sex:  
Spring 1980**

	Sophomores			Seniors		
	Total population	Labor force participation rate <sup>1</sup>	Unemployment rate <sup>2</sup>	Total population	Labor force participation rate <sup>1</sup>	Unemployment rate <sup>2</sup>
All students	3,512,055	58.6	28.1	2,924,034	75.2	17.1
Males	1,677,206	62.0	28.6	1,404,098	78.3	16.3
Females	1,819,599	55.3	27.5	1,519,936	74.3	17.8
Blacks	359,887	53.8	47.1	269,068	70.3	30.7
Males	160,428	58.6	43.5	117,185	74.0	27.4
Females	196,111	49.4	50.4	151,883	67.4	33.5
Hispanics	253,714	56.6	37.3	174,362	75.1	20.4
Males	123,001	64.9	33.1	88,471	78.7	19.3
Females	127,342	48.3	42.4	85,891	71.5	21.5
Whites	2,345,642	59.0	24.8	2,093,410	75.7	15.0
Males	1,117,216	61.4	26.6	1,000,735	78.4	14.6
Females	1,222,516	56.7	23.0	1,092,676	75.3	15.4

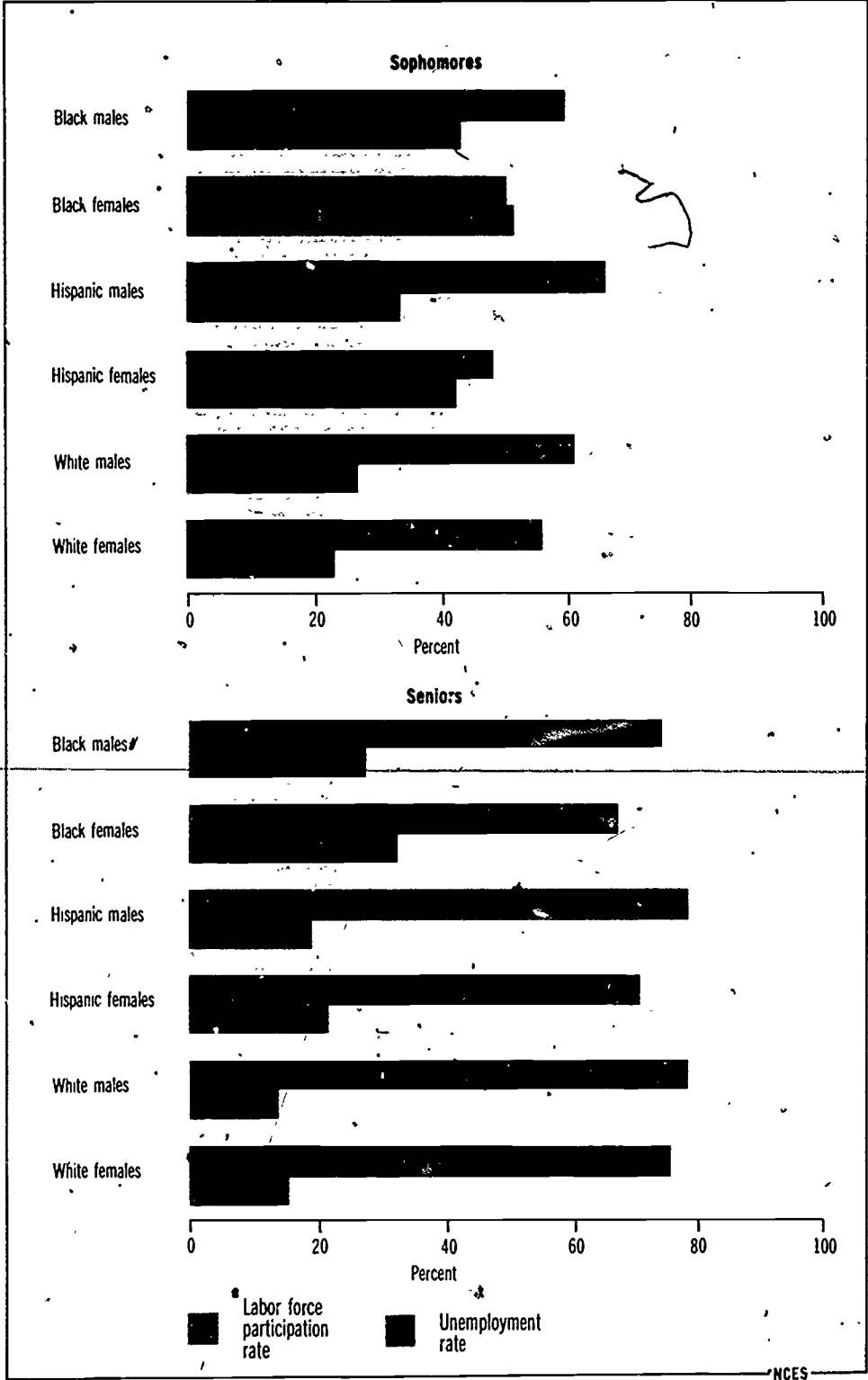
<sup>1</sup> Labor force participation rate is the total number of students, employed and unemployed, participating in the labor force as a percent of the total population of students.

<sup>2</sup> Unemployment rate is the number of students in the labor force who are unemployed as a percent of all students in the labor force.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, *Youth Employment During High School*, forthcoming.

**Chart 5.13**  
**Employment Status of High School Students, by Racial/Ethnic Group and Sex**

Hispanic males had the highest labor force participation rates among both sophomores and seniors. The unemployment rate for white seniors was three-quarters that for Hispanics and half that for blacks.



**Table 5.14**  
**Employment of sophomore and senior high school students, by type of community and racial/ethnic group: Spring 1980**

Type of community and racial/ethnic group	Sophomores		Seniors	
	Labor force participation rate <sup>1</sup>	Unemployment rate <sup>2</sup>	Labor force participation rate <sup>1</sup>	Unemployment rate <sup>2</sup>
Urban	57.9	35.5	76.5	20.3
Black	57.9	51.6	73.2	33.7
Hispanic	54.8	44.3	74.2	22.6
White	58.7	25.2	78.1	15.0
Suburban	60.0	27.7	78.1	15.8
Black	54.7	46.6	70.9	27.9
Hispanic	58.4	33.6	73.8	21.5
White	60.8	25.5	79.0	14.5
Rural	55.9	24.8	72.4	16.8
Black	47.0	37.4	65.1	28.0
Hispanic	57.7	27.5	77.3	14.6
White	56.7	23.5	72.8	16.0

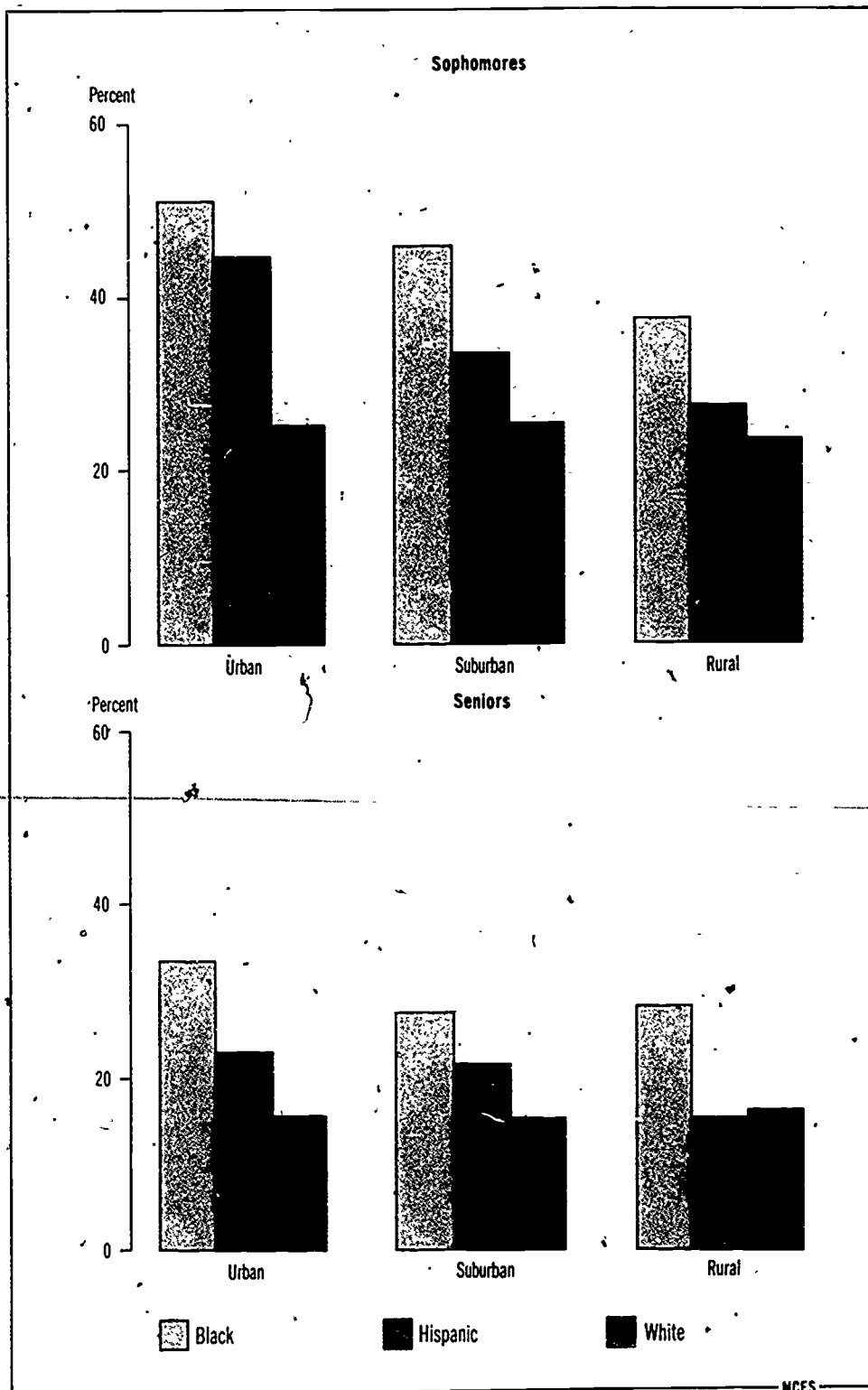
<sup>1</sup> Labor force participation rate is the total number of students, employed and unemployed, participating in the labor force as a percent of the total population of students.

<sup>2</sup> Unemployment rate is the number of students in the labor force who are unemployed as a percent of all students in the labor force.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, *Youth Employment During High School*, forthcoming.

**Chart 5.14**  
**Unemployment Rates of High School Students by Type of Community and Racial/Ethnic Group**

More than one-third of black seniors in urban areas were unemployed, compared with 23 percent of Hispanics and 15 percent of white seniors in urban communities.



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**Table 5.15**

**Sophomore and senior high school students participating in government sponsored work programs,<sup>1</sup> by sex, race/ethnicity, high school program, family income, and type of community: Spring 1980**

	Sophomores			Seniors		
	Cooperative Education	Work-study	CETA	Cooperative Education	Work-study	CETA
	Percent participating					
All Students	2.6	4.7	5.9	10.4	13.0	8.5
Sex:						
Males	3.4	6.4	6.7	10.5	13.6	8.6
Females	1.9	3.1	5.1	10.2	12.5	8.4
Race/ethnicity:						
Black	3.6	6.6	16.0	12.6	15.7	26.0
Hispanic	2.9	5.4	10.1	11.4	15.3	14.7
White	2.4	4.4	3.7	9.7	12.3	5.4
High school program:						
General	2.3	4.5	6.2	9.6	13.0	9.7
College preparatory	1.4	2.9	4.4	4.3	6.4	6.0
Vocational	5.4	9.1	8.4	21.4	24.1	11.5
Family income:						
Low	3.0	5.7	13.4	12.5	16.0	21.0
Middle	2.6	4.9	4.9	10.5	13.8	7.6
High	2.4	3.9	3.0	9.2	11.1	4.5
Type of community:						
Urban	3.0	4.8	9.0	11.2	13.3	11.8
Suburban	2.2	4.0	4.6	10.3	12.3	7.1
Rural	3.2	6.3	6.4	10.5	15.0	9.6

<sup>1</sup> Three major types of government sponsored programs that provide work experience are available to high school students: (1) Cooperative Education is an instructional plan that combines study at school (most often in the vocational track) with regularly supervised employment; (2) work-study is a program designed to contribute financial means, to students in need, through part-time employment, and (3) the Comprehensive Employment and Training Act (CETA).

SOURCE. U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, *Youth Employment During High School*, forthcoming.

**Chart 5.15**  
**High School Students Participating in Government Sponsored Work Programs**

Participation in government sponsored work programs was highest for blacks, students in vocational programs, those with low family income, and those from urban and rural communities.

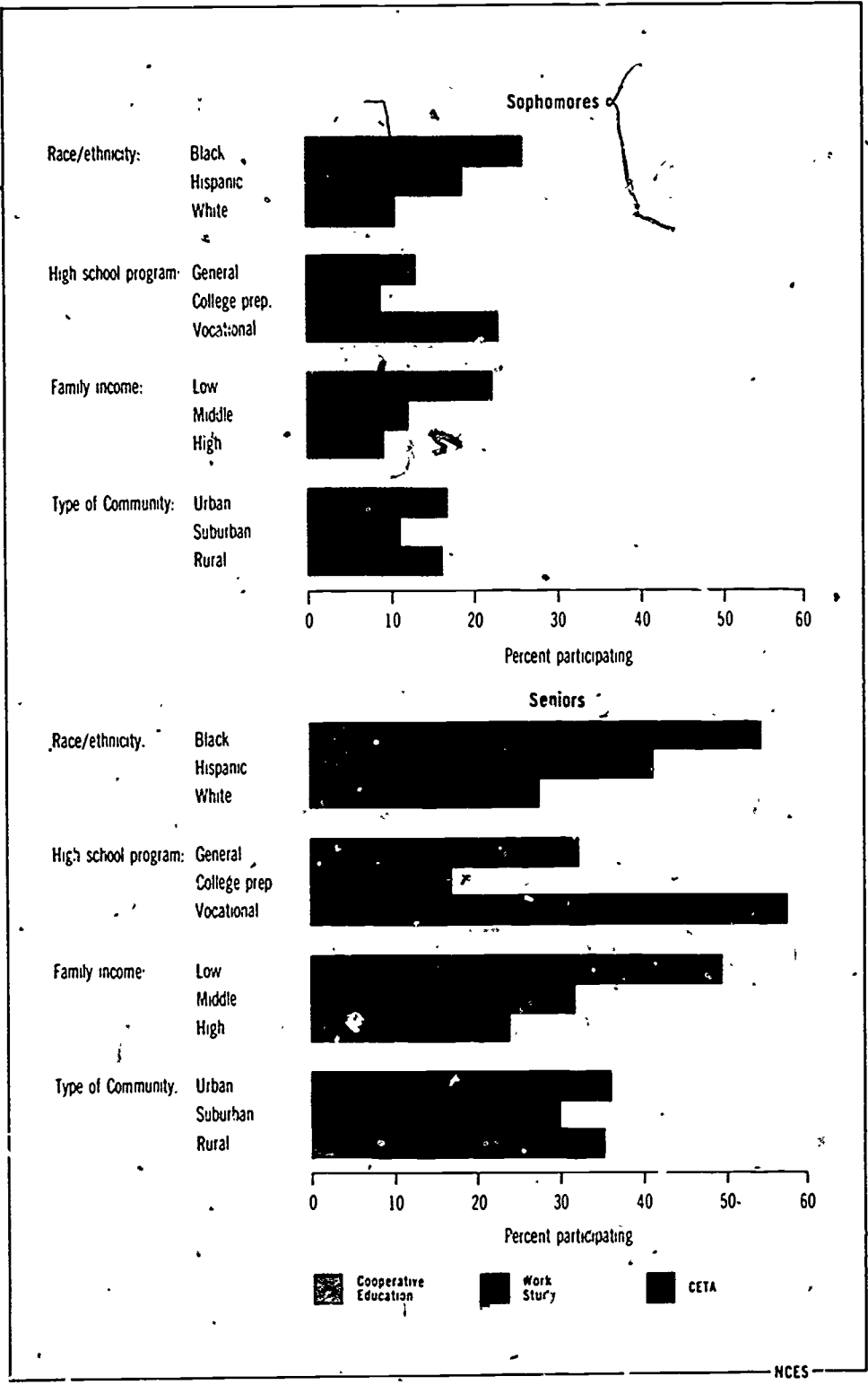


Table 5.16

Percentage distribution, by type of employer, of employed sophomore and senior high school students, by race/ethnicity and family income: Spring 1980

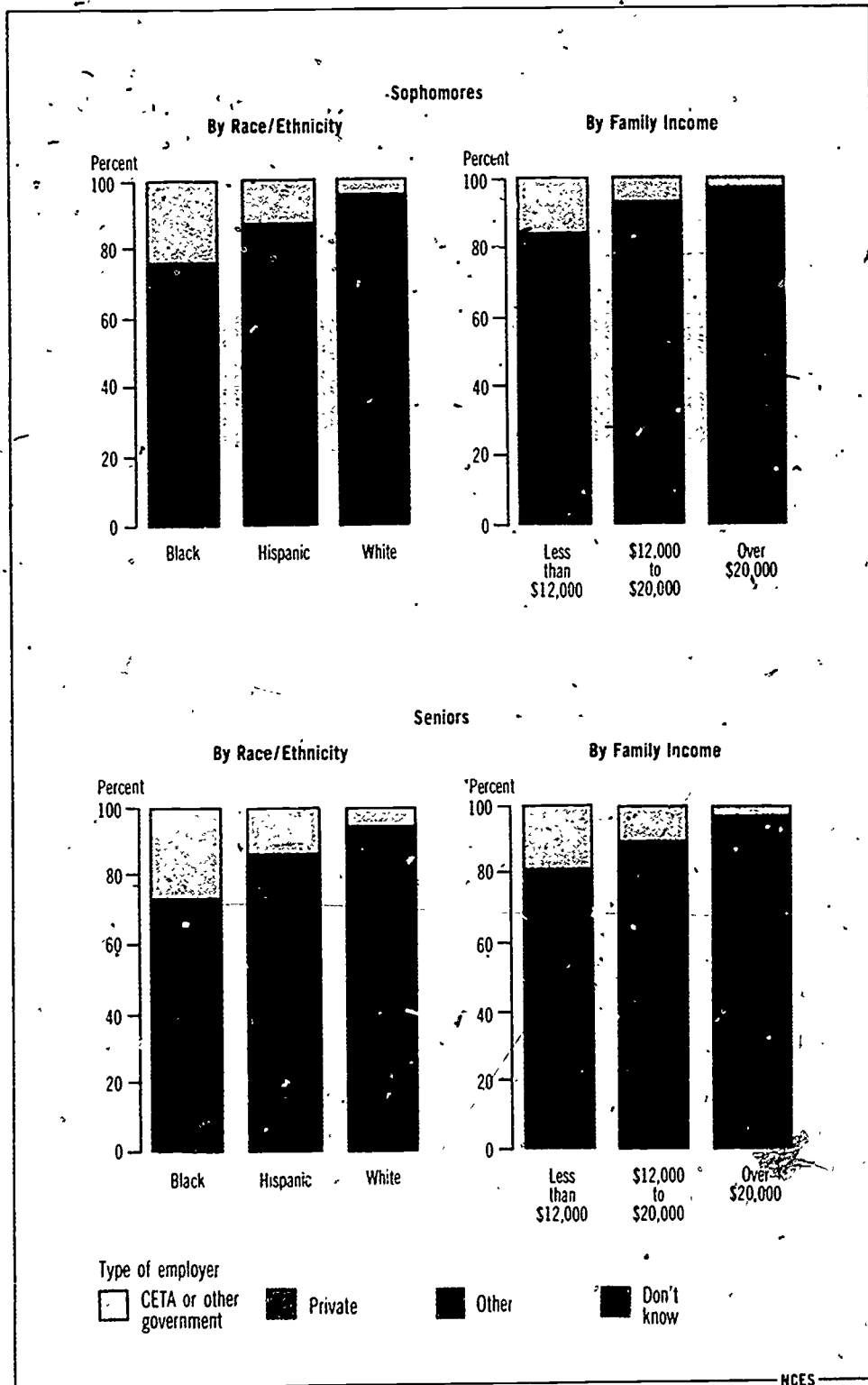
	Total	CETA or, other government job	Private	Other	Don't know
Sophomores					
Race/ethnicity					
Black	100.0	22.7	17.0	32.8	27.5
Hispanic	100.0	11.5	29.9	28.0	30.6
White	100.0	4.0	36.9	36.3	22.8
Family income					
Less than \$12,000	100.0	15.5	23.5	33.5	27.5
\$12,000 to \$20,000	100.0	5.8	32.8	37.0	24.4
Over \$20,000	100.0	2.7	42.6	34.3	20.4
Seniors					
Race/ethnicity					
Black	100.0	27.8	34.9	20.6	16.7
Hispanic	100.0	13.8	42.6	18.8	24.7
White	100.0	5.3	58.4	17.9	18.3
Family income					
Less than \$12,000	100.0	19.1	42.1	20.8	18.0
\$12,000 to \$20,000	100.0	7.5	53.6	18.9	20.0
Over \$20,000	100.0	3.9	62.6	16.8	16.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, *Youth Employment During High School*, forthcoming

275

**Chart 5.16**  
**Distribution of Employed High School Students by Type of Employer**

Black and Hispanic employed students were more likely than whites to be working in CETA or other government jobs. Employed students from families with higher income levels were more likely to work for private employers.



