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## ABSTRACT

Forming part 2 of the eighth annual report on the condition of education in the United States, this publication describes the programs and activities of the National Center for Education Statistics. Both current and projected programs are discussed in order to provide educators and policy makers some insight into the services offered by the Center. The report is divided into eight sections that include an introduction and information on projects involving elementary/secondary education, higher education, adult and vocational education, national longitudinal studies, learning resources, information dissemination services, and state technical assistance. The Center's 1983 program will concentrate on maintaining five databases on public and private schools at different levels, analyzing data from the Center's longitudinal studies, administering surveys on current policy issues, and operating the Statistical Information Office, which provides comprehensive information services to Congress, the states, and the general public. (Author/WD)

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# **The Condition of Education Part 2**

## **1982 Edition**

### **NCES Programs and Plans**

by

**Loretta Wright**

**Forms Management and  
Publications Branch  
Division of Statistical Services**

**U.S. Department of Education**

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**Office of Educational Research and Improvement**

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**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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# Administrator's Statement

With the emergence of the new Federalism, the role of the Federal government in education is now being redefined. It is clear that accompanying this redefining, there is a recognition that the Federal role in statistics is relatively more important. We have provided what we believe is important for the education community at large, and the public in general, the data about American education in Volume I of *The Condition of Education*.

It seems equally important to me, that we provide to the State education agencies, local school districts, educational institutions, and other education policymakers some insight into what the National Center for Education Statistics is now doing and what we are planning to do. I ask you to take the time to read this Volume II, *Condition of Education*, so that you can not only anticipate what surveys, what statistical and information programs we have in the Center, but also so that you can provide us with your reactions, and suggestions, regarding our current work and our future plans. We need to know what emphasis in education statistics you feel are most important and why you believe this to be true. We do solicit your views and I can assure you that we will carefully consider the reactions which you provide.

I believe this volume will be both informative and useful as you anticipate the education statistics needs of your area of interest as well as that of the nation.

*Maria S. Eldridge*

Administrator  
National Center for Education Statistics

# Acknowledgments

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Photographs in this report are compliments of the University of Maryland at College Park, Northwestern High School, Hyattsville, Md., Caroline High and Bowling Green Elementary Schools, Caroline County, Va., and the Division of Statistical Services, NCES.

# Contents

## Page

iii

Administrator's Statement

1

**1** Introduction

3

**2** Elementary/Secondary Education

9

**3** Higher Education