**Table 5.17**

**Mean reservation wage<sup>1</sup> and earned wage<sup>2</sup> of sophomore and senior high school students, by sex, racial/ethnic group, and employment status: Spring 1980**

Grade level, racial/ ethnic group, and employment status	Male			Female		
	Reservation wage <sup>1</sup>	Earned wage <sup>2</sup>	Ratio of reservation to earned wage	Reservation wage <sup>1</sup>	Earned wage <sup>2</sup>	Ratio of reservation to earned wage
Sophomores						
Black						
Employed	\$2.85	\$3.00	.95	\$2.65	\$2.52	1.05
Unemployed	2.85	...	95	2.85	...	1.13
Out of labor force	2.74	...	91	2.76	...	1.09
Hispanic						
Employed	2.87	3.12	92	2.81	2.56	1.10
Unemployed	2.87	...	92	2.55	...	1.00
Out of labor force	2.79	...	89	2.70	...	1.05
White						
Employed	2.73	3.01	91	2.30	2.19	1.05
Unemployed	2.79	...	93	2.51	...	1.15
Out of labor force	2.68	...	89	2.35	...	1.07
Seniors						
Black						
Employed	\$3.11	\$3.35	93	\$3.05	\$3.20	95
Unemployed	2.97	...	87	2.98	...	93
Out of labor force	2.93	...	88	2.84	...	90
Hispanic						
Employed	3.16	3.43	92	2.93	3.16	93
Unemployed	2.99	...	87	2.91	...	92
Out of labor force	3.05	...	89	2.91	...	92
White						
Employed	3.08	3.43	90	2.86	3.12	92
Unemployed	2.97	...	87	2.79	...	89
Out of labor force	3.01	...	88	2.71	...	87

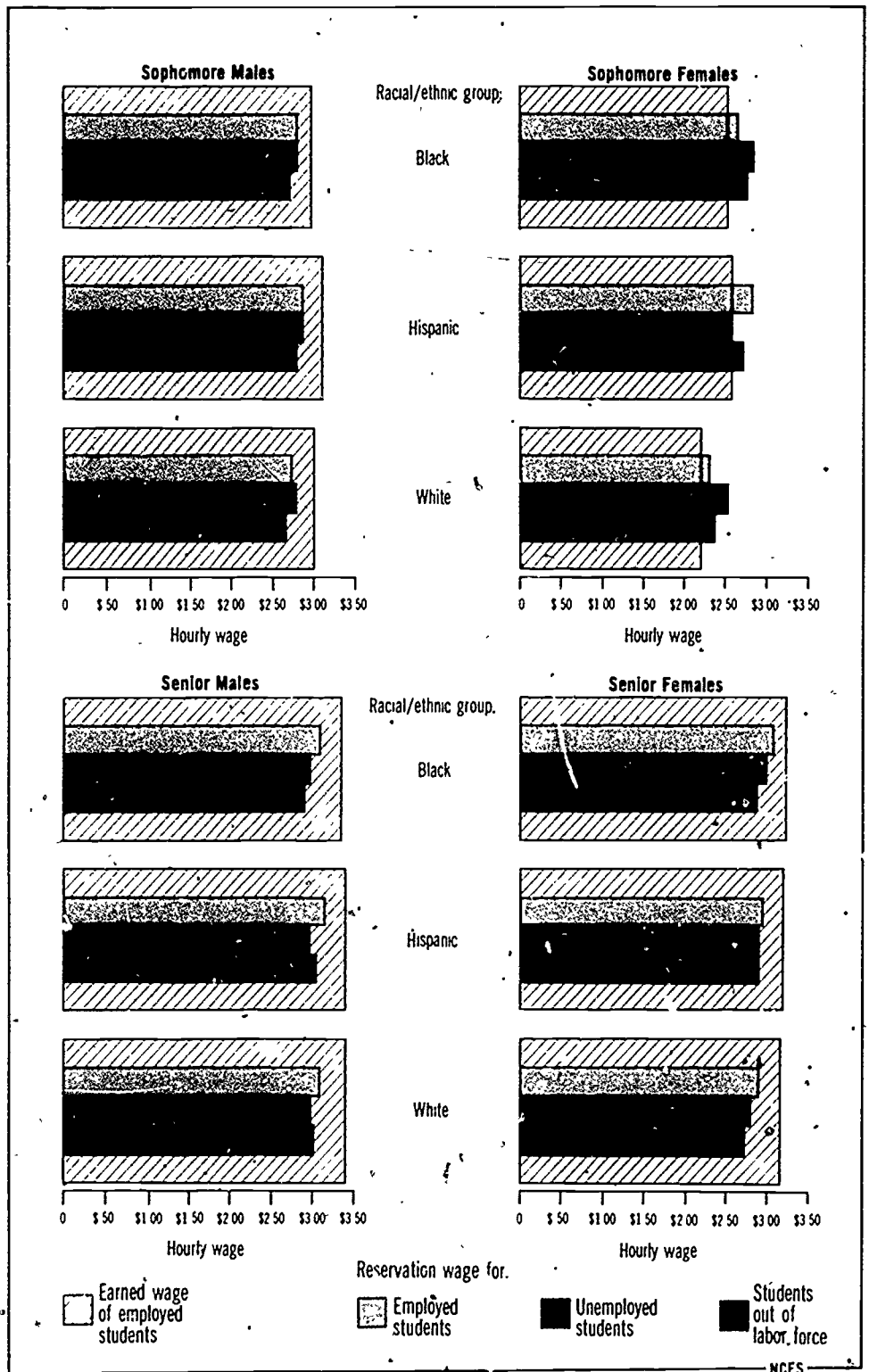
<sup>1</sup> Lowest hourly wage students would accept while in high school.

<sup>2</sup> Mean hourly wage earned by employed high school students.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Survey, *Youth Employment During High School*, forthcoming

**Chart 5.17**  
**Mean Reservation Wage and Earned Wage of Sophomore and Senior High School Students**

The lowest hourly wage students would accept while in high school (the reservation wage) was lower than the average earned wage of employed students except among sophomore females. The reservation wage for most groups of students was lower than the spring 1980 minimum wage of \$3.10.



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In recent years, increased attention has been focused on the handicapped students in the Nation's schools. Supplemental funding has been provided by the Federal Government and State education agencies to assist local school districts in furnishing improved, more appropriate services to handicapped students. Federal and State education agencies also have sought to ensure that the rights of handicapped students are being protected. Much of the data presented in this chapter was collected as part of these Federal and State efforts. Recent attention has been heightened further by the designation of 1981 as the International Year of Disabled Persons. Given the currency of interest and the availability of data, this chapter undertakes to examine the education of the handicapped.

There are a number of issues which arise when one examines the condition of education of the handicapped. First, defining and counting the school-aged handicapped population are problematic. Who needs and who is receiving special education? Are certain groups more heavily represented among special education students? Then there is the question of the types of educational settings within which the handicapped of school-age are served. The further issues of isolation and integration emerge at this point. Are handicapped students being educated with their non-handicapped peers? Are handicapped students being served in local schools, or are they being sent to special schools for the handicapped? The question also arises as to what types of services are being provided for handicapped students. Are handicapped children, especially those attending institutions other than their local schools, receiving training that will prepare them for outside opportunities, or are they simply receiving custodial care? Associated with questions of services are concerns about the staff that are being allocated to provide special education. This chapter begins to address some of these questions by examining data available through the Office for Civil Rights (OCR) and the Office of Special Education (OSE).

### **Students Being Served.**

One major source of data on students needing and receiving special education is the OCR Elementary and Secondary Schools Civil Rights Survey. This survey sampled 6,049 of the approximately 11,500 school districts with enrollments of at least 300 students. According to data reported to QCR as of October 15, 1978, the proportion of public elementary/secondary school students evaluated as needing special education services ranged from 5 to 13 percent, depending on the State (entry 6.1). For the Nation, approximately 8 percent of the total public school enrollment was represented in this count of students requiring special education. Nationwide, fully 98 percent of the students requiring special education services appeared to participate in some special education program, although it was not possible to assess the extent or quality of these services. There were, however, variations among States in the percentage of students being served. The proportion of students identified as needing special education and being served varied from 93 percent in North Carolina to 100 percent in Florida, Hawaii, and Nevada. Despite State variations, no regional pattern was discernible. It should be kept in mind that a small percentage, 5 or 6 percent, can be translated into thousands of children needing, but not receiving, educational services. The percentage of students who were served outside of their own school district also varied considerably. Although an average of 7 percent of all special education students participated in programs outside of their own district, in 10 States the proportion was 10 percent or higher, and in New York and Pennsylvania the percentages were 22 and 25 percent, respectively.

The handicapped population of school-age received services in three major areas: schools operated by local school districts; special purpose facilities, (e.g., schools for the blind, schools for the mentally retarded); and vocational education facilities. The participation and composition of the handicapped population varied in different types of facilities. Handicapped students served in the local school districts were enrolled either in regular schools or in special education schools composed predominantly of handicapped students. According to data reported to OCR in the fall of 1978, an estimated 2.9 million were served by local school districts, of which 117,000 were enrolled in special education schools operated by their local school district (entry 6.2). Approximately 152,000 were served in special purpose facilities, operated or substantially supported by the State.

The composition of these schools and facilities appeared to be distinguished by the severity of the handicapping conditions. Students with specific learning disabilities or speech impairments together comprised nearly two-thirds of the handicapped enrollment in local school districts but less than 10 percent of enrollments in special schools and in special purpose facilities. The mentally retarded served in the local school districts were overwhelmingly classified as educable, although those served in special schools were most often categorized as trainable mentally retarded. The trainable mentally retarded made up the largest single share of special school enrollment, 34 percent, while the severely/profoundly mentally retarded represented the most frequent category of handicapped in special purpose facilities.

During the 1978-79 school year, about 163,000 children were reportedly receiving educational services in special purpose facilities, and about half of this number was residing in these facilities (entry 6.3). Students being educated or residing in special purpose facilities showed similar disabilities, with the severely/profoundly mentally retarded comprising a larger proportion of the resident population. Among the children being educated, 61 percent were classified as severely/profoundly mentally retarded, trainable mentally retarded, seriously emotionally disturbed, or deaf. These groups represented 72 percent of the facilities' resident population. Whereas the specific learning disabled comprised one-third of the total handicapped population served in local school districts, they made up only 6 percent of the population being educated and 2 percent of the population residing in special purpose facilities. The speech impaired, likewise, were seldom served or housed in special purpose facilities.

Although special education students made up approximately 8 percent of regular school district enrollment, they comprised a smaller proportion, 5.8 percent, of vocational education enrollment in comprehensive secondary schools in the fall of 1979 (entry 6.4). About 5 percent of the students trained in area vocational education centers also were handicapped. Specific learning disabled and mentally retarded students were most frequently represented in the counts of handicapped youth in secondary school vocational programs. It is not known what proportion the handicapped represented of the general enrollment at the secondary level. This vocational education percentage is even smaller when 2-year higher education institutions are considered; fewer than 2 percent of vocational education participants at this level were handicapped. Data are not available to compare figures for handicapped participation in postsecondary education overall.



Another point of interest is the comparison of participation rates in various special education programs by racial/ethnic membership and sex. Blacks and males were found proportionally more often in special education programs than other students. Their overrepresentation in special education programs was particularly evident in programs that can be considered judgmental. That is, the judgment of administrators and teachers plays a greater part in the assignment of students to these programs than to programs for more clinically defined conditions (entry 6.5). Included among these judgmental programs were: educable mentally retarded, trainable mentally retarded, seriously emotionally disturbed, specific learning disabled, and speech impaired. Males were disproportionately represented in all five programs, while blacks were overrepresented in the mentally retarded and seriously emotionally disturbed categories.

Two major Federal formula grant programs were designed to help meet the special educational needs of handicapped children. Public Law 94-142, the Education for All Handicapped Children Act, authorizes Federal funds to be used to cover the excess cost of educating handicapped students in the Nation's public schools. Public Law 89-313 authorizes Title I funds to be used to educate handicapped children in State-operated institutions and programs. During school year 1979-80, over 4 million handicapped persons 3 through 21 years old reportedly were receiving special education under these two programs (entry 6.6). These data are based on State counts of all handicapped children receiving special education and related services on December 1, 1979. The counts include all children served, whether by local school districts, intermediate units, or directly by the State.

### **Environmental Conditions**

Public Law 94-142 mandates that handicapped children be educated with their non-handicapped peers to the maximum extent appropriate and that school districts have a continuum of service options available for handicapped students. According to the most recent data for the school year 1978-79, 93 percent of the handicapped persons served under P.L. 94-142 and P.L. 89-313 received special education services in regular schools (entry 6.7). Sixty-nine percent were served in regular classrooms in 1978-79; another 24 percent took instruction in separate classrooms in regular schools, while 4.9 percent were placed in separate schools. These proportions varied appreciably by State; in nine States, the percentages served in regular classes were significantly below the national average. Eight States had appreciably higher percentages served in separate classes, and five States had significantly higher percentages served in separate schools. Despite apparent State differences, little regional variation was discernible.

Another major concern is with the amount of time special education students spend in isolated classes. These are classes where students have a chance to interact only with other special education students. Certainly there are a number of handicapping conditions that are more difficult to "mainstream" than others. The data from the fall of 1978 show that the amount of time spent in special education classes did vary among programs and thus seemed to reflect this consideration (entry 6.8). A majority of public school students in special education programs spent less than 10 hours a week in such programs. This observation was true, particularly of students in speech impaired, specific learning disabled, visually impaired, and other health impaired programs. Mentally retarded, seriously emotionally disturbed, orthopedically impaired, and deaf students were much less likely to spend most of their day in regular classrooms. The data indicate that many special education children, over half a million, remained in isolated settings full-time.

A further concern in any discussion of the education of the handicapped is the question of accessibility of school buildings to handicapped students. The major contention in this area has usually been over the expense of altering major structural aspects of school buildings. It is interesting that the area where the least progress in accessibility has been achieved is with restroom facilities, not in building entrances (entry 6.9). Building entrances had the highest rate of accessibility of the four types of structural features, according to the fall 1978 OCR survey. The amount of variation among the States in accessibility was sizable. New Mexico schools reported that 79 percent of their buildings were accessible compared to the District of Columbia with only 14 percent. Most States located in the Great Lakes and the Far Southwest areas were as high or higher than the Nation on all four accessibility measures. It should be clear that, although progress has been made in recent years to improve the accessibility of educational facilities, there are still areas where accessibility is extremely limited.

#### **Types of Programs**

For any discussion of the types of programs being offered handicapped children, there is very little information on what exactly is being provided. The offerings of local school districts can only be approximated by examining the types of students served. From the data, it is apparent that severely/profoundly mentally retarded students are seldom served in local school districts and that provisions for these students would be uncommon. Beyond this information, little else is known about programs in local school districts. One area where there is at least some information available is in special purpose facilities. In examining the special purpose facility data, one finds that most residential facilities attempted to offer at least some form of alternative placement to their students (entry 6.10). The most common form of alternative placement was to a local school district, although placements to intermediate educational units, area vocational education centers, sheltered workshops and other facilities for the handicapped were also available at some facilities. Residential facilities operated for the orthopedically impaired and the specific learning disabled were least likely to offer alternative programs outside of their own institution.

Certainly, alternative placements were not the only form of programs offered by special purpose facilities. A number of types of educational programs were offered within these institutions (entry 6.11). Most often these programs involved a combination of academic and specialized training, e.g., communications skills, use of devices, etc. Over 800 facilities serving 94,000 children provided such programs. Another 91,000 children were served by 345 facilities offering a combination of academic, vocational education, and specialized training. Facilities providing only special training were also common. The type of educational program tended to vary according to the type of handicapped student the facility was organized to serve. Mentally retarded and speech impaired facilities most often provided specialized training programs only.

#### **Personnel**

Of the teaching force, approximately 200,000 were identified as special education teachers in 1978-79 (entry 6.12). The 1980 OSE Report to Congress established the 1978-79 national need for newly trained special educators at 64,000, with a cumulative projection of 85,000 when accounting for attrition. Greatest need has been identified for teachers of the seriously emotionally disturbed, teachers of low-incidence handicapped population, such as the deaf/blind and the multihandicapped, and instructional and support staff to serve special populations. Given that 69 percent of all handicapped children and youth are served in the regular classroom environment, a compelling need has been identified by OSE for regular classroom teachers to receive specialized training. Present OSE initiatives are targeted upon programming to insure that regular educators acquire the competencies to serve exceptional children appropriately. For the fiscal year 1980, 21.4 percent (\$11,875,000) of OSE Personnel Preparation funds were obligated for the inservice training of regular educators. This funding supported the specialized preparation of 83,000 regular educators and support personnel.

**Table 6.1**  
**Public elementary/secondary students evaluated as requiring special education, students participating,**  
**and students served outside of local school district: Fall 1978**

State	Total enrollment	Students requiring special education		Students participating		Students served outside	
		Number	As percent of total enrollment	Number	As percent of students requiring special education	Number	As percent of students participating in special education
Total 50 States and DC	41,836,257	3,491,482	8	3,409,672	98	244,876	7
Alabama	761,928	63,773	8	62,226	98	1,122	2
Alaska	86,307	9,139	11	8,884	97	22	0
Arizona	508,085	40,647	8	39,091	96	1,618	4
Arkansas	442,294	34,987	8	34,064	97	2,223	7
California	4,096,371	311,183	8	305,883	98	23,687	8
Colorado	549,014	44,814	8	44,274	99	1,447	3
Connecticut	568,957	64,317	11	62,777	98	4,966	8
Delaware	113,564	14,690	13	13,990	95	734	5
District of Columbia	108,903	6,762	6	6,541	97	647	10
Florida	1,513,285	127,630	8	127,121	100	-628	0
Georgia	1,067,669	90,111	8	84,643	94	1,959	2
Hawaii	169,602	9,886	6	9,886	100	337	3
Idaho	194,545	13,796	7	13,520	98	207	2
Illinois	2,082,095	207,165	10	203,512	98	19,687	10
Indiana	1,108,976	84,266	8	83,083	99	3,918	5
Iowa	553,075	32,364	6	31,281	97	3,270	10
Kansas	423,615	32,954	8	31,226	95	1,497	5
Kentucky	686,357	66,901	10	64,448	96	1,403	3
Louisiana	817,228	83,286	10	80,845	97	2,342	2
Maine	220,653	18,554	8	17,885	96	1,140	6
Maryland	819,327	86,528	11	84,435	98	2,079	2
Massachusetts	1,032,891	120,046	12	118,851	99	7,502	6
Michigan	1,911,394	149,577	8	147,901	99	17,833	12
Minnesota	787,671	72,438	9	71,488	99	6,256	9
Mississippi	487,473	34,849	7	34,151	98	747	2
Missouri	883,665	103,420	12	99,860	97	11,649	12
Montana	141,443	7,636	5	7,537	99	192	3
Nebraska	255,438	21,596	8	21,440	99	1,122	5
Nevada	145,813	9,838	7	9,836	100	23	0
New Hampshire	158,820	7,646	5	7,567	99	1,050	14
New Jersey	1,303,151	105,163	8	102,761	98	13,540	13
New Mexico	273,568	19,637	7	19,380	99	194	1
New York	3,035,925	156,093	5	153,682	98	34,001	22
North Carolina	1,170,311	111,486	10	103,342	93	1,656	2
North Dakota	97,115	7,047	7	6,592	94	479	7
Ohio	2,063,951	175,710	9	170,888	97	16,118	9
Oklahoma	539,639	45,699	8	44,796	98	859	2
Oregon	451,342	26,707	6	25,791	97	1,240	5
Pennsylvania	2,019,501	148,310	7	143,775	97	35,581	25
Rhode Island	166,033	14,020	8	13,682	98	1,111	8
South Carolina	638,574	69,244	11	68,218	95	1,330	2
South Dakota	125,386	8,126	6	7,869	97	386	5
Tennessee	863,530	103,485	12	102,182	99	1,644	2
Texas	2,808,985	266,975	10	262,214	98	3,195	1
Utah	320,780	33,107	10	32,533	98	555	2
Vermont	80,176	9,716	11	8,276	95	1,157	14
Virginia	1,054,341	73,818	7	72,374	98	1,944	3
Washington	766,928	38,444	5	37,845	98	1,991	5
West Virginia	397,620	20,335	5	19,707	97	216	1
Wisconsin	873,269	80,262	9	78,158	97	6,044	8
Wyoming	89,674	7,699	9	7,371	96	328	4

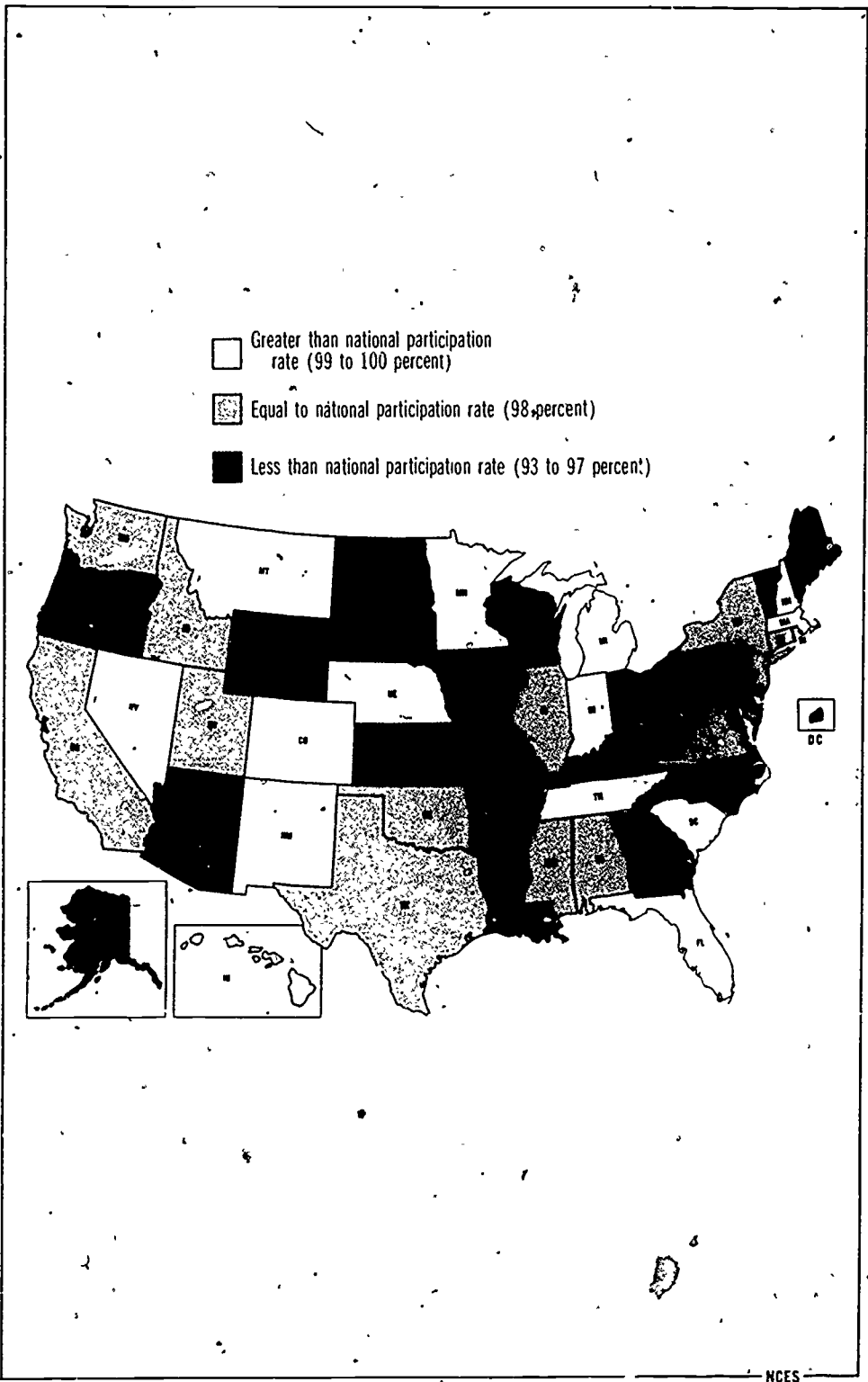
\*Data on the total number of students requiring special education may be underestimated in local school districts where complete information on all handicapped children is not available.

NOTE: Details may not add to totals due to rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, *State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools, 1980.*

**Chart 6.1**  
**Handicapped Students Participating in Special Education as Percent of Those Requiring Special Education**

From 5 to 13 percent of public elementary/secondary school students were judged in need of special education depending on the State. Participation rates in special education programs of students needing services ranged from 93 to 100 percent among the States.



**Table 6.2**

**Public elementary/secondary school students in special education programs served in local school districts and special purpose facilities, by type of program: Fall 1978**

Type of program	Total served <sup>1</sup>	Served in local school districts		Served in special purpose educational facilities
		Total	In special education schools <sup>2</sup>	
		Number		
Total	3,011,251	2,859,694	117,328	151,557
Specific learning disabled	994,924	985,087	7,159	9,837
Speech impaired	856,052	851,565	2,889	4,487
Educable mentally retarded	618,884	608,629	20,515	10,255
Seriously emotionally disturbed	167,055	138,831	18,328	28,224
Trainable mentally retarded	119,338	97,106	39,644	22,232
Multihandicapped	55,089	40,253	12,744	14,836
Other health impaired	50,226	48,642	3,631	1,584
Orthopedically impaired	36,973	32,779	9,767	4,194
Deaf	32,890	16,031	2,515	16,859
Seriously/profoundly mentally retarded	31,946	...	...	31,946
Hard of hearing	25,267	23,926	767	1,341
Visually handicapped	19,212	14,528	669	4,684
Deaf/blind	3,395	2,317	332	1,078
		Percentage distribution		
Total	100.0	100.0	100.0	100.0
Specific learning disabled	33.0	34.4	6.1	6.5
Speech impaired	28.4	29.8	2.5	3.0
Educable mentally retarded	20.6	21.3	17.5	6.8
Seriously emotionally disturbed	5.6	4.8	15.6	18.6
Trainable mentally retarded	4.0	3.4	33.8	14.7
Multihandicapped	1.8	1.4	10.9	9.8
Other health impaired	1.7	1.7	3.1	1.0
Orthopedically impaired	1.2	1.2	8.3	2.8
Deaf	1.1	.6	2.1	11.1
Seriously/profoundly mentally retarded	1.1	...	...	21.1
Hard of hearing	.8	.8	.6	.9
Visually handicapped	.6	.5	.6	3.1
Deaf/blind	.1	.1	.3	.7

NA Not available.

<sup>1</sup> Data may not include students being served in educational facilities other than local public schools or special purpose facilities.

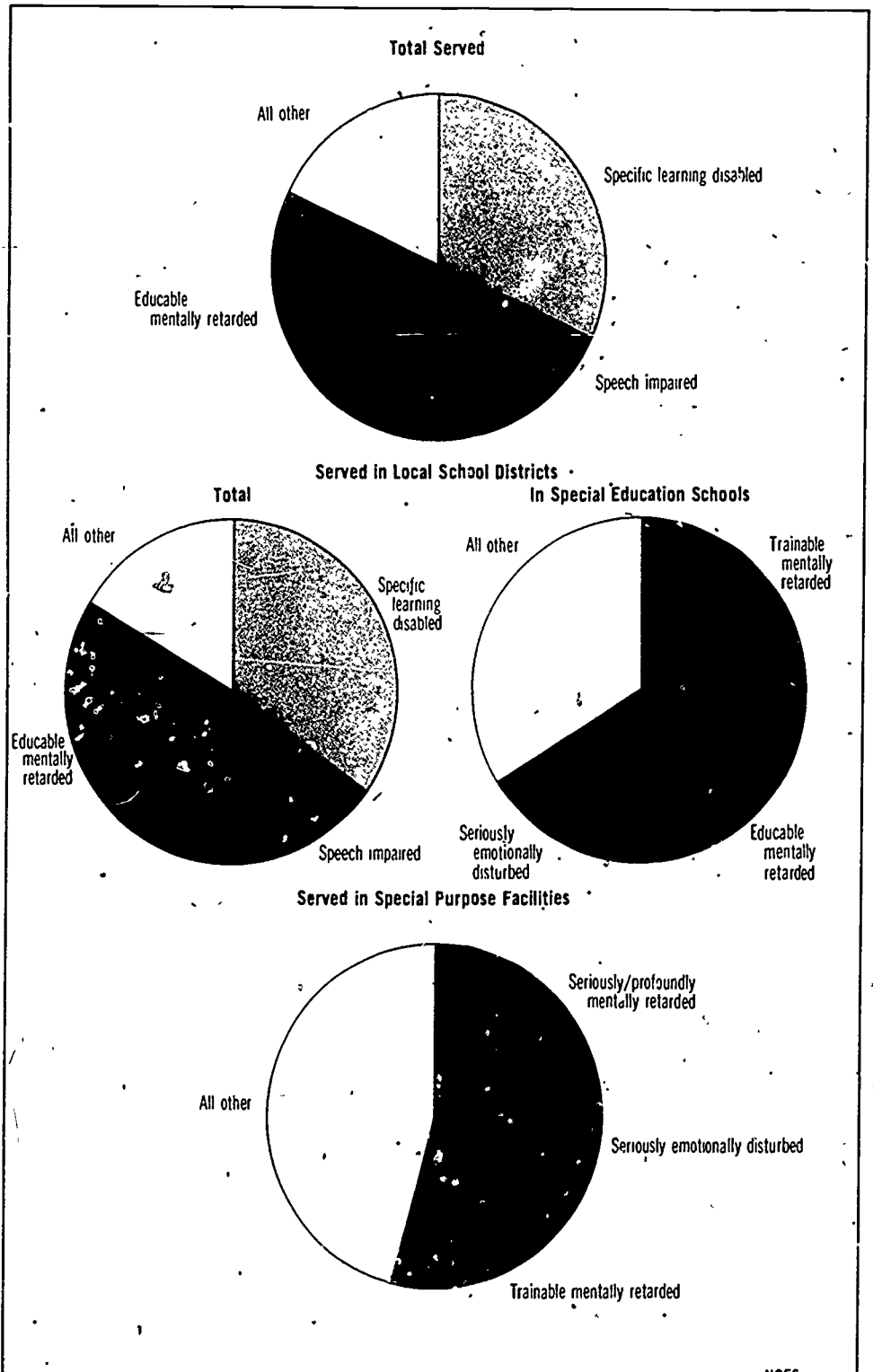
<sup>2</sup> Schools composed of 90 percent or more special education students.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools, 1980, and unpublished tabulations.

**Chart 6.2**  
**Special Education Students Served in Local School Districts and Special Purpose Facilities**

The composition of the handicapped enrollment in local school districts, in special schools operated by the local district, or in special purpose facilities varied appreciably by the severity of the handicap. Students with specific learning disabilities or speech impairments together comprised nearly two-thirds of the local school district handicapped enrollment but less than 10 percent of enrollment in special schools and in special purpose facilities.



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Table 6.3

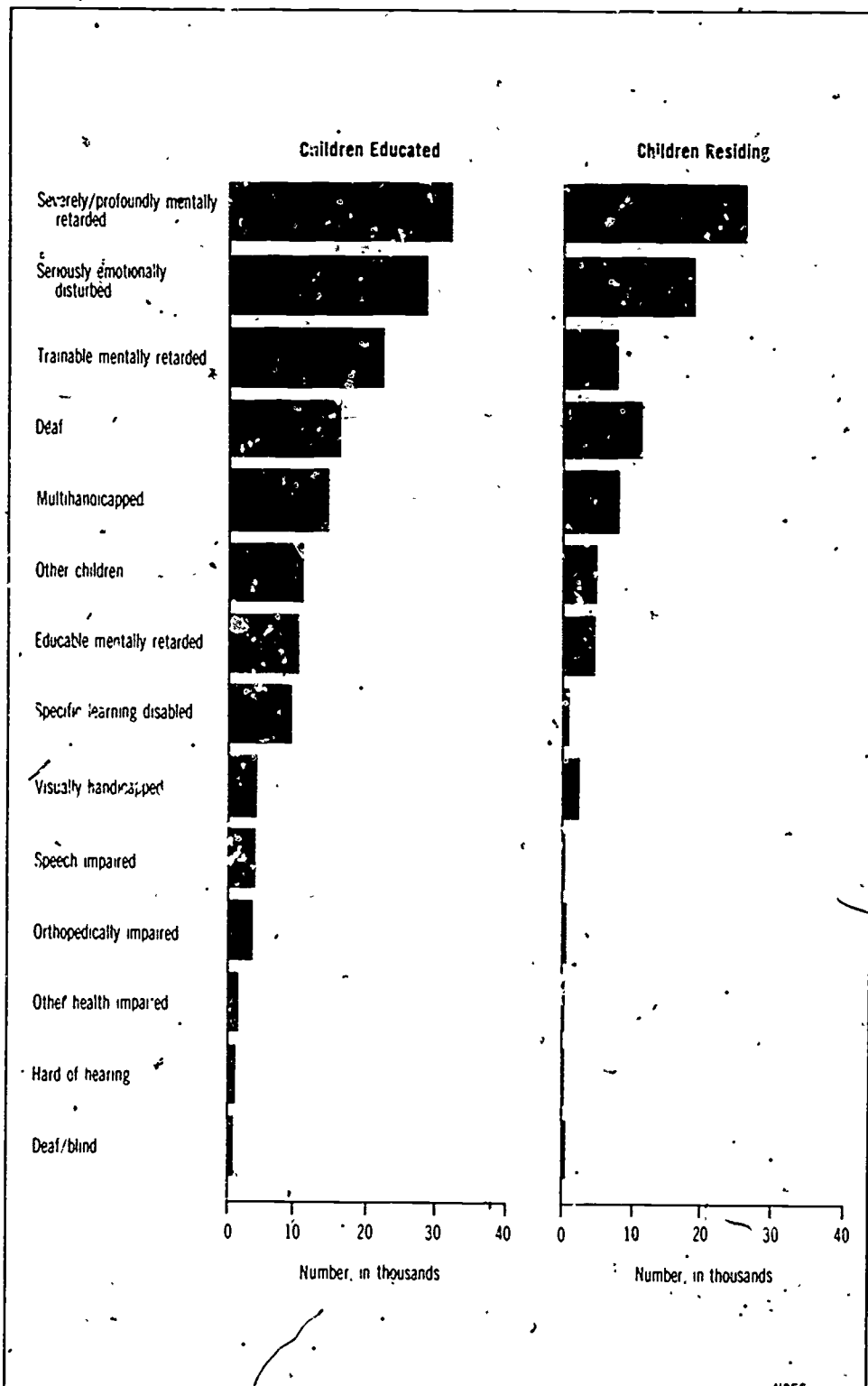
Children educated and residing in special purpose facilities, by type of handicap: School year 1978-79

Type of handicap	Children being educated		Resident children	
	Number	Percentage distribution	Number	Percentage distribution
Total	162,586	100.0	87,787	100.0
Severely/profoundly mentally retarded	31,946	19.7	26,360	30.0
Seriously emotionally disturbed	28,224	17.3	18,488	21.1
Trainable mentally retarded	22,232	13.7	7,217	8.2
Deaf	16,859	10.4	10,778	12.3
Multihandicapped	14,836	9.1	7,672	8.7
Other children	11,029	6.8	4,734	5.4
Educable mentally retarded	10,255	6.3	4,706	5.4
Specific learning disabled	9,837	6.0	1,803	2.0
Visually handicapped	4,684	2.9	3,493	4.0
Speech impaired	4,487	2.7	276	.3
Orthopedically impaired	4,194	2.6	930	1.1
Other health impaired	1,584	1.0	342	.4
Hard of hearing	1,341	.8	209	.2
Deaf/blind	1,078	.7	779	.9

SOURCE. U.S. Department of Education, Office for Civil Rights, 1978-79 Special Purpose Facilities Civil Rights Survey, 1980.

**Chart 6.3**  
**Children Educated and Residing in Special Purpose Facilities**

In special purpose facilities, 61 percent of the children being educated and 72 percent of the children in residence were classified as severely/profoundly retarded, trainable mentally retarded, seriously emotionally disturbed, or deaf.



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**Table 6.4**  
**Handicapped enrollment in vocational programs in comprehensive secondary schools, area vocational education centers, and 2-year higher education institutions by type of handicap: Fall 1979**

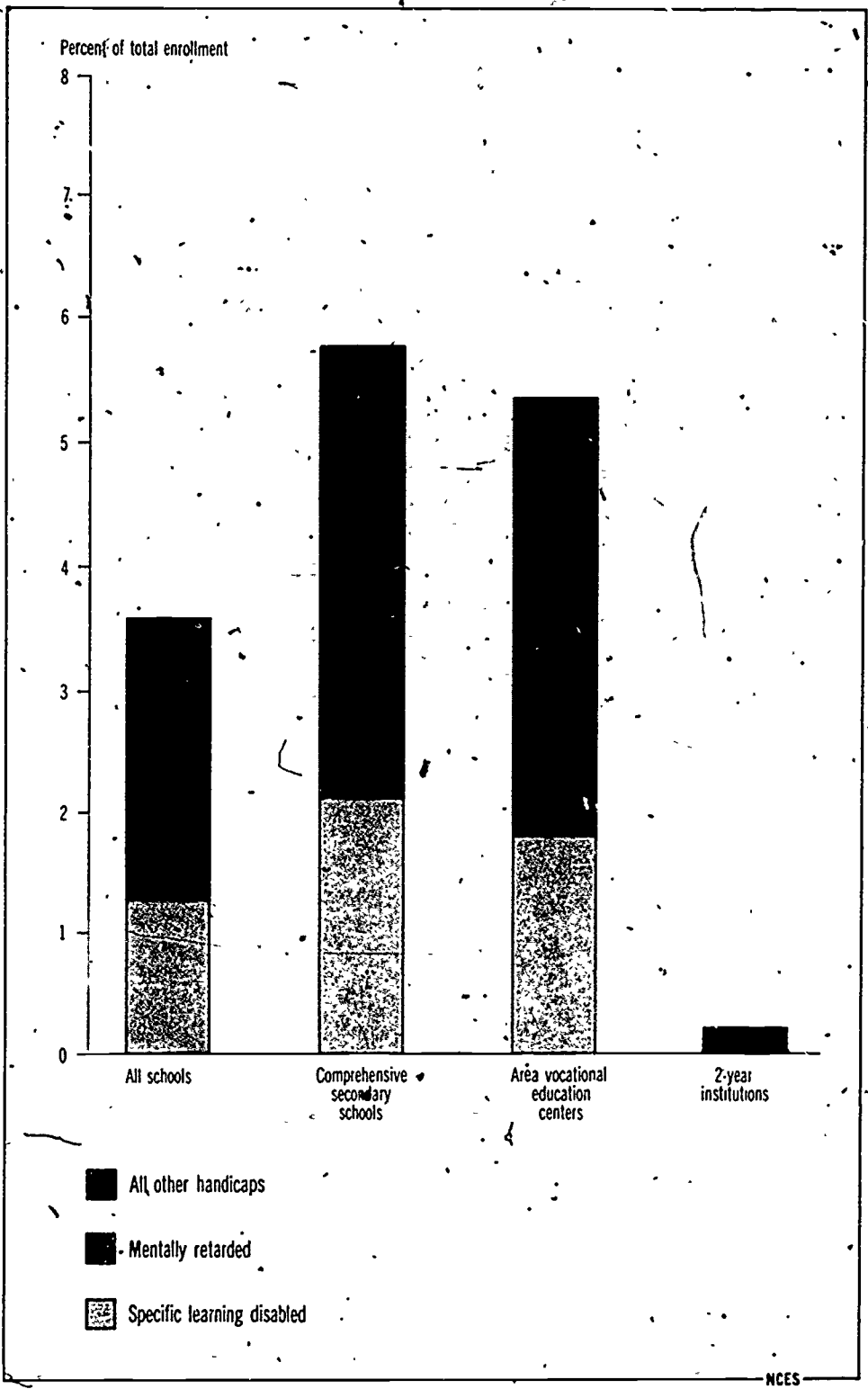
Type of handicap	All schools	Comprehensive secondary schools	Area vocational education centers	2-year institutions
	Number			
Total enrollment	4,594,388	2,269,031	570,364	1,754,723
Total handicapped enrollment	164,385	130,589	30,486	3,340
Specific learning disabled	59,537	48,056	11,157	324
Speech impaired	4,496	3,746	639	111
Mentally retarded	58,961	48,513	10,256	192
Seriously emotionally disturbed	12,014	9,607	2,209	198
Other health impaired	9,710	6,345	2,577	788
Multihandicapped	4,335	3,004	995	336
Orthopedically impaired	4,784	3,146	750	888
Hard of hearing	4,424	3,551	704	169
Deaf	1,595	1,111	403	81
Visually handicapped	4,258	3,283	766	209
Deaf/blind	271	227	30	14
	Handicapped as percent of total enrollment			
Total handicapped enrollment	3.58	5.76	5.34	.19
Specific learning disabled	1.30	2.12	1.96	.02
Speech impaired	.10	.16	.11	.01
Mentally retarded	1.28	2.14	1.80	.01
Seriously emotionally disturbed	.26	.42	.04	.01
Other health impaired	.21	.28	.45	.04
Multihandicapped	.09	.13	.17	.02
Orthopedically impaired	.10	.14	.13	.05
Hard of hearing	.10	.16	.12	.01
Deaf	.03	.05	.07	.00
Visually handicapped	.09	.14	.13	.01
Deaf/blind	.01	.01	.01	.00

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, *Fall, 1979 Vocational Education Civil Rights Survey*; unpublished tabulations.

**Chart 6.4**  
**Handicapped Enrollment in Vocational Programs as Percent of Total Enrollment**

Handicapped students comprised about 6 percent of the enrollment in vocational programs in comprehensive high schools and about 5 percent in area vocational education centers. In comparison, they represented less than 0.2 percent of vocational enrollment in 2-year institutions of higher education.



**Table 6.5**  
**Public elementary/secondary school students participating in selected special education**  
**programs, by sex, racial/ethnic group, and region: Fall 1978**

Region and type of program	Total	Male	Female	White <sup>1</sup>	Black <sup>1</sup>	Hispanic	Asian American	American Indian
Percentage distribution								
Total 50 States and D.C.	100	51	49	75	16	7	1	1
Enrollment	100	51	49	75	16	7	1	1
Total special education	100	66	34	71	21	6	1	1
Educable mentally retarded	100	59	41	56	38	5	0	1
Trainable mentally retarded	100	57	43	64	27	7	1	1
Seriously emotionally disturbed	100	76	24	68	24	6	0	1
Specific learning disabled	100	72	28	75	15	8	1	1
Speech impaired	100	62	38	77	15	6	1	1
<b>Northeast</b>								
Enrollment	100	51	49	79	13	6	1	0
Total special education	100	67	33	79	16	5	0	0
Educable mentally retarded	100	59	41	66	26	8	0	0
Trainable mentally retarded	100	57	43	67	23	10	1	0
Seriously emotionally disturbed	100	80	20	57	33	10	0	0
Specific learning disabled	100	73	27	86	11	3	0	0
Speech impaired	100	63	37	87	9	3	1	0
<b>Border States and D.C.</b>								
Enrollment	100	51	49	79	18	1	1	2
Total special education	100	66	34	75	22	1	0	2
Educable mentally retarded	100	62	38	68	30	0	0	2
Trainable mentally retarded	100	57	43	75	23	1	0	1
Seriously emotionally disturbed	100	78	22	72	27	0	0	0
Specific learning disabled	100	71	29	72	25	1	0	2
Speech impaired	100	63	37	84	13	1	1	2
<b>South</b>								
Enrollment	100	51	49	65	27	7	0	0
Total special education	100	67	33	57	36	7	0	0
Educable mentally retarded	100	62	38	36	60	3	0	0
Trainable mentally retarded	100	58	42	49	43	7	0	0
Seriously emotionally disturbed	100	77	23	64	32	4	0	0
Specific learning disabled	100	73	27	65	23	11	0	0
Speech impaired	100	63	37	65	28	7	1	0
<b>Midwest</b>								
Enrollment	100	51	49	85	11	2	1	1
Total special education	100	63	37	83	13	2	1	1
Educable mentally retarded	100	55	45	72	25	2	0	1
Trainable mentally retarded	100	55	45	84	13	2	0	1
Seriously emotionally disturbed	100	71	29	77	20	2	0	1
Specific learning disabled	100	70	30	87	9	2	0	1
Speech impaired	100	60	40	89	7	2	1	1
<b>West</b>								
Enrollment	100	51	49	72	7	16	3	2
Total special education	100	67	33	72	7	16	2	2
Educable mentally retarded	100	58	42	65	10	20	1	4
Trainable mentally retarded	100	56	44	70	9	16	2	3
Seriously emotionally disturbed	100	76	24	75	11	11	1	2
Specific learning disabled	100	72	28	74	7	15	1	3
Speech impaired	100	62	38	71	6	18	4	1
<b>Alaska/Hawaii</b>								
Enrollment	100	52	48	39	2	5	47	8
Total special education	100	56	34	38	3	7	34	18
Educable mentally retarded	100	58	42	21	3	8	47	21
Trainable mentally retarded	100	60	40	31	1	8	50	9
Seriously emotionally disturbed	100	74	26	40	3	6	31	20
Specific learning disabled	100	69	31	37	3	8	35	18
Speech impaired	100	62	38	65	2	2	12	19

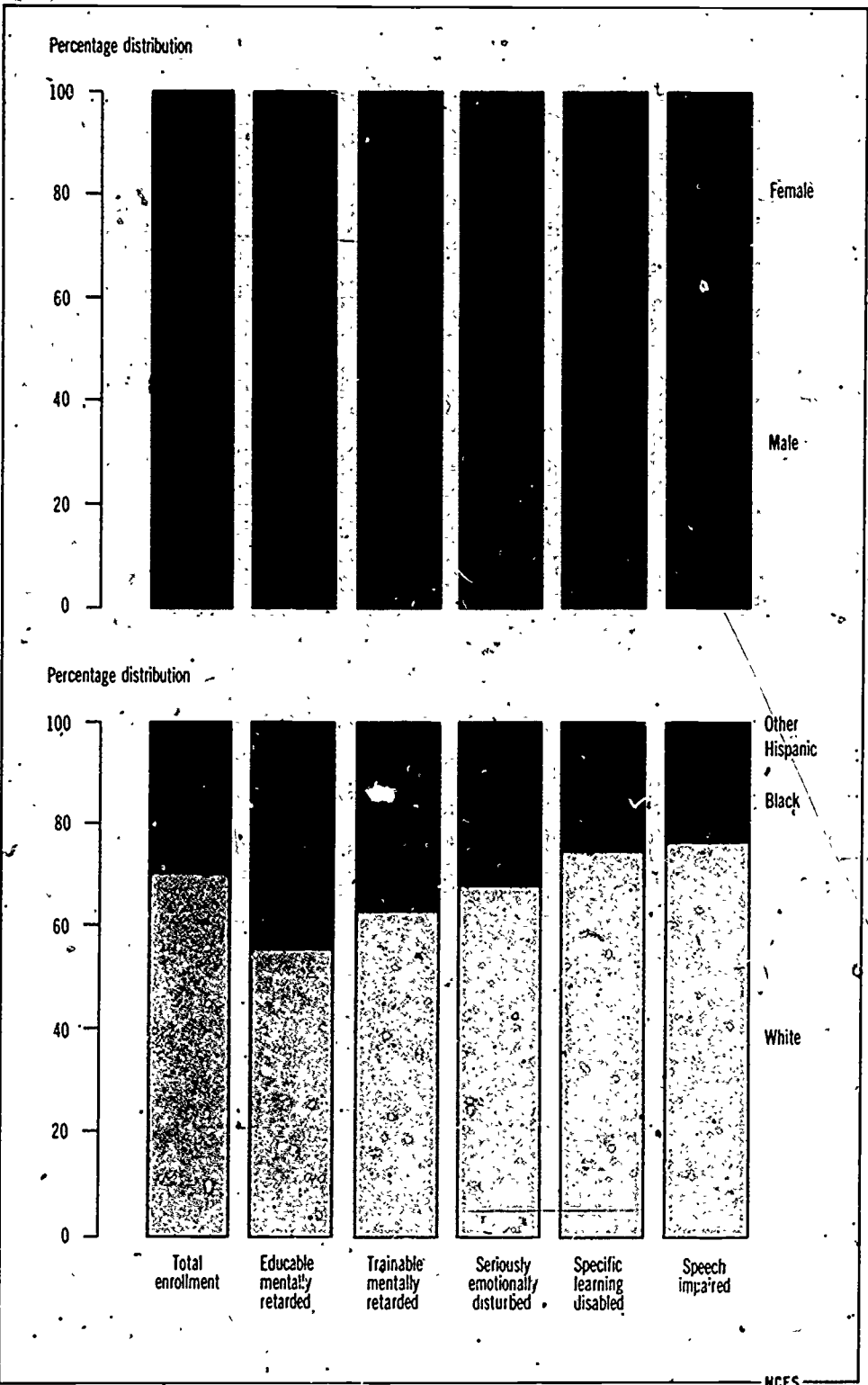
<sup>1</sup> Non-Hispanic.

NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Civil Rights, *State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools, 1980.*

**Chart 6.5**  
**Special Education Enrollment by Sex and Racial/Ethnic Group**

Male students and black students represented a disproportional share of special education enrollments. Males comprised three-fourths of all students in programs for the seriously emotionally disturbed and blacks made up more than twice their proportional share of enrollment in programs for the educable mentally retarded.



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**Table 6.6**  
**Handicapped population 3 to 21 years old receiving special education and related services, as reported by State agencies under P.L. 94-142 and P.L. 89-313, by type of handicap: School year 1979-80**

Type of handicap	Total	Combined		P.L. 94-142 <sup>1</sup>		P.L. 89-313 <sup>2</sup>	
		Percent of 3- to 21-year-old population	Percentage distribution of handicapped	Total	Percent of 3- to 21-year-old population	Total	Percent of 3- to 21-year-old population
Total	4,035,685	8.25	100.0	3,802,511	7.78	233,174	0.47
Specific learning disabled	1,281,395	2.62	31.7	1,265,872	2.59	15,523	.03
Speech impaired	1,188,973	2.43	29.4	1,180,162	2.41	8,811	.01
Mentally retarded	881,739	1.80	21.8	768,840	1.57	112,899	.23
Seriously emotionally disturbed	330,999	.67	8.2	295,811	.60	35,188	.07
Other health impaired	106,287	.21	2.6	102,407	.20	3,880	.00
Orthopedically impaired	66,243	.13	1.6	56,147	.11	10,096	.02
Multihandicapped	61,923	.12	1.5	52,458	.10	9,465	.01
Hard of hearing	41,383	.08	1.0	37,466	.07	3,917	.00
Visually handicapped	32,676	.06	.8	22,659	.04	10,017	.02
Deaf	41,489	.08	1.0	19,114	.03	22,375	.04
Deaf/blind	2,578	.00	.0	1,575	.00	1,003	.00

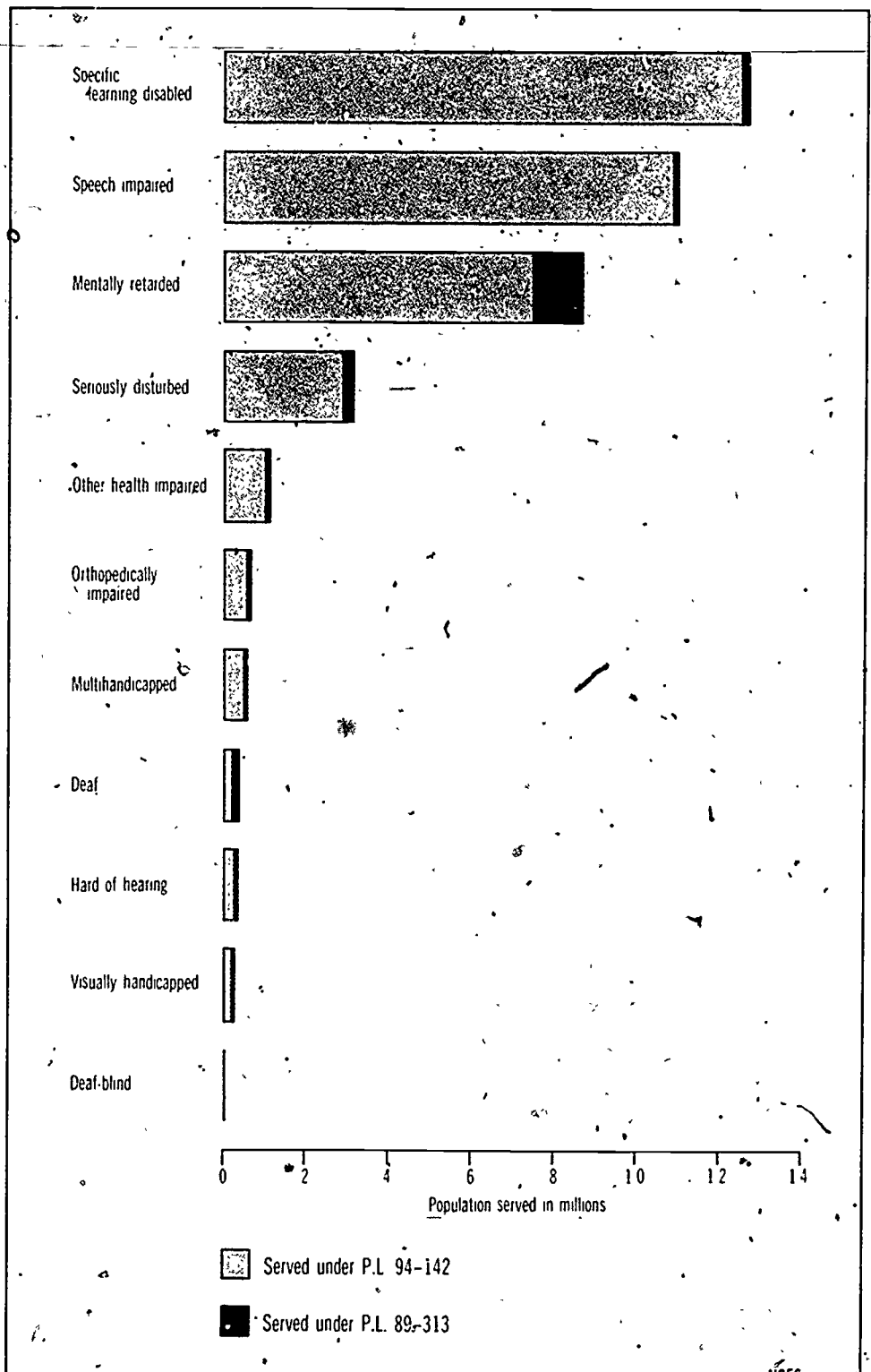
<sup>1</sup> Refers to the Education for all Handicapped Children Act and provides formula grants to the States for the provision of free and appropriate education for the handicapped population, 3 to 21-years old.

<sup>2</sup> Amends Title I and provides aid for the handicapped in State owned or operated facilities.

SOURCE: U.S. Department of Education, Office for Special Education, unpublished tabulations.

**Chart 6.6**  
**Handicapped Population 3 to 21 Years Old Served Under P.L. 94-142 and P.L. 89-313**

The specific learning disabled and the speech impaired represented the two largest groups served under P.L. 94-142 and P.L. 89-313 combined. Mentally retarded persons comprised the third largest group served under P.L. 94-142 and represented almost one-half of participants provided for by P.L. 89-313.



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Table 6.7

Percent of handicapped population 3 to 21 years old served under P.L. 94-142 and P.L. 89-313, by educational environment and State: School year 1978-79

State	Total	Regular classes	Separate classes	Separate schools	Other environments
Percentage distribution					
Total 50 States and D.C.	100.0	69.4	23.7	4.9	2.0
Alabama	100.0	83.2	14.1	2.5	**2
Alaska	100.0	*87.3	11.2	1.4	**1
Arizona	100.0	74.0	19.1	3.6	3.2
Arkansas	100.0	83.7	**6.2	7.2	2.9
California	100.0	67.6	30.1	1.1	1.2
Colorado	100.0	NA	NA	NA	NA
Connecticut	100.0	77.1	18.5	3.2	1.3
Delaware	100.0	**53.1	35.6	**0.5	.7
District of Columbia	100.0	55.0	12.8	*24.9	*7.2
Florida	100.0	NA	NA	NA	NA
Georgia	100.0	75.1	20.8	1.2	2.9
Hawaii	100.0	57.1	37.4	4.2	1.3
Idaho	100.0	60.0	30.7	9.0	*4.4
Illinois	100.0	*87.9	**7.6	4.5	**0
Indiana	100.0	67.9	31.2	.9	**0
Iowa	100.0	73.2	24.2	2.0	.6
Kansas	100.0	**38.9	*44.1	*14.4	2.6
Kentucky	100.0	69.4	17.4	*10.4	2.8
Louisiana	100.0	62.1	30.2	6.2	1.6
Maine	100.0	*86.8	**5.6	5.2	2.4
Maryland	100.0	66.8	27.0	2.4	*3.8
Massachusetts	100.0	78.9	13.0	7.4	.8
Michigan	100.0	65.1	32.7	.7	1.6
Minnesota	100.0	75.5	13.0	6.6	*4.9
Mississippi	100.0	NA	NA	NA	NA
Missouri	100.0	NA	NA	NA	NA
Montana	100.0	82.2	12.2	3.5	2.1
Nebraska	100.0	84.0	13.8	2.2	**0
Nevada	100.0	81.4	*8.3	6.7	*3.6
New Hampshire	100.0	**44.1	*44.8	6.1	*5.1
New Jersey	100.0	**53.2	*38.3	3.4	*5.2
New Mexico	100.0	NA	NA	NA	NA
New York	100.0	**41.4	*50.6	5.7	2.3
North Carolina	100.0	78.5	14.0	3.9	*3.6
North Dakota	100.0	NA	NA	NA	NA
Ohio	100.0	**43.8	*49.2	6.2	.8
Oklahoma	100.0	84.0	15.3	**0	.7
Oregon	100.0	*87.2	**9.0	1.4	2.4
Pennsylvania	100.0	56.4	*38.1	3.5	2.0
Rhode Island	100.0	76.1	15.8	5.5	2.5
South Carolina	100.0	78.7	19.1	.7	1.6
South Dakota	100.0	83.5	10.2	6.4	**0
Tennessee	100.0	82.1	10.5	6.2	1.2
Texas	100.0	79.6	16.0	1.8	2.6
Utah	100.0	83.8	**7.8	5.2	3.2
Vermont	100.0	78.8	16.0	3.0	2.2
Virginia	100.0	63.4	29.9	5.8	.9
Washington	100.0	**50.7	*44.0	4.5	.8
West Virginia	100.0	NA	NA	NA	NA
Wisconsin	100.0	58.9	37.6	2.8	.8
Wyoming	100.0	**34.3	*60.0	3.2	2.4

\* Value is greater than one standard deviation above the national mean.

\*\* Value is greater than one standard deviation below the national mean.

NA Not available.

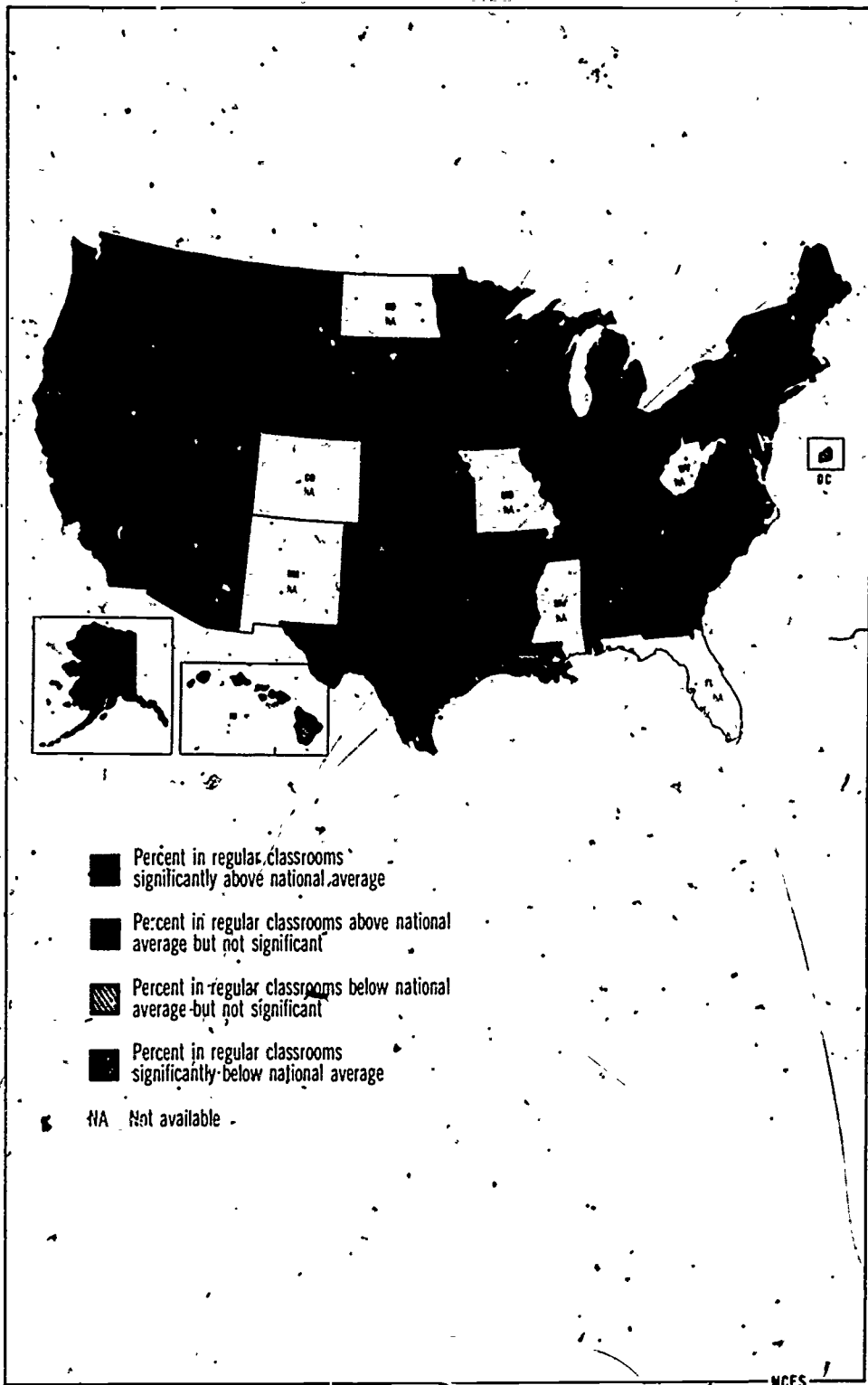
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Education, Office for Special Education, unpublished tabulations.

**Chart 6.7**

**Percent of Handicapped Population Served in Regular Classrooms Under P.L. 94-142 and P.L. 89-313**

Over two-thirds of the handicapped population served under P.L. 94-142 and P.L. 89-313 received instruction in regular classes. This proportion varied by State from 34 percent in Wyoming to 88 percent in Illinois.



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**Table 6.8**

**Public elementary/secondary school students participating in special education programs, by time spent per week in program and type of handicap: Fall 1978**

Type of handicap	Students in program <sup>1</sup>	Students, by time spent in program per week					
		Less than 10 hours		More than 10 hours, less than full-time		Full-time	
		Number	Percent	Number	Percent	Number	Percent
Total	2,807,352	1,596,632	57	560,633	20	650,087	23
Specific learning disabled	969,843	596,029	61	247,072	25	126,742	13
Speech impaired	835,620	801,804	96	16,391	2	17,425	2
Educable mentally retarded	599,391	99,600	15	236,756	39	273,035	46
Seriously emotionally disturbed	135,875	41,673	31	30,085	22	64,117	47
Trainable mentally retarded	94,755	2,541	3	7,011	7	85,203	90
Other health impaired	46,091	27,466	60	3,069	7	15,556	34
Multihandicapped	39,258	4,272	11	5,824	15	29,162	74
Orthopedically impaired	31,785	8,929	28	3,912	12	18,944	60
Hard of hearing	22,933	12,690	55	4,283	19	5,960	26
Deaf	15,370	1,901	12	3,664	24	9,805	64
Visually handicapped	14,175	8,701	61	2,347	17	3,127	22
Deaf/blind	2,256	1,026	45	219	10	1,011	45

NOTE: Details may not add to totals because of rounding.

<sup>1</sup>Data include only those students served on local school campuses.

SOURCE: U.S. Department of Education, Office for Civil Rights, *State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools*, 1980.

**Chart 6.8**

**Amount of Time Spent in Special Education Programs by Type of Handicap**

A majority of all handicapped students spent less than 10 hours a week in special education programs, but this varied considerably by the type of handicap. Mentally retarded, seriously emotionally disturbed, orthopedically impaired, and deaf students were far less likely to spend most of their day in regular classrooms.

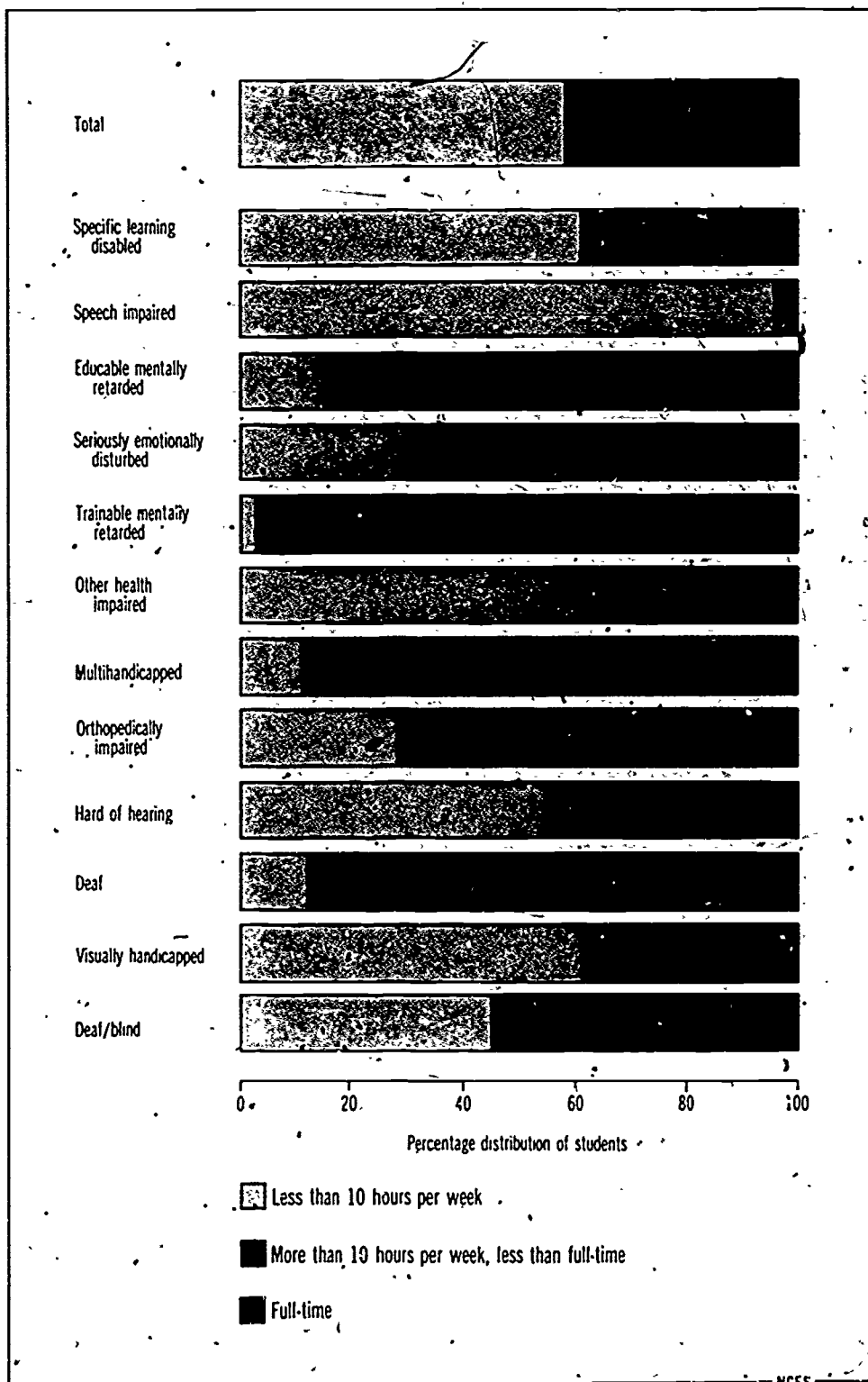


Table 6.9

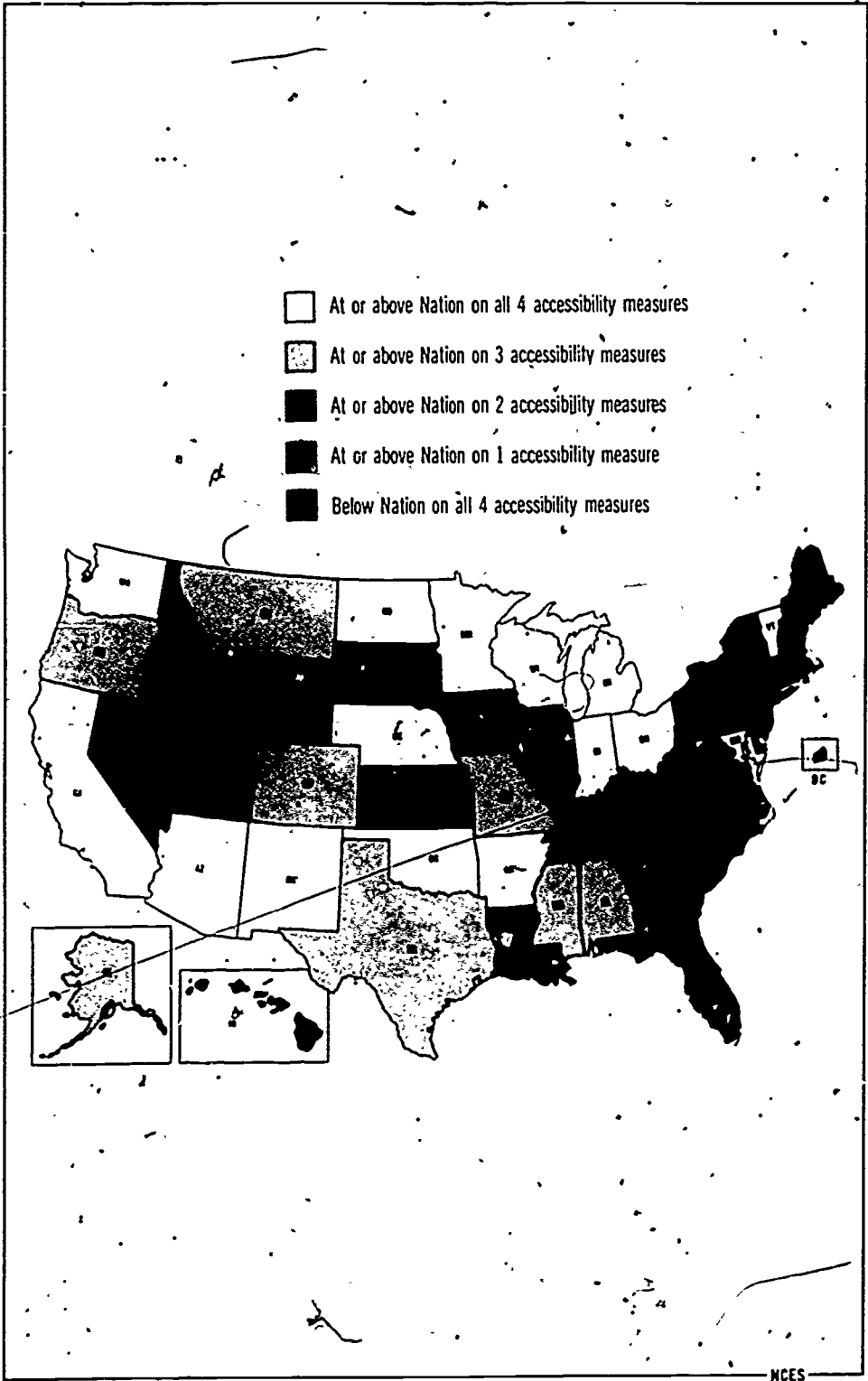
Public elementary/secondary schools with architectural features to accommodate the needs of physically handicapped students: Fall 1978

State	Accessible building entrances	Accessible classrooms	Accessible science labs	Accessible toilet stalls
	Percent			
Total 50 States and D.C.	60	58	51	26
Alabama	68	51	51	42
Alaska	47	66	52	35
Arizona	80	73	57	48
Arkansas	76	61	58	42
California	77	69	52	27
Colorado	68	65	46	30
Connecticut	50	66	50	26
Delaware	45	56	42	20
District of Columbia	14	50	59	4
Florida	74	42	36	41
Georgia	58	58	49	22
Hawaii	50	48	50	26
Idaho	65	55	55	23
Illinois	46	57	53	16
Indiana	60	58	59	27
Iowa	58	57	47	23
Kansas	66	56	46	25
Kentucky	57	47	42	24
Louisiana	51	44	44	12
Maine	42	67	53	16
Maryland	64	68	55	26
Massachusetts	41	58	55	21
Michigan	61	64	52	29
Minnesota	70	63	53	31
Mississippi	62	52	52	27
Missouri	60	61	53	23
Montana	65	58	50	28
Nebraska	74	65	54	28
Nevada	72	24	19	24
New Hampshire	49	57	35	22
New Jersey	44	52	45	17
New Mexico	79	74	56	45
New York	41	51	45	15
North Carolina	65	50	49	34
North Dakota	81	68	56	39
Ohio	54	55	48	20
Oklahoma	71	61	60	30
Oregon	75	75	50	27
Pennsylvania	52	56	51	26
Rhode Island	44	65	49	21
South Carolina	58	50	57	29
South Dakota	46	53	59	19
Tennessee	55	52	51	23
Texas	61	56	59	34
Utah	58	70	49	27
Vermont	62	69	54	42
Virginia	58	56	51	22
Washington	74	71	52	31
West Virginia	44	49	38	17
Wisconsin	68	60	57	38
Wyoming	61	67	47	21

SOURCE: U.S. Department of Education, Office for Civil Rights, *State, Regional, and National Summaries of Data from the Fall 1978 Civil Rights Survey of Elementary and Secondary Schools, 1980.*

**Chart 5.9**  
**Accessibility to Handicapped Students of Public Elementary/Secondary Schools by State Compared to Nation**

At least a majority of public elementary/secondary schools provided building entrances, classrooms, and science labs accessible to the physically handicapped, although most made no accommodation in providing accessible toilet facilities. Most States located in the Great Lakes and the Far Southwest areas rated as high or higher than the Nation on all four accessibility measures.



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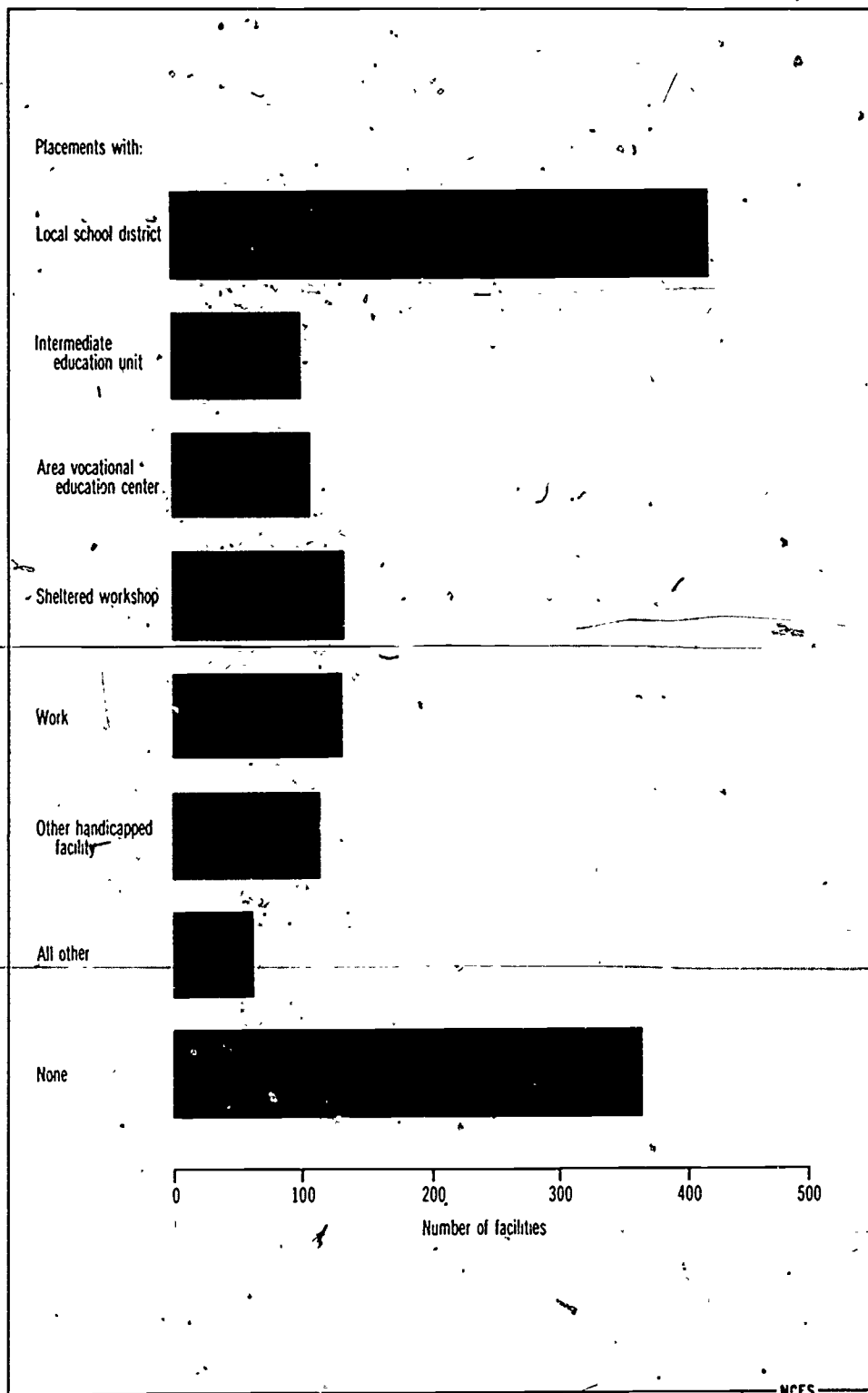
**Table 6.10**  
**Alternative placements provided by residential special purpose facilities, by type of facility:**  
**School year 1978-79**

Type of facility	Local school district	Intermediate education unit	Area vocational education center	Sheltered workshop	Work	Other facility	All other	None
	Number of facilities							
Total	413	99	104	135	134	112	65	366
Mentally retarded	124	45	15	69	27	63	24	90
Seriously emotionally disturbed	171	30	50	30	48	33	17	152
Deaf, blind, hard of hearing, deaf/blind	36	5	19	17	30	6	6	37
Orthopedically impaired	2	0	0	0	0	0	1	12
Specific learning disabled	3	0	1	0	0	0	2	14
Other children	20	5	7	4	8	4	6	12
100% Multihandicapped	11	1	1	5	2	0	1	12
Mentally retarded and seriously emotionally disturbed	17	7	8	6	12	2	3	16
Speech impaired	0	0	0	0	0	0	0	0
Other health impaired	0	0	0	0	0	0	0	1
Unclassifiable	29	6	3	4	7	4	5	20

SOURCE: U.S. Department of Education, Office for Civil Rights, 1978-79 Special Purpose Facilities Civil Rights Survey, 1980

**Chart 6.10:**  
**Alternative Placements Provided by Residential Special Purpose Facilities**

Residential special purpose facilities most frequently provided placements to local school districts. Many also offered placements in work settings and in sheltered workshops, although a sizable number provided no alternatives outside of their own institutions.



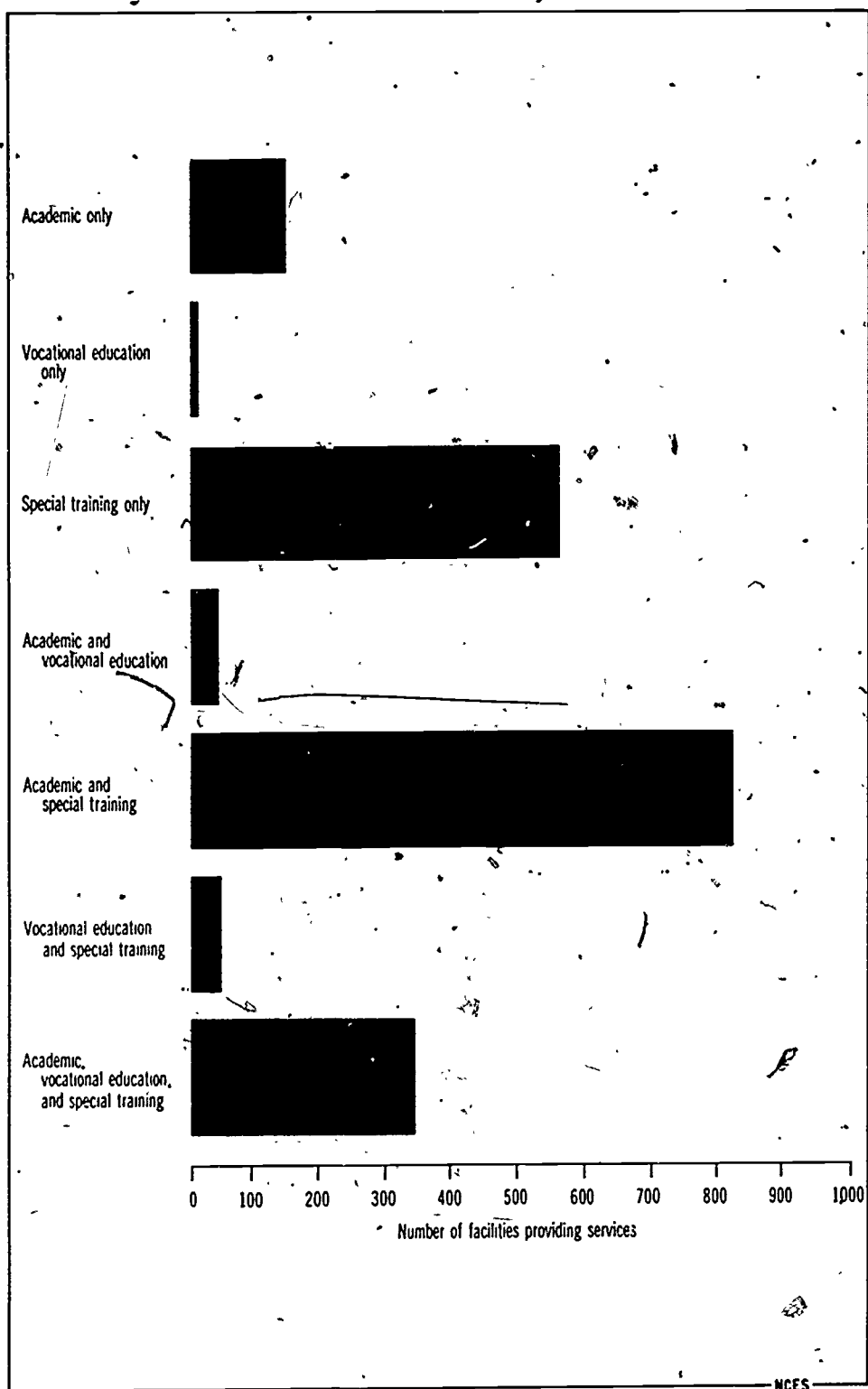
**Table 6.11**  
**Services provided in special purpose facilities, by type of facility: School year 1978-79**

Type of facility	Academic only	Vocational education only	Special training only	Academic and vocational education	Academic and special training	Vocational education and special training	Academic, vocational education, and special training
<b>Total</b>							
Number of facilities	157	11	577	48	822	52	345
Children	8,344	263	38,936	4,737	93,606	3,854	91,248
<b>Mentally retarded</b>							
Number of facilities	6	5	358	8	240	35	108
Children	233	57	27,979	519	27,734	2,213	23,976
<b>Seriously emotionally disturbed</b>							
Number of facilities	104	1	25	18	264	3	81
Children	4,331	17	545	1,484	21,864	80	13,365
<b>Deaf, blind, hard of hearing, deaf/blind</b>							
Number of facilities	0	0	12	2	51	1	62
Children	0	0	1,095	387	12,179	74	33,937
<b>Orthopedically impaired</b>							
Number of facilities	1	0	8	0	23	0	5
Children	226	0	411	0	2,690	0	1,088
<b>Specific learning disabled</b>							
Number of facilities	8	0	2	1	55	0	13
Children	177	0	93	131	6,651	0	4,340
<b>Other children</b>							
Number of facilities	18	1	14	13	24	0	7
Children	2,326	170	1,447	1,581	3,240	0	1,660
<b>100% Multihandicapped</b>							
Number of facilities	0	1	25	0	30	0	4
Children	0	1	984	0	3,661	0	584
<b>Mentally retarded and seriously emotionally disturbed</b>							
Number of facilities	5	0	20	1	22	1	28
Children	120	0	1,004	250	3,031	225	3,196
<b>Speech impaired</b>							
Number of facilities	0	0	18	0	10	0	0
Children	0	0	1,110	0	894	0	0
<b>Other health impaired</b>							
Number of facilities	4	1	1	0	1	0	1
Children	163	9	23	0	114	0	51
<b>Unclassifiable</b>							
Number of facilities	11	2	94	5	102	12	36
Children	768	9	4,245	385	11,548	1,262	9,051

SOURCE: U.S. Department of Education, Office for Civil Rights, 1978-79 Special Purpose Facilities Civil Rights Survey, 1980.

**Chart 6.11**  
**Academic, Vocational Education, and Special Training Services Provided by Special Purpose Facilities**

Special purpose facilities most often offered academic and specialized training, although facilities providing specialized training only were also fairly common. Facilities offering all three types of services—academic, vocational education, and special training—were the third most common.





**Table 6.12**

**Personnel (in full-time equivalents) employed to meet the full educational opportunities goal for handicapped children, aggregate United States: School year 1978-79**

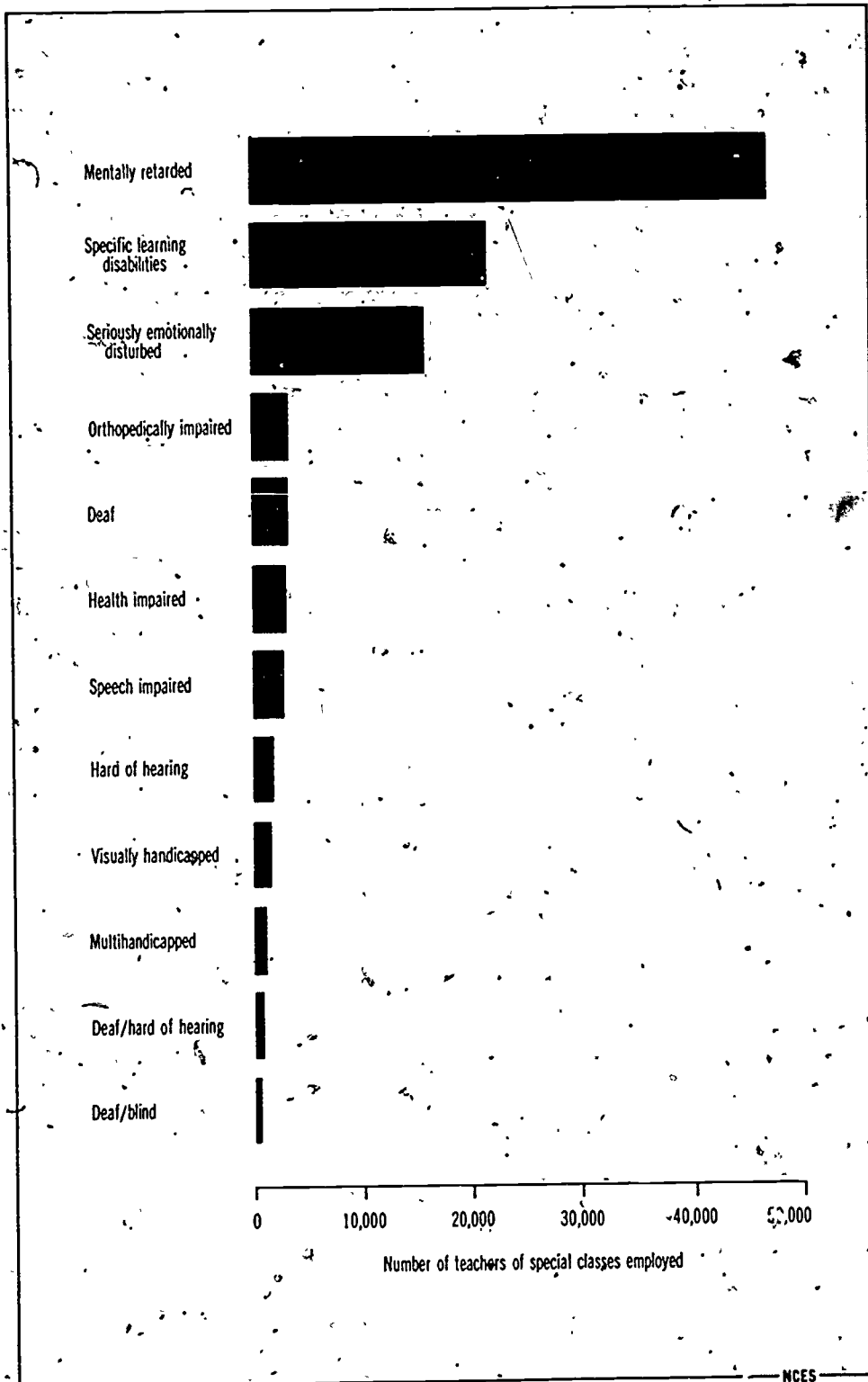
Program	Teachers of special classes	Resource room teachers	Itinerant/consulting teachers
Total	100,581	21,088	21,569
Mentally retarded	46,423	23,288	1,211
Specific learning disabled	21,389	37,748	3,468
Seriously emotionally disturbed	15,235	7,087	974
Orthopedically impaired	3,278	1,981	440
Deaf	3,158	529	362
Health impaired	2,837	1,527	551
Speech impaired	2,681	4,061	12,362
Hard of hearing	1,847	1,031	988
Visually handicapped	1,677	1,199	1,358
Multihandicapped	1,008	1,143	80
Deaf/hard of hearing	609	630	83
Deaf/blind	70	100	56

SOURCE: U.S. Department of Education, Office for Special Education, unpublished tabulations.

Chart 6.12

Special Classroom Teachers Employed to Meet Full Educational Opportunities Goal for the Handicapped

Of the over 100,000 special classroom teachers employed in the 1978-79 school year, 46,000 were teachers of the mentally retarded and another 21,000 were teachers of the specific learning disabled.



NCES

# The Condition of Education

The information presented in this report derives from several sources including Federal and State agencies, private research organizations, and professional associations. The data are obtained using several research methods including universe and sample surveys, administrative records, and statistical projections.

Particular care should be taken in comparing data from different sources because of differences in reference periods, operational definitions, and collection techniques. Additionally, all data entries are subject to errors such as faulty survey design, incomplete response, incorrect processing, or biased interpretations.

The accompanying guide is designed to acquaint the reader with sources consulted in the preparation of this report. Government contributions are described first, followed by private research and professional associations. Additional information can be obtained by contacting directly the contributing organization.

### **National Center for Education Statistics**

The National Center for Education Statistics (NCES) is the primary Federal agency for collecting, analyzing, and reporting of education statistics. In addition, NCES assists State data-collection activities in an effort to promote efficiency and comparability. The National Center for Education Statistics collects data primarily through census or sample surveys of educational institutions. NCES also sponsors surveys of individuals designed to chart the post-high school experiences of young Americans, the employment outcomes of recent college graduates, and the life-long learning activities of adults.

### **Surveys of Educational Institutions**

Institutional characteristics obtained through several surveys provide information on school enrollment, organization, and support. Data on public elementary/secondary schools are collected annually from State departments of education. Statistics on privately controlled elementary/secondary education are gathered periodically from the universe of nonpublic schools. Annual surveys are also taken of institutions of higher education. These surveys cover a variety of subject areas including students, faculty, degrees, libraries, and finance. Data on noncollegiate and vocational postsecondary education are collected periodically on a sample basis. More detailed information on survey instruments, sampling frames, and methodology can be obtained through the individual reports.

### **Surveys of Individuals**

#### *High School and Beyond*

*High School and Beyond* is a national longitudinal study of the cohorts of 1980 high school seniors and sophomores in the United States. The base-year survey was conducted in spring 1980. The study sampling frame included over 1,100 high schools with 36 seniors and 36 sophomores per school. Over 30,000 sophomores and 28,000 seniors enrolled in 1,015 public and private schools across the Nation participated in the base-year survey. The samples represent the Nation's 10th and 12th grade populations, totalling about 3,800,000 sophomores and 3,000,000 seniors in more than 21,000 schools in spring 1980.

Questionnaire and cognitive tests were administered to each student in the sample. In addition, the administrator in each selected school filled out a questionnaire about the school; teachers in each school were asked to make comments on students in the sample; twins in the sample were identified and their counterpart twins were also surveyed; and a sample of parents of sophomores and seniors (about 3,600 for each cohort) was surveyed primarily for information on financing of higher education.

Further information is available from the U.S. Department of Education, National Center for Education Statistics, Division of Multilevel Education Statistics, Longitudinal Studies Branch, 400 Maryland Avenue SW, Washington, DC 20202.

### *National Longitudinal Study of the High School Class of 1972*

The National Longitudinal Study of the High School Class of 1972 periodically queries a national sample of the 1972 high school seniors to chart their educational, vocational, and personal development. Initiated in the spring of 1972, over 1,000 public and private schools and nearly 18,000 students participated. Four followup surveys have been conducted since the 1972 base-year survey in fall 1973, fall 1974, fall 1976, and fall 1979. The original sample design was a deeply stratified two-stage probability sample with schools as first-stage sampling units and students as second-stage units. The first-stage sampling frame was constructed from computerized school files maintained by the Office of Education and by the National Catholic Education Association. The schools were then stratified according to various criteria and randomly selected within strata. Except for schools in low income areas or with high black enrollments and schools with small enrollments, the schools were sampled with equal probability and without replacement. From each selected school, 18 students were randomly chosen to participate. The samples represent the Nation's 12th grade enrollment in 1972 in all public and private schools.

Further information is available from the U.S. Department of Education, National Center for Education Statistics, Division of Multilevel Education Statistics, Longitudinal Studies Branch, 400 Maryland Avenue SW, Washington, DC 20202.

### *Recent College Graduate Survey*

The 1978 Recent College Graduate Survey is the second in a series of biennial surveys providing information on employment and earnings prospects for college graduates. The data address several issues, including the economic returns of a college education, the supply and demand of professional personnel, and the relationship of Federal assistance to employment and postbaccalaureate education.

To obtain the data, the Recent College Graduate survey used a two-stage sample. For the first stage, a sample of 297 colleges and universities offering a bachelor's or master's degree was selected. The universe of schools was stratified by percent of graduates with degrees in education, by control, by whether or not the school emphasized special education, and by geographic region. A sample of 30 predominantly black institutions was included in the total of 297 institutions.

For the second-stage sample, a listing of graduates with bachelor's and master's degrees was obtained from the selected schools. The graduates were stratified by level and by type of degree, and were then selected through systematic sampling. For the 1978 survey, 283 of the 297 schools responded (95 percent) and 7,922 graduates of the 11,025 in the sample responded (72 percent).

Additional information can be obtained from the U.S. Department of Education, National Center for Education Statistics, Division of Elementary and Secondary Education Statistics, Population Surveys Branch, 400 Maryland Avenue SW, Washington, DC 20202.

### *Adult Education Participation Survey*

The Adult Education Participation Survey was conducted by the Bureau of the Census as a supplement to the Current Population Survey for the National Center for Education Statistics. The 1978 survey is the fourth in a series of triennial reports begun in 1969. The survey provides a broad picture of part-time educational activity within and outside the regular school system, reporting on adult education as used for occupational purposes, for general education and information, and for life enrichment. The sample was composed of 54,000 households in the 50 States and the District of Columbia and data were collected about adult education participation on approximately two persons within each household.

In 1978, adult education activities of full-time students in high school or college were included for the first time in the counts of participation in adult education. In the 1978 survey, information on courses taken by full-time students in occupational programs of 6-months or more duration was collected, but was excluded from the participation counts in the adult education statistics. The 1978 survey reports separately the population characteristics for programs of 6-months or more duration, as well as for full-time students. Course characteristics are reported for participants in adult education, including data on courses taken for job-related reasons, and for courses sponsored by 2-year colleges and vocational-technical institutes and by vocational schools.

Further information is available from the U.S. Department of Education, National Center for Education Statistics, Division of Postsecondary and Vocational Education Statistics, Adult and Vocational Education Statistics Branch, 400 Maryland Avenue SW, Washington, DC 20202.

### **National Institute of Education**

#### *National Assessment of Educational Progress, Writing Achievement, 1969-1979*

Under contract with the Education Commission of the States, the National Assessment of Educational Progress (NAEP) collects data on achievement of young Americans in several subject areas. Results are reported for each age level and by region, sex, racial group, parental education, and size and type of community, using weighted percentages of correct responses. Each reported percentage is an estimate of the percentage of persons in a given group who could have given a certain acceptable response to a specific exercise.

The writing assessment was administered to 9-, 13-, and 17-year-old students in school years 1969-70, 1973-74, and 1978-79. Each of the three assessments employed a stratified, multistage probability sample design. About 2,400 to 2,600 responses were collected for any given writing task. To obtain representative subsamples of descriptive and narrative papers, scientific probability subsamples were drawn from the total National Assessment samples. Descriptive and narrative exercises were evaluated holistically and in terms of cohesion and rhetorical effectiveness. The assessments were not administered to intact classrooms; rather, they were given to randomly selected groups who might or might not be receiving the same writing instruction.

More detailed information can be obtained from the Education Commission of the States, National Assessment of Educational Progress, Suite 700, 1860 Lincoln Street, Denver, Colorado 80295.

#### *Study of Minimum Competency Testing Programs*

The Study of Minimum Competency Testing Programs, a project contracted through National Evaluation Systems, Incorporated, was based upon information gathered about 31 State and 20 local district testing programs across the United States. On-site visits were conducted for the purpose of collecting information, both published and informal, about each program's policy, implementation, and standards. One set of discussion guidelines provided a framework for the conduct of each site visit, while the collection of published documents about a program before the visit enabled the interviewer to focus on those questions which were not answered by the documents. Each site visit, therefore, was tailored to the particular program under study.

A fuller description can be obtained by contacting the National Evaluation Systems, Incorporated, 30 Gatehouse Road, Box 226, Amherst, Massachusetts 01004.

#### **Office for Civil Rights**

##### *State, Regional, and National Summaries of Data from the 1978 Civil Rights Survey of Elementary and Secondary Schools*

The 1978 Civil Rights Survey of Elementary and Secondary Schools, a study contracted through Killalea Associates, Incorporated, was designed to address issues concerning educational discrimination on the basis of race or ethnicity, sex, or handicapping conditions at the elementary/secondary level. The survey provides information on minority enrollment, limited- or non-English-speaking enrollment, disciplinary actions, composition of graduating class, and participation in traditionally single sex courses. Other areas addressed concern participation in special education and architectural accommodations for the physically handicapped.

The survey collected data from 6,049 school districts, selected as a sample of the approximately 11,500 districts that enroll at least 300 students. The results were based on responses to questions from mail-in survey forms. The survey was designed to include information from each school district in the sample and from the 54,000 schools in those districts. For a review of data quality and of the two forms used in the survey (OS/CR 101 and OS/CR 102), refer to the User's Guide to the Data File: Fall 1978 Elementary and Secondary Schools Civil Rights Survey, Killalea Associates, Incorporated, February 1980.

More detailed information can be obtained from the U.S. Department of Education, Office for Civil Rights, Survey and Data Analysis Branch, 400 Maryland Avenue SW, Washington, DC 20202.

#### *1978-1979 Special Purpose Facilities (Civil Rights Survey)*

The Special Purpose Facilities Survey, contracted through DBS Corporation and Opportunity Systems Incorporated, was designed to collect data from facilities designed primarily for the handicapped which were either operated by the State or substantially supported by the State. These included privately owned facilities as well as government owned facilities. Data for the report were obtained from 2,052 facilities located in the fifty States and the District of Columbia. Information was collected on staffing, children in residence, children being educated, and types of programs offered.

Respondents to the survey were to include all State-operated or State-supported institutions for the handicapped, excluding those administered by local school districts. A consolidated list of such facilities, however, did not exist. In an effort to construct a list, OCR obtained information from the Bureau for the Education of the Handicapped, the National Institute of Mental Health, and various State education agencies. The final data base contains the best universe of State-operated or State-supported facilities which could be obtained.

Further information is available from the U.S. Department of Education, Office for Civil Rights, Survey and Data Analysis Branch, 400 Maryland Avenue SW, Washington, DC 20202.

#### **Office of Program Evaluation**

##### *Study of Program Management Procedures in the Campus-Based and Basic Grant Programs*

Conducted in the winter and spring of 1979, the Study of Program Management Procedures in the Campus-Based and Basic Grant Programs was designed to evaluate institutional and Federal administrative policies and procedures as they influence the extent to which the programs are fulfilling their legislative goals. The Study of the Impact of the Middle Income Student Assistance Act (MISAA), a followup posttest effort, was designed to assess the distribution of financial aid to students from middle income families and was conducted by Applied Management Sciences, Incorporated. Data were collected from approximately 12,000 aid recipients and 4,000 non-recipients from 174 postsecondary institutions. A student mail survey was implemented in three waves, with the last two serving as followups for non-respondents.

More detailed information can be obtained by contacting Applied Management Sciences, Incorporated, 963 Wayne Avenue, Silver Spring, Maryland 20910.

#### **Bureau of the Census**

##### *Current Population Survey*

The Bureau of the Census provides data through a regular program of data collection and through supplements conducted for other organizations. The Census mechanism for data collection cited most frequently in this report is the Current Population Survey (CPS). The data on preprimary and adult education and on educational attainment and labor force participation of the population were collected from the CPS or supplements to it.

The primary purpose of the CPS is to obtain a monthly measure of labor force participation for the Bureau of Labor Statistics. It gathers data on the employment status of the civilian resident noninstitutionalized population, 16 years old and over. In addition, it provides monthly population estimates as well as annual data on such characteristics of the population as income, schooling, age, racial/ethnic membership, sex, marital status, and living arrangements. Various governmental agencies utilize CPS to obtain specific information.



The current CPS sample is spread over 614 areas covering each of the 50 States and the District of Columbia. Approximately 54,000 occupied housing units comprise the sampling frame sites for interviews each month. Of this number, 2,500 occupied units, on the average, are visited without obtaining interviews because the occupants are not found at home after repeated calls or are unavailable for some other reason. In addition to the 2,500, about 10,000 sample units are visited during an average month, but are found to be vacant or the occupants are not available to be interviewed.

More detailed information is contained in Series P-20 reports, available from the U.S. Department of Commerce, Bureau of the Census, Washington, DC 20233:

#### *Survey of Income and Education*

In response to the Education Amendments of 1974, the Survey of Income and Education (SIE) was designed to yield State estimates of target-group populations—specifically, school-age children in poverty and persons of limited English-speaking ability. The survey revised the 1970 Census poverty counts and provided, for the first time, State data on persons of limited English-speaking ability. In addition, the SIE also supplied needed data on the handicapped population and the population interested in further education but not currently enrolled.

Because of its special reporting requirements, the Survey of Income and Education deviated somewhat from the procedures employed in the Current Population Surveys. To report at the State level, the survey was designed to furnish estimates with approximately the same statistical reliability for each State. This required a larger sample, 190,000 households, distributed throughout the United States and the District of Columbia. Because of the respondent sensitivity anticipated for the income items, personal interviewing was chosen over the usual telephone mode.

More detailed information is available from the U.S. Department of Commerce, Bureau of the Census, Population Division, Washington, DC 20233.

#### *Government Finance Survey*

The Governments Division of the Bureau of the Census annually collects and reports data on Federal, State, and local revenues and expenditures. The School System Study, a supplement to the local government data collection activities, was based on the universe of local school districts as defined for financial purposes.

More detailed information is available from the U.S. Department of Commerce, Bureau of the Census, Governments Division, Washington, DC 20233.

#### *Gallup Poll*

*Public Attitudes Toward the Public Schools Survey*  
Through funding provided by the Institute for Development of Educational Activities, Incorporated (I/D/E/A), the Gallup Poll conducts annual surveys of the public's attitudes toward education. Each year the Poll interviews approximately 1,600 adults, representative of the civilian noninstitutionalized population 18 years old and over.

The sample used in the twelfth annual survey was comprised of a total of 1,547 respondents and is described as a modified probability sample of the Nation. Personal, in-home interviewing was conducted in all areas of the Nation and in all types of communities. The sample design included stratification by size of community and region.

For more detailed information, contact I/D/E/A—Kettering, Information and Services, P.O. Box 446, Melbourne, Florida 32901.

**National Opinion Research Center  
General Social Surveys**

The General Social Surveys, sponsored by the Roper Public Opinion Research Center and the National Science Foundation, is designed as a program of social indicator research. The survey has been conducted during February, March, and April since 1972. After 1978, data collection became biennial.

The universe sampled in these surveys is the total noninstitutionalized English-speaking population of the continental United States, 18 years old and over. The sample size has averaged about 1,500 respondents each year. Before 1975, the sample was a multi-stage area probability sample to the block or segment level with quota sampling used at the block level. The 1975 and 1976 surveys used a transitional sample design, i.e., one-half full probability and one-half block quota. The General Social Survey then switched to a full probability sample for the 1977, 1978, and 1980 surveys. The national probability sample was a stratified, multi-stage area probability sample of clusters of households in the continental United States. The clusters of households were divided into replicated subsamples in order to facilitate estimation of the variance of sample estimators of population characteristics.

For more information, contact the National Opinion Research Center, 6030 South Ellis Avenue, Chicago, Illinois 60637.

**Corporation for Public Broadcasting  
A Study of Public Radio Stations' Educational Services 1978-79**

The study was intended to assist the management of public radio stations and educational institutions in examining the educational services provided in local broadcasting areas. Also, it was intended to support other national organizations involved in public radio. It describes and analyzes the educational services provided by public radio stations to elementary, secondary, and postsecondary educational institutions and learners throughout the United States.

In the fall of 1978, each of 202 CPB-qualified public radio stations in the 50 States, D.C., and U.S. Territories was sent a screener survey to determine which stations provided educational services of any sort. Of the 202 stations, 191 responded, 88 of which reported that they provided some educational services (44 percent). Those 88 stations were then mailed a copy of the Biennial Educational Radio Survey instrument for 1978-79 of which 72 (82 percent) were completed and returned. The remaining 16 stations were contacted by phone. Those stations, however, were not included in the analyses of the report since they did not respond to the detailed survey. Although 72 responses were received, 10 of the respondents reversed the information reported on the screener and indicated that they provided neither elementary/secondary nor postsecondary programming or services. Those 10 respondents were dropped from the study. Consequently, the analyses were based on the experiences of 62 licensees.

Further information can be obtained by contacting the Corporation for Public Broadcasting, Office of Educational Activities, 1111 Sixteenth Street NW, Washington, DC 20036.

**A Study of Public Televisions' Educational Services 1978-1979**

The purpose of the survey was to provide recent information enabling management of public television stations and educational institutions to examine the instructional services available through public television. It was also intended to assist planners at other organizations who are involved and interested in public television and its services to American education.

In spring 1979, the Biennial Educational Television Survey (BETS) forms were sent to 166 licensees. Although there were more than 275 stations in the United States at that time, in many instances, two or more stations were licensed to a single licensee. The questionnaires were sent to the general manager of each licensee. Two followup mailings and a mailgram were sent to non-responding licensees. The survey resulted in a return of 144 forms representing responses from 155 of 166 licensees (93 percent). (In eleven cases a single agency responded for two or more licensees.) Telephone calls determined that two of the eleven non-respondents were not on the air during 1978-79 while two other non-responding licensees offered no instructional television services during 1978-79. Consequently, only seven licensees (four percent) were considered to be non-respondents. The effective response rate to the national survey, therefore, was 159 of 166 licensees (96 percent).

More information can be obtained by contacting the Corporation for Public Broadcasting, Office of Educational Activities, 1111 Sixteenth Street NW, Washington, DC 20036.

### **The Chronicle of Higher Education Higher Education Faculty Survey**

The higher education faculty salary survey was designed and conducted for *The Chronicle* by John Minter Associates of Boulder, Colorado, a research organization specializing in higher education studies. The survey was intended to provide current data on faculty salaries and for the first time on a national basis, reported salaries and changes in salary by discipline as well as rank.

The sample was drawn from a list of 500,000 faculty members employed by 4-year public and private colleges and universities and public 2-year colleges. Excluded from the survey were faculty members in 2-year private colleges, colleges with enrollment below 500, and faculties of law and medicine. The list was stratified into 24 cells. The file in each cell was structured by faculty names within their employing institution. Each cell was sampled systematically with a random start to draw 200 names for each cell. Response was relatively even across cells and weighted to represent full-time faculty members on 9-month or 10-month contracts. Respondents' employers included 967 different institutions.

A fuller description of the survey can be obtained by contacting John Minter Associates, Box 107, Boulder, Colorado 80308.

## Definitions of Selected Terms

The following terms are defined as they generally apply in the text. Readers interested in more technical, detailed definitions should refer to the appropriate National Center for Education Statistics (NCES) Handbook.

**Adult education:** Courses and other organized educational activities taken by persons 17 years of age and over, other than courses taken by full-time students in programs leading toward a high school diploma or an academic degree and other than occupational programs of six months or more duration. The report includes all courses taken for credit by part-time students. Providers of instruction include public and private educational institutions, business and industry, governmental agencies, private community organizations, and tutors. (The definition applies specifically to data from the NCES Participation in Adult Education Survey).

**Aggregate United States:** The 50 States, District of Columbia, and outlying areas—Puerto Rico, American Samoa, Guam, the Virgin Islands, and the Trust Territory of the Pacific Islands, and the Northern Mariana Islands. Several NCES surveys report data for the aggregate United States. However, data pertain to the 50 States and the District of Columbia, unless otherwise noted.

**Auxiliary enterprises (higher education):** Services to students, faculty, or other staff for which a fee is charged that is directly related to, but not necessarily equal to, the cost of service (e.g., dormitories, food service, and student stores).

**Bachelor's degree:** A degree granted for the successful completion of a baccalaureate program of studies, usually requiring at least 4 years (or equivalent) of full-time college-level study.

**Capital outlay:** An expenditure which results in the acquisition of fixed assets or additions to fixed assets which are presumed to have benefits for more than one year. It is an expenditure for land or existing buildings, improvements of grounds, construction of buildings, remodeling of buildings, initial or additional replacement of equipment.

**Central cities:** The largest city with 50,000 or more inhabitants in a Standard Metropolitan Statistical Area (SMSA). A smaller city within an SMSA may also qualify if it has at least 25,000 inhabitants or has a population of one-third or more of that of the largest city and a minimum population of 25,000. An exception occurs where two cities have contiguous boundaries and constitute, for economic and social purposes, a single community of at least 50,000, the smaller of which must have a population of at least 15,000.

**College:** A postsecondary school which offers general or liberal arts education, usually leading to a first degree. For the purposes of this report, junior colleges and community colleges are included under this terminology.

**College enrollment:** Enrollment in a course that leads to a bachelor's, master's, professional, or doctorate degree, excluding vocational certification. (This definition applies specifically to data collected by the Bureau of the Census, Current Population Surveys).

**Competency-based certification:** The general process by which a State (or agency or organization authorized by the State) provides a credential to an individual. Processes may require individuals to demonstrate a mastery of minimum essential generic and specialization competencies and other related criteria adopted by the board through a comprehensive written examination and through other procedures that may be prescribed by the board of educational examiners.

**Constant dollars:** Dollar amounts that have been adjusted by means of price and cost indexes to eliminate inflationary factors and allow direct comparison across years.

**Core current expenditures:** Measure of total expenditures excluding transportation and food service costs, used in interstate comparisons.

**Corporal punishment:** Infliction of physical punishment to the body of a student by a school employee for disciplinary reasons.

**Current dollars:** Dollar amounts that have not been adjusted to compensate for inflation.

**Current funds expenditures (higher education):** Money spent to meet current operating costs including salaries, wages, utilities, student services, public service, research libraries, scholarships and fellowships, auxiliary enterprises, hospitals, and independent operations. Excludes loans, capital expenditures, and investments.

**Current funds revenues:** Money received during the current fiscal year from revenue which can be used to pay obligations currently due, and surpluses reappropriated for the current fiscal year.

**Direct expenditures:** Payment to employees, suppliers, contractors, beneficiaries, and other final recipients of governmental payments, i.e., all expenditures other than intergovernmental expenditures. (This definition applies specifically to data collected by the Bureau of the Census, Government Finance Surveys).

**Distributive education:** Programs of occupational instruction in the field of distribution and marketing. Emphasis is on the development of attitudes, skills and understanding related to marketing, merchandising and management. Instruction is offered at the secondary, postsecondary, and adult education levels and is structured to meet the requirements for gainful employment and entrepreneurship at specified occupational levels.

**Doctor's degree:** An earned degree carrying the title of Doctor. The Doctor of Philosophy degree (Ph.D) is the highest academic degree, and requires mastery within a field of knowledge and demonstrated ability to perform scholarly research. Other doctorates are awarded for fulfilling specialized requirements in professional fields, such as education (Ed.D.), musical arts (D.M.A.), business administration (D.B.A.), and engineering (D.Eng. or D.E.S.). Many doctor's degrees in both academic and professional fields require an earned master's degree as a prerequisite. First-professional degrees, such as M.D. and D.D.S. are counted separately and are not included under this heading.

**Dropouts:** Persons not enrolled in school and not high school graduates. (This definition applies specifically to data collected by the Bureau of the Census, Current Population Survey).

**Elementary school:** A school classified as elementary by State and local practice and composed of any span of grades not above grade 8. A preschool or kindergarten school is included under this heading only if it is an integral part of an elementary school or a regularly established school system.

**Expenditures:** Charges incurred, whether paid or unpaid which are presumed to benefit the current fiscal year. For elementary/secondary schools, these include all charges for current outlays for education, plus capital outlays and interest on school debt. For institutions of higher education, these include current outlays plus capital outlays. For government, these include charges net of recoveries and other correcting transaction—other than for retirement of debt, investment in securities, extension of credit, or as agency transactions. Government expenditures include only external transactions, such as the provision of prerequisites or other payments in kind. Aggregates for groups of governments exclude intergovernmental transactions among the governments.

**Expulsion:** Permanent exclusion of a student from school for disciplinary reasons.

**Family:** A unit consisting of a household head and one or more other persons living in the same household who are related to the head by blood, marriage, or adoption; all persons in a household who are related to the head are regarded as members of his (her) family.

**First-professional degree:** A degree that signifies both (a) completion of the academic requirements for beginning practice in a given profession and (b) a level of professional skill beyond that normally required for a bachelor's degree. This degree usually is based on a program requiring at least 2 academic years of work prior to entrance and a total of at least 6 academic years of work to complete the degree program, including both prior-required college work and the professional program itself. First-professional degrees are awarded in fields such as dentistry (D.D.S. or D.M.D.), medicine (M.D.), optometry (O.D.), osteopathic medicine (D.O.), podiatric medicine (D.P.M.), veterinary medicine (D.V.M.), law (J.D.), and theological professions (M.Div. or M.H.L.).

**First-time college students:** Students not previously enrolled in any institution of higher education. (This definition applies specifically to data collected by the American Council of Education, Cooperative Institutional Research Program, National Freshman Norms).

**Full-time instructional faculty (higher education):** Those members of the staff of an educational institution who are employed on a full-time basis and whose major regular assignment is instruction.

**Full-time students (higher education):** Students enrolled in courses with total credit equal to at least 75 percent of the normal full-time course load.

*Geographic regions:* 1) Regions used by the U.S. Department of Commerce, Bureau of Economic Analysis and by the National Assessment of Educational Progress, as follows:

*Northeast*

Connecticut  
 Delaware  
 District of Columbia  
 Maine  
 Maryland  
 Massachusetts  
 New Hampshire  
 New Jersey  
 New York  
 Pennsylvania  
 Rhode Island  
 Vermont

*Central*

Illinois  
 Indiana  
 Iowa  
 Kansas  
 Michigan  
 Minnesota  
 Missouri  
 Nebraska  
 North Dakota  
 Ohio  
 South Dakota  
 Wisconsin

*Southeast*

Alabama  
 Arkansas  
 Florida  
 Georgia  
 Kentucky  
 Louisiana  
 Mississippi  
 North Carolina  
 South Carolina  
 Tennessee  
 Virginia  
 West Virginia

*West*

Alaska  
 Arizona  
 California  
 Colorado  
 Hawaii  
 Idaho  
 Montana  
 Nevada  
 New Mexico  
 Oklahoma  
 Oregon  
 Texas  
 Washington  
 Wyoming

2) Regions and divisions used by the U.S. Department of Commerce, Bureau of the Census, in Current Population Survey tabulations, as follows:

*Northeast*

(New England)  
 Maine  
 New Hampshire  
 Vermont  
 Massachusetts  
 Rhode Island  
 Connecticut

(Middle Atlantic)

New York  
 New Jersey  
 Pennsylvania

*South*

(South Atlantic)  
 Delaware  
 Maryland  
 District of Columbia  
 Virginia  
 West Virginia  
 North Carolina  
 South Carolina  
 Georgia  
 Florida

(East South-Central)

Kentucky  
 Tennessee  
 Alabama  
 Mississippi

(West South Central)

Arkansas  
 Louisiana  
 Oklahoma  
 Texas

*North Central*

(East North Central)  
 Ohio  
 Indiana  
 Illinois  
 Michigan  
 Wisconsin

(West North Central)

Minnesota  
 Iowa  
 Missouri  
 North Dakota  
 South Dakota  
 Nebraska  
 Kansas

*West*

(Mountain)  
 Montana  
 Idaho  
 Wyoming  
 Colorado  
 New Mexico  
 Arizona  
 Utah  
 Nevada

(Pacific)

Washington  
 Oregon  
 California  
 Alaska  
 Hawaii

**Gifted and talented:** Students who by virtue of outstanding abilities are capable of high performance and who require differentiated educational programs and/or services beyond those normally provided by the regular school program. Such pupils include those with demonstrated achievement and/or potential ability in any of the following areas singly or in combination: (1) general intellectual ability, (2) specific academic aptitude, (3) creative or productive thinking, (4) leadership ability, (5) visual or performing arts, (6) psychomotor abilities.

**Handicapped:** A "handicapped" person is one who has one or more of the exceptionalities defined below, whether or not he or she requires special education.

**Educable mentally retarded** A condition of mental retardation which includes students who are educable in the academic, social, and occupational areas even though moderate supervision may be necessary.

**Trainable mentally retarded** A condition of mental retardation which includes students who are capable of only very limited meaningful achievement in the traditional basic academic skills but who are capable of profiting from programs of training in self-care and simple job or vocational skills.

**Hard of hearing** A hearing impairment, whether permanent or fluctuating, which adversely affects a student's educational performance but which is not included under the definition of "deaf" in this section.

**Deaf** A hearing impairment which is so severe that the student is impaired in processing linguistic information through hearing, with or without amplification, which adversely affects educational performance.

**Speech impaired** A communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, which adversely affects a student's educational performance.

**Visually handicapped** A visual impairment which, even with correction, adversely affects a student's educational performance. The term includes both partially seeing and blind children.

**Seriously emotionally disturbed** A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance: an inability to learn which cannot be explained by intellectual, sensory, or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal or school problems. The term includes children who are schizophrenic or autistic.

**Orthopedically impaired** A severe orthopedic impairment which adversely affects a student's educational performance. The term includes impairments caused by congenital anomaly, disease, and other causes.

**Other health impairment** Limited strength, vitality, or alertness, due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes, which adversely affects a student's educational performance.



**Specific learning disability** A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental asphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, or of environmental, cultural, or economic disadvantage.

**Deaf-blind** Concomitant hearing and visual impairments the combination of which causes such severe communication and other developmental and educational problems that they cannot be accommodated in special education programs solely for deaf or blind students.

**Multihandicapped** Concomitant impairments (such as mentally retarded-blind, mentally retarded-orthopedically impaired, etc.), the combination of which causes such severe educational problems that they cannot be accommodated in special education programs solely for one of the impairments. The term does not include deaf-blind students. This category includes those students who are severely or profoundly mentally retarded.

**High school:** A secondary school offering the final years of high school work necessary for graduation, usually including grades 10, 11, 12 (in a 6-3-3 plan) or grades 9, 10, 11, and 12 (in a 6-2-4 plan).

**Higher education:** Study beyond the secondary school level at an institution that offers programs terminating in an associate, baccalaureate, or higher degree.

**Holistic score:** An overall rating of quality relative to others assessed, without regard to specific aspects of the assignment. It is a rank order from best to worst and does not identify errors or specific problems.

**Junior high school:** A separately organized and administered secondary school (intermediate between the elementary and senior high schools, usually including grades 7, 8, and 9 (in a 6-3-3 plan) or grades 7 and 8 (in a 6-2-4 plan).

**Labor force participation rate:** The labor force participation rate is the percent of the civilian noninstitutional population in the labor force.

**Limited English speaking:** Persons who have limited ability to understand, speak, or read English and have a primary or home language other than English.

**Master's degree:** An earned degree carrying the title of Master. One type of Master's degree—including the Master of Arts degree (M.A.) and the Master of Science degree (M.S.)—usually is awarded in the liberal arts and sciences for advanced scholarship in a subject field or discipline and demonstrated ability to perform scholarly research. A second type of master's degree is awarded for the completion of a professionally-oriented program, such as in education (M.Ed.), in business administration (M.B.A.), in fine arts (M.F.A.), in music (M.M.), in social work (M.S.W.), in public administration (M.P.A.), and in other fields. A third type of master's degree is awarded in professional fields for study beyond the first-professional degree, such as the Master of Laws (LL.M.) and Master of Science in various medical specializations.

**Metropolitan-nonmetropolitan residence:** The population residing in standard metropolitan statistical areas (SMSA's) constitutes the metropolitan population. Except in New England, an SMSA is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. In addition to the county, or counties, containing such a city or cities, contiguous counties are included in an SMSA if, according to certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city. In New England SMSA's consist of towns and cities, rather than counties.

**Minimum competency testing:** Measuring the acquisition of competence or skills to or beyond a certain specified standard.

**Modal grade:** The grade in which most children of a given age are enrolled.

**Noncollegiate postsecondary school:** An institution beyond the high school level that does not offer programs terminating in an associate, a baccalaureate, or a higher degree.

**Non-English speaking:** Persons who do not speak English or who do not hear English spoken in their residence.

**Nonrevenue receipts:** Amounts received which either incur an obligation that must be met at some future date or change the form of an asset from property to cash and therefore decrease the amount and value of school property. Money received from loans, sale of bonds, sale of property purchased from capital funds, and proceeds from insurance adjustments constitute most of the nonrevenue receipts.

**Part-time students:** A student who is carrying less than a full course load, as determined by the State, local school system, or institution.

**Preprimary program:** A set of organized educational experiences for children attending prekindergarten and kindergarten classes including Head Start programs. Such programs may be offered by a public or private school or by some other agency. Custodial care in private homes is not included. (This definition applies specifically to data collected by the Bureau of the Census, Current Population Survey).

**Primary school:** A separately organized and administered elementary school for students in the lower elementary grades, usually including grade 1 through grade 3 or the equivalent; and sometimes including preprimary years.

**Private control:** Control by a nonpublic entity, that may be either nonprofit (i.e., tax-exempt) or proprietary.

**Proprietary school:** An educational institution that is under private control and whose profits derived from revenues are subject to taxation.

**Public control:** Control by a Federal, State, local, or other governmental agency.

**Racial/ethnic group:** Classification indicating general racial or ethnic heritage based on self-identification as in data collected by the Bureau of the Census or on observer identification as in data collected by the Office for Civil Rights. These categories are in accordance with the Office of Management and Budget standard classification scheme presented below:

**White** A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.

**Black** A person having origins in any of the black racial groups of Africa.

**Hispanic** A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.

**Asian or Pacific Islander** A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.

**American Indian or Alaskan Native** A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.

**Regular day schools:** State-approved elementary/secondary schools offering at least one grade beyond kindergarten, attended by students during a part of the day, as distinguished from residential schools. Not included in this category are residential schools for exceptional children, Federal schools for Indians, federally operated schools on Federal installations, and subcollegiate departments of institutions of higher education.

**Religiously affiliated school:** A private school which in most cases a parent church group exercises some control over or provides some form of subsidy to the school. Catholic schools include those affiliated with the Roman Catholic Church, including the "private" Catholic schools operated by religious orders. Other affiliation includes schools associated with other religious denominations. An unaffiliated school is usually privately operated or under control of a board of trustees or directors.

**Revenues:** All funds received from external sources, net of refunds, and correcting transactions. Noncash transactions such as receipt of services, commodities, or other receipts "in kind" are excluded, as are funds received from the issuance of debt, liquidation of investments, and nonroutine sale of property.

**School district:** An educational agency at the local level that exists primarily to operate public schools or to contract for public school services. This term is used synonymously with the terms "local basic administrative unit" and "local education agency."

**Secondary school:** A school comprising any span of grades beginning with the next grade following an elementary or middle school and ending with or below grade 12.

**Student education expenditures (higher education):** Expenditures for formal instruction and activities that are most closely related to instruction. Includes instruction and research that are part of regular instructional services (departmental research), extension and public service, libraries, physical plant operation and maintenance, general administration, and other sponsored activities.

**Suspension:** Temporary exclusion of a student from school for disciplinary reasons for one full school day or longer.

**Tuition and fees:** A payment or charge for instruction, or compensation for services, privileges, or for the use of equipment, books, or other goods.

**Undergraduate students:** Students registered at an institution of higher education who have not completed requirements for a bachelor's degree.

**Unemployment rate:** The number of unemployed persons seeking employment as a percent of the civilian labor force.

# The Condition of Education

Cumulative Index

	Page in Edition			
	1981	1980	1979	1978
<b>A</b>				
<b>Accounting, salary offers</b> .....			209	
<b>Achievement tests:</b>				
advanced placement candidates .....			189	
college entrance exams .....	135	133	187	
in art knowledge .....			179	
in citizenship .....			41	
in career and occupational development .....			27	
in consumer knowledge .....		89		
in mathematics .....	111	85, 87	181	95
in reading .....	111			95, 97
in science .....	111		177	95
in social studies .....			41	95
in writing .....	109, 111			
<b>Administrative unit (see: School districts)</b>				
<b>Adult education:</b>				
<b>courses:</b>				47, 157
by source of payment .....		257		
by status .....		259		
by subject area .....		255		
by type of provider .....	25			
<b>participants:</b>				
as percent of adult population .....		239	105	
by age .....		239, 241, 249, 253		
by course of study .....		255		147
by course sponsor .....				153
by credit objectives .....		249		
by educational attainment .....	37	243		149
by family income .....		245		
by instructional method .....		253		
by racial/ethnic group .....		241		
by reasons for participation .....		251		
by sex .....		241		
in basic and secondary education .....			199	151/
in federally aided classes .....				157
in vocational programs .....	193			
number .....		239		
<b>Advanced placement program</b> .....			189	
<b>Age distribution:</b>				
college students .....		105		
in United States .....		11		

Page in Edition

	1981	1980	1979	1978
<b>Aid, Financial, institutions of higher education</b> (see: Financial aid)				
<b>Annual income</b> (see: Income)				
<b>Applied research</b> (see: Research)				
<b>Associate degrees</b> .....		111		141
<b>Attitudes</b> (see: Opinions)				
<b>Average daily attendance</b> .....		83	163	
<b>B</b>				
<b>Bachelor's degrees:</b>				
by field of study .....	159	131	229, 233	
by racial/ethnic group .....	155		227, 229	141
by sex .....	155	129	231, 233	139
candidates, salary offers .....			209	
graduates, in major occupational groups .....	241, 243	135	29, 31, 207	
number .....	155, 159	129	197	139
recipients, salaries, and underemployment .....		139	241, 243	145
<b>Basic administrative units</b> (see: School districts)				
<b>Bilingual programs:</b>				
students .....	79			37
federal funding .....		61	149	
<b>Blacks</b> (see specific subject area, by racial/ethnic group)				
<b>Blue collar employment</b> .....	233	137	29	21, 29
<b>Bond elections</b> .....			153	
<b>Business and management:</b>				
formal awards .....	159	131		
occupational status of recipients .....	241			
organized occupational curriculums .....		255, 271	103	
salary offers .....			209	
<b>C</b>				
<b>Career and occupational development</b>				
<b>achievement:</b>				
by age .....				95
by enrollment status .....			27	
by race .....			27	
<b>Classroom teachers, public elementary and secondary schools</b> (see also Teachers):				
assignment .....		25	85	
experience and preparation .....			83	

Page in Edition

	1981	1980	1979	1978
number		71	81	
salaries		77	87, 159	
supply and demand	75	73		
tenure		75		
<b>College entrance exams:</b>				
graduate				107
undergraduate	137	133	187	106
<b>College faculty (see: Faculty, higher education)</b>				
<b>College withdrawal:</b>				
by ability				135
by educational aspiration				135
by financial aid status				135
by socioeconomic status				135
<b>Commercial schools</b>	267, 269, 271		101	159
<b>Competency testing:</b>				
of teachers	77			
provisions	89	93	69	
<b>Computer science, salary offers</b>			209	
<b>Consumer price index, related to education expenditures</b>	173	125	135	
<b>Correspondence schools</b>				159
<b>Cosmetology/barber schools:</b>				
enrollment		261	103	
number		271	101	159
tuition and fees			103	
<b>Cost of education (see: Tuition/Fees, Current Expenditures)</b>				
<b>Current expenditures: (see also: Expenditures)</b>				
elementary/secondary schools	103	37	145	
higher education institutions	103, 105	37, 149		
in large cities, per student				79
private elementary/secondary schools		37		
per average daily attendance			163	
per student	101, 103, 173	285, 287	135	73, 227
projections		37	155	
public elementary/secondary schools	101	37	155, 157	73
<b>Curriculum:</b>				
elementary schools	91, 93	25, 91	247	
secondary schools	97	27, 91	43, 77, 245	
<b>D</b>				
<b>Daily attendance as a percent of enrollment</b>		83		
<b>Day care centers:</b>				
child/staff ratios		215		
class size		217		

Page in Edition

	1981	1980	1979	1978
enrollment .....		201, 213		
expenditures .....		225		
legal status .....		203		
number .....		201		
sponsorship .....		203		
staff .....		219, 221		
<b>Degrees earned:</b>				
advanced engineering .....		33	143	
associate .....		31	141	
bachelor's:				
by field of study .....	159	125, 131	87, 229, 233	
by racial/ethnic group .....	155		227, 229	141
by sex .....	155	129	197, 231, 233	139
number .....	155, 157	33, 129	197	139
salary offers .....			209	
dentistry .....	161		235	143
doctorate:				
by field of study .....	159	33	233	
by racial/ethnic group .....	157	227	141	
by sex .....	157	129	197, 231, 233	139
number .....	157, 159	33, 129	197	139
first-professional:				
by field of study .....	161		229, 233, 235	143
by racial/ethnic group .....	157		227	
by sex .....	157	129	231, 235	139
number .....	157, 161	129		139
law .....	161		233	141, 143
major field of study .....	159, 161		229, 233, 235	
master's:				
by field of study .....	159	33	233	
by racial/ethnic group .....	155		227	141
by sex .....	155	129	231, 233	139
number .....	155, 159	33	197	139
medicine .....	161		233	141, 143
projections .....		129, 131	197	139, 143
Dentistry, degrees conferred .....	161		235	143
Discipline .....	117			53, 55
Districts, school (see: School districts)				
Doctorate degree:				
by field of study .....	159	33	233	
by racial/ethnic group .....	157		227	141
by sex .....	157	129	231, 233	139
number .....	157, 159	129	197	139



Page in Edition

	1981	1980	1979	1978
<b>Dropouts:</b>				
by age .....	31, 55		185	
by language background .....	31			
by metropolitan status .....	35			
by nativity .....	31			
by racial/ethnic group .....	31, 35		135	
by sex and racial/ethnic group .....	235		185	
employment status .....	233, 235		23	15
income .....		139		17
<b>Drug/dope problem (see: Opinions)</b>				
<b>E</b>				
<b>Earned degrees (see: Degrees earned)</b>				
<b>Educational attainment:</b>				
and job satisfaction .....	217		33	
and relationship of schooling .....	245			
and voter participation .....			35	
by adult males .....			225	
by high school graduates of 1972 .....	129, 131,			131, 137
	213			
by racial/ethnic group .....	33, 129			
by region .....	33			
by SES and ability .....	131			
of 17-year-olds or older .....	37	243	225	23
of adult education participants .....	37	243		
of college faculty .....			123	
of family head .....	29, 151		11, 15	
of labor force .....	231	135	25, 29	
<b>Educational innovations</b> .....			43, 75, 77	
<b>Educational plans:</b>				
college freshmen .....		20		
high school seniors:				
by ability .....	127			
by education of family head .....				109
by family income or socioeconomic status .....	127			109
by racial/ethnic group .....	127, 209	19		
by sex .....	127, 209	19		
by type of institution .....		19		
occupational education students .....		23		
<b>Elementary and Secondary Education Act</b> .....	87	61, 63		
<b>Elementary/secondary schools (see: Public schools and private schools)</b>				

Page in Edition

	1981	1980	1979	1978
<b>Employment: (see also: unemployment)</b>				
by educational attainment	233, 235	135, 137	25, 29	21
by major occupational groups	215, 233	137	29, 31	21, 29, 169
growth, by occupation			31	
income	239, 263	139		
job satisfaction by attainment	217		33	
use of vocational training	211, 217	265	201, 203	
<b>Engineering, degrees conferred</b>	159	31, 33, 131		143
<b>Enrollment:</b>				
adult education		239, 245		147, 151, 157
by age	27	239	61-65, 115, 203	
by level	11, 59	17, 57, 59	51, 53, 55	
by modal grade			61-65, 69	
by school size	15			
by school system size			79	
day care center		201		
elementary/secondary schools:				
by age	27			
by control of school	11, 63	57	53, 55	69
by metropolitan status	63			
by racial/ethnic group	65, 115		55-59	71
by region	63, 115		57, 59	
by State	59	59		
in large cities			89	
number	11, 59, 63, 65, 115	57, 59	53	67
handicapped:				
by disability	269, 273, 275	79		39
percentage of population	269, 279, 283	79		39
Head Start		205		
high schools (see: Secondary education)				
higher education:				
by age	27	105, 239		
by attendance status	143	107		
by control	11, 17, 165	103, 111, 113	107, 111	115, 119, 124, 217
by parental education	151		11	
by parental income	153			117, 123
by racial/ethnic group	149-153	111, 113	115	119-123

Page in Edition

	1981	1980	1979	1978
by region .....			113	
by sex .....	147	105	113	117, 121
by size of institution .....	17			127,
by socioeconomic status .....				117, 121
by State .....	145			
by type of institution .....	17, 143, 165	103	111	115, 119
first-time, by sex .....	147			
first-time, by time elapsed since high school .....			119	
foreign students .....		109		
four-year institutions .....	165	103, 111, 113	111	115, 119, 217
noncredit registrations .....		247		155
number .....	143	103, 111, 113	107	
percent of population .....			115	
privately controlled institutions .....	165	103, 111, 113	107, 111	115, 119, 127, 217
publicly controlled institutions .....	165	103, 111, 113	107, 111	115, 119, 127, 217
two-year institutions .....	165	103, 111, 113	111	115, 119, 217
in Federal programs .....		63, 65, 67		157
minority, by racial composition of schools .....	61		57, 59	
postsecondary .....			103, 115	157
preprimary:				
by age .....	27	197, 207		
by control of school .....		211		
by family income .....		211, 223	51	
by labor force status of mother .....		207		
by level .....		211, 223		
by racial/ethnic group .....		209		
by State .....		199		
number .....	197, 199	51	65	
projections:				
elementary/secondary .....		17, 57	53	67
institutions of higher education .....	143	17, 103		115
vocational education:				
by ability level .....		265	99	
by program .....	193	261	101	
by race .....	207	263		
by sex .....	207		97	
by type of institution .....	193	261	101	

Page in Edition

	1981	1980	1979	1978
enrollment in postsecondary .....	193	261	103	157
in Federal programs .....	195			
in public secondary schools .....	192		53	
<b>Ethnic groups (see: specific area, by racial/ethnic group)</b>				
<b>Expenditures: (see also: Current expenditures)</b>				
all elementary/secondary schools .....		37	155	73
all levels of education .....		37		
by financial character of school districts .....		285	157	
by large cities .....				79
by source of funds .....	171		127, 145	213
by State; per student .....	101, 103	287	165, 167	77
change in expenditures and average daily attendance .....			163	
change in governmental expenditures .....		41	163	
distribution of school districts, per student .....			165	
Federal sources .....	171	41	129, 145	213, 215
for salaries of classroom teachers .....		77	159	
for social welfare .....		41	145	43
for student transportation .....			161	
institutions of higher education .....	171, 173	41, 149, 151	127	209, 213, 227
of Federal Government .....		41	127, 145	215
of local governments .....		41, 43	127, 145	43, 79
of State governments .....		41, 43	127, 145	43
percent of Gross National Product .....		39		41
per student, elementary/secondary .....	169, 171	287	165	77, 79
per-student, higher education .....	173	155	135	227
private institutions .....			127	213, 215
projections .....		37	155	215
public elementary/secondary schools .....	101, 103	37	155-163	73, 77, 79
research and development .....		35		223
State and local sources .....	171	43		
utilities .....		153		

**F**

**Faculty, higher education:**

by academic rank .....	121	121	185, 195
by racial/ethnic group .....			195
by sex .....	123	121	191, 195
by type of institution .....	123	121	
educational attainment .....		123	

Page in Edition

	1981	1980	1979	1978
number .....		121, 123	121	167, 185, 189
salaries .....	175, 177	125	125	191, 193
tenured .....		123		189
unionization .....				197
<b>Federal education programs:</b>				
bilingual services .....	79	61		
expenditures for .....		227	145	
of low income areas .....		61		
percent participating .....	79, 87, 141	61, 63, 65, 67		
special education .....	141, 259, 261, 279, 281			
student financial aid .....	141	181, 183, 185		215-219, 237, 241-247
vocational education .....	195			
<b>Federal sources, receipts from:</b>				
all levels of education .....	13		41	
higher education .....	13	157	129	211-215, 233
public elementary/secondary school .....	13, 99	283	149	75, 79, 81
teacher training .....				215
<b>Fees, higher education students (see: Tuition/ fees)</b>				
<b>Field of study, degrees conferred .....</b>	159, 161	33, 131	229, 233, 235	
<b>Finance (see: Current expenditures, Expenditures, Income, Salaries)</b>				
<b>Financial aid, higher education:</b>				
and education attainment .....				137
and withdrawal .....				135
by ability level .....				239, 241
by family income .....	141	181		231, 239-249
by level of institution .....				209, 217, 241
by racial/ethnic group .....				231, 239, 241
by sex .....				231, 239, 241
by type of aid .....	141	187	133	237-247
by type of institution .....				209, 217, 241
from Federal Government .....	141	183, 185		217, 237-247
<b>Fine and applied arts, degrees conferred .....</b>		131		

	Page in Edition			
	1981	1980	1979	1978
<b>First-professional degrees</b> .....	159	129	227, 231, 235	139, 143
<b>First-time college students:</b>				
degree aspirations .....		21		
need for remedial work .....			191	
number, by sex .....	147			
reasons for going to college .....				113
time elapsed since graduation .....			119	
<b>Flight schools</b> .....		261, 271	101	159
<b>Foundation program</b> .....			169	
<b>Four-year institutions:</b>				
ability level of persons admitted .....			191	
as sponsors of adult education .....	25	247		153, 155
closings .....		117		
enrollment .....	143, 165	103, 111	111	115, 119
expenditures .....		151	127	
faculty .....		123	121	
tenured .....		123		189
number .....	163	115	109	
revenues .....		157	129	
salaries, instructional staff, by rank .....			125	191
tuition/fees .....	139	159	129	
<b>Funds, federal, for education (see: Expenditures, Federal sources, Federal education programs)</b>				
<b>G</b>				
<b>Graduates:</b>				
high school:				
as percent of age group .....		81	183, 225	
by age .....			225	23
by racial/ethnic group .....	13		115, 225	23
by region .....	13			
by sex .....	113	81	225	
number .....		81	183	93
institutions of higher education .....		129	197	
organized occupational programs .....		259, 277	195	
<b>Gross National Product, relation to expenditures for education</b> .....		39		41
<b>H</b>				
<b>Handicapped population:</b>				
accommodations for .....	285			
alternative placements .....	287			

Page in Edition

	1981	1980	1979	1978
by State .....	269			
by type of disability .....	271-277	79		39
enrolled .....	271-277, 281, 283	79		39
federal programs for .....	279, 281	79		
personnel serving .....	291			
services provided .....	289			
<b>Health occupations, vocational awards</b> .....		31, 277		
<b>Health professions:</b>				
degrees conferred .....	159	131	233	
salary offers .....			209	
<b>High school graduates:</b>				
in major occupational groups .....	233		207	
interest in postsecondary education .....	127	19		111
labor force participation of .....	235		25, 207	
political and social participation .....			37	
salary comparisons .....		139	205	
<b>High schools (see: Secondary education)</b>				
<b>Higher education (see: Institutions of higher education)</b>				
<b>Hispanic origin (see specific subject area, by racial/ethnic group)</b>				
<b>Home study</b> .....		253		
<b>Hospital, paramedical schools</b> .....		261, 271		159

<b>I</b>				
<b>Income, personal:</b>				
by educational level .....		139	205, 241	17, 19
by racial/ethnic group .....	153			
by sex .....		139	237-243	17
related to education expenditures .....	139	291		231, 233, 249
<b>Institutions of higher education:</b>				
associate degrees conferred .....		33, 129, 131		141
bachelor's degrees conferred .....	155, 159	33	197	139
by control .....	17, 163	115	109	125, 127
by size .....	17			127
by State .....	163			
by summer and evening sessions offered .....	167, 169			
by type .....	17	115	109	125
closings .....		117		

Page in Edition

	1981	1980	1979	1978
credentials required for admission .....	133, 135			
doctoral degrees conferred .....	157, 159	33, 129	197	139, 141
endowment .....	171	175, 177		
enrollment (see: Enrollment, higher education)				
expenditures .....	171, 173	37, 149, 179	127, 135	209; 213, 227
first-professional degrees conferred .....	157, 161	129		139, 143
governing boards .....				129
graduates (see: Graduates)				
instructional faculty (see: Faculty, higher education)				
libraries .....		127		
master's degrees conferred .....	155, 159	33, 129	197	139, 141
noncredit activities .....		247		155
number .....	163	115	109	
price indexes .....	173	153	135	
revenues .....	171	157, 163-167		
special programs .....		175	249	
tuition/fees .....	139	159, 161	131	
withdrawal rates .....				135
<b>Instructional radio</b> .....	19			
<b>Instructional staff, elementary/secondary schools:</b>				
number .....	73, 75	71		
salaries .....		77		
supply and demand .....	75	73		
tenure .....		75		
<b>Instructional staff, higher education (see: Faculty, higher education)</b>				
<b>Instructional television</b> .....	19			89
<b>Integration:</b>				
attitudes towards .....			17	59, 61
in public schools .....	61		57, 59	71
<b>International education statistics</b> .....				261-269
<b>J</b>				
<b>Jobs held by young adults</b> .....	213			
<b>Job satisfaction</b> .....	217			
<b>K</b>				
<b>Kindergarten, enrollment (see: Enrollment; pre-primary)</b>				



Page in Edition

	1981	1980	1979	1978
<b>L</b>				
<b>Labor force:</b>				
by sex .....	231, 235			25, 266-269
educational attainment of .....	231-235		29	
participation of high school students .....	237, 255			
participation of recent college graduates .....	235, 241, 243	135		
participation of young adults .....	235		25, 207	266-269
<b>Labor unions:</b>				
as administrators of adult education .....		251		
as sponsors of adult education .....				153
<b>Language usage:</b>				
by racial/ethnic origin .....	79			
household .....				37
<b>Law, degrees conferred</b> .....	161		235	143
<b>Libraries, public</b> .....	23			
<b>Local government expenditures</b> .....		41, 43, 157, 283	145	
<b>Local sources, receipts from:</b>				
higher education .....	13, 171	157	133	211, 213
public elementary/secondary schools .....	13	283	145	
<b>Low income areas, federal services to</b> .....		61		
<b>M</b>				
<b>Master's degrees:</b>				
by field of study .....	159	33	233	
by racial/ethnic group .....	155		227	141
by sex .....	155	129	197	139
number .....	155, 159	129	197	139
<b>Mathematics:</b>				
achievement:				
by age group .....		85, 87		95
by homework assigned .....			181	
by parental education .....		85		
by racial/ethnic group .....				95
by sex .....		87		
by television viewing .....			181	
offerings and enrollment .....	91, 93	27		
required courses .....		91		
time spent teaching in elementary schools .....		25		
<b>Medicine, degrees conferred</b> .....	161			141, 143
<b>Minimum competency testing</b> .....	89	93, 95	67, 69	

Page in Edition

	1981	1980	1979	1978
<b>Minorities (see subject headings).</b>				
<b>Modal grade</b> .....			61-65	
<b>Museums</b> .....	21			

**N**

**National Assessment of Educational Progress:**

art knowledge and appreciation .....			179	
career and occupational development .....			27	95
citizenship .....			41	
consumer knowledge .....		89		
mathematics .....		85, 87	181	95
reading .....				95, 97
science .....			177	95
social studies .....			41	95
writing .....	109			99
<b>Noncollegiate postsecondary education (see Vocational education)</b>				
<b>Nonpublic schools (see: Private schools)</b>				

**O**

**Objectives:**

adult education participants .....		249, 251	105	
career .....			23	
high school seniors .....	127		19	
<b>Occupational programs (see also Vocational education)</b>				
by type of program .....		261, 273	101	159
		275		
completion rate .....		277	195	
enrollment size .....		269		
number of schools offering .....		267, 273,	101	
work and education plans .....		23		
outcomes .....		277		
participation in:				
by age .....			97	
by educational attainment .....		265	99	
by racial/ethnic group .....		263		
by sex .....			97	
by type of program .....		261	97	
tuition/fees .....		275	103	
<b>Opinions:</b>				
of parents toward public schools .....	39			11, 53, 63
of students on difficulty of school and homework .....			73	

Page in Edition

	1981	1980	1979	1978
of teachers toward teaching . . . . .				89*
of teenagers on getting ahead . . . . .			223	
of young adults toward high schools . . . . .	251, 253		193	
on competency testing . . . . .		95	67	
on confidence in people running institutions . . . . .	43		39	
on equality of opportunity . . . . .			219	
on financial aid plans . . . . .			133	
on high school credit for community service . . . . .			43	
on importance of education . . . . .	245, 247		117	
on interdistrict busing . . . . .			17	59
on leaders in American institutions . . . . .	43		39	13
on major educational problems . . . . .	41			53-63
on outside influences on children's education . . . . .	251		17	
on priorities for U.S. Department of Education . . . . .	47			
on public expenditures . . . . .	45		143	
on quality of public education . . . . .	39		71	63
on sending children to college . . . . .			221	
on school integration . . . . .			17	59, 61

**P**

<b>Parental education, related to student's achievement . . . . .</b>			179	
<b>Parental expectations for children . . . . .</b>			117, 221	9
<b>Parental involvement . . . . .</b>			19, 21	
<b>Per-pupil expenditures (see: Expenditures, per student)</b>				
<b>Personnel, education (see: Instructional staff, and Faculty)</b>				
<b>Physical sciences, degrees conferred . . . . .</b>	159	131	233	
<b>Population:</b>				
age distribution . . . . .		11		
family status . . . . .			13	
in poverty . . . . .		11		35
language . . . . .				37
participation in education (see: Enrollment)				
projections . . . . .		13		31, 235
racial/ethnic composition . . . . .		11		
school-age:				
by age group . . . . .		11	51, 61	31
by country . . . . .				258, 259

	Page in Edition			
	1981	1980	1979	1978
by language .....				37
by racial/ethnic group .....		11		31, 235
by region .....		13		
handicapped .....		79		39
migration .....				33
total, United States .....		11		31
young adult .....		11		31, 235, 259
<b>Postsecondary education: (see also: Adult education, Institutions of higher education, Vocational education, Noncollegiate postsecondary)</b>				
age distribution of students .....			101	
by racial/ethnic group .....		263		
interest in .....				111
noncollegiate .....	191, 193		97-103	159
plans of high school seniors .....	127	19		109
<b>Preprimary education</b>				
enrollment:				
by age .....		197, 207		
by control of school .....		211		
by family income .....		211, 223	51	
by labor force status of mother .....		207		
by level .....		211, 223		
by racial/ethnic group .....		209		
by State .....		199		
number .....		197, 199	51	65
outcomes .....		229		
Price indexes, higher education .....	173		135	225
<b>Private schools:</b>				
elementary/secondary schools:				
enrollment .....	63, 65, 71	57	55	
participation in Federal programs .....	87, 259, 261			87
school size .....	71			
teachers .....	71			
tuition/fees .....	105, 107			
institutions of higher education:				
enrollment .....	191	103	107, 111	115, 217
expenditures .....	171	149, 151	127	209, 227
number .....	17	115	109	
revenues .....	13, 171	157	129	211
tuition/fees .....		161	131	233
noncollegiate postsecondary schools:				
completion .....		259	195	
enrollment .....		261	103	157

	Page in Edition			
	1981	1980	1979	1978
length of program .....			103	
number .....	191	267	101	159
tuition/fees .....		257	103	
<b>Professional degrees (see: First-professional degrees)</b>				
<b>Projections (see specific subject areas)</b>				
<b>Public opinion (see: Opinions)</b>				
<b>Public schools:</b>				
elementary/secondary schools:				
enrollment:				
by expenditure .....		285		
by level .....	11	57	53	
by metropolitan status .....	63			
by region .....	63			
by size .....	15		79	
by State .....	59	59		
expenditures .....	101, 103	287, 291, 293, 299	155-163	
Federal program participants .....	259, 261	63		
instructional staff .....		71, 73	81-87, 159	
number .....	69, 191		79	83
organization .....	69		79	85
revenue receipts .....	13, 99	283	147, 151	
student-teacher ratio .....	69	71, 289, 295, 297	81	179
institutions of higher education:				
enrollment .....	11, 165	103	107, 111, 121, 217	115, 119
expenditures .....	171, 173	149, 151	127, 135	209, 227
number .....	17, 163	115	109	125
revenues .....	171	157	129	211
tuition/fees .....	139	159, 161	131	233
noncollegiate postsecondary schools:				
completion rate .....		259	195	
length of program .....			103	
number .....	191	267	101	159
tuition/fees .....		257	103	
<b>Public school systems (see: School districts)</b>				
<b>Pupils, per teacher .....</b>	71, 73	71	81	

	Page in Edition			
	1981	1980	1979	1978
<b>R</b>				
<b>Racial/ethnic group (see specific subject areas)</b>				
<b>Receipts, public elementary/secondary schools (see: Revenue receipts)</b>				
<b>Research and development expenditures</b> .....		35, 151	127	223
<b>Revenue receipts:</b>				
and personal income .....		291	151	
by State .....	99	157, 283	151	75
from Federal sources .....	13, 99, 171	157, 283	147	75, 211
from State and local .....	13, 99, 171	157, 283	147	75, 211
of institutions of higher education .....	13, 171	157		
of large cities .....				79, 81
of public elementary/secondary schools .....	13, 99	283	147	75
<b>S</b>				
<b>Salaries:</b>				
by occupation .....			237, 239	
by race .....			237, 241	
by sex .....		139	237, 241	
earned by recent B.A. recipients .....		139	87, 241, 243	145
elementary/secondary education .....		77, 139	87, 159	
full-time workers .....		139	237	
higher education .....	175, 177	139	125	
offered to B.A. candidates .....			209	
master's recipients .....			241	
projections .....			159	
<b>Scholarships (see: Financial aid, higher education)</b>				
<b>School bond elections</b> .....				
			153	
<b>School districts:</b>				
by enrollment size .....			79	
expenditures .....	101	285	155, 165	
number .....			79	
<b>School finance (see: Finance)</b>				
<b>School year, length of</b> .....				
			85	
<b>Schools, number of:</b>				
elementary/secondary .....	15		79	
higher education .....	17, 133, 163	115	109	125
noncollegiate postsecondary .....	191		10	159

Page in Edition

	1981	1980	1979	1978
<b>Science:</b>				
achievement:				
by age .....			177	95
by racial/ethnic group .....				95
offerings and enrollment .....	91, 93	119		
required courses .....		91		
<b>Secondary education:</b>				
graduates .....	247, 249, 253	81	183	93
principal's assessment .....			75	
student-staff ratio .....	73	71	81	
<b>Social sciences:</b>				
degrees conferred .....	159		229, 233	
salary offers .....			209	
<b>Social studies:</b>				
achievement:				
by age .....			41	95
by racial/ethnic group .....				95
by size and type of community .....			41	
offerings and enrollment .....		27		
required courses .....		91		
<b>Social welfare expenditures .....</b>			145	41, 43
<b>Staff (see: Faculty, classroom teachers, instructional staff, teachers)</b>				
<b>State government expenditures .....</b>		41	145	43, 73
<b>State competency-based education provisions .....</b>	77, 89		69	
<b>State programs, federal funding .....</b>			149	
<b>State sources, receipts from:</b>				
elementary/secondary schools .....	13, 99	283	147	75
higher education .....	13	151, 163, 165 181	133	211, 213
<b>Student expenditures .....</b>				229, 231
<b>Student fees (see: Tuition/Fees, Current Expenditures)</b>				
<b>Student loans, higher education (see: Financial aid, higher education)</b>				
<b>Students (see: Enrollment)</b>				
<b>Students' postsecondary aspirations .....</b>	127			109
<b>T:</b>				
<b>Teachers:</b>				
elementary/secondary schools:				
by experience and preparation .....			83	
by type of position .....				171

Page in Edition

	1981	1980	1979	1978
competency-based certification .....	77			
contracts .....		79		
hours worked .....			85	
number .....		71	81	167
salaries .....		77	87, 159	
supply and demand .....	75	73		169-177, 187
tenure .....		75		
unionization .....		79		181
work stoppages .....				183
higher education (see: Faculty)				
<b>Technical education, vocational:</b>				
enrollment .....	193, 195	261	103	
number .....		267	101	159
<b>Television</b> .....	19		17, 19, 23, 121	
<b>Trades and industry (vocational) (see: Vocational education, Noncollegiate postsecondary education)</b>				
<b>Tuition/fees:</b>				
private elementary/secondary schools .....	105, 107			
private preprimary schools .....		223		
revenue source .....		157, 161	129, 131	211
undergraduate .....	139	159		233
vocational programs .....			103	
<b>Two-year institutions:</b>				
enrollment:				
by control .....	165	103	111	115, 217
by racial/ethnic group .....		111		119
number .....	143	103		115
expenditures .....		151	127	209
faculty:				
by sex .....		123	121	
number .....		123	121, 123	
salaries .....		125	125	191
tenured .....		123		189
number .....	163	123	109	
revenues .....		157	129	211
tuition/fees .....		159		233



Page in Edition

	1981	1980	1979	1978
<b>U</b>				
Underemployment .....			243	
<b>Unemployment rate:</b>				
by country .....				275, 277
by sex .....	235, 255; 257		211	
of college graduates .....	235		25, 31	
of doctoral degree holders .....			211	
of high school dropouts .....	235		25	
of high school graduates .....	235		25	
of high school students .....	237, 255, 257, 263			
<b>Universities:</b>				
enrollment:				
by control .....		103	111	115, 217
number .....		103		115, 119
expenditures .....		149, 151	127	209
faculty:				
by position .....			121	
by salaries .....		125	125	191
by sex .....		123	121	
tenured .....		123		189
revenues .....		157	129	211
tuition/fees .....	139	159		233
<b>V</b>				
<b>Vocational education:</b>				
enrollment:				
by ability .....		265	99	
by age .....		239	97	
by control .....	193	271	103	
by program .....	193, 195, 207	263, 265	103	157
by racial/ethnic group .....	207	263		
by sex .....	207		97	
federally aided programs .....	195			157
number .....	193		103	157
completions .....			195, 201	
conditions of facilities .....	201			
instructional staff .....	203, 205			
number of schools, by population .....	197			
number of schools, by type .....	191, 199	267, 271	101	159
teachers .....	203, 205			
tuition/fees .....			103	

Page in Edition

	1981	1980	1979	1978
<b>Voluntary support, higher education</b> .....		169, 171, 173		211, 221
<b>Voter participation</b> .....			35, 37	
<b>W</b>				
<b>White-collar employment:</b>				
by educational attainment .....	233	135, 137	29	
percent of employed .....		137		21, 29
<b>Work, education and</b> .....	231-263	135, 139	25-33	
<b>Writing achievement, by age</b> .....	109			99
<b>Y</b>				
<b>Years of school completed:</b>				
by civilian labor force .....	231			
persons aged 25-years or older .....	33		225	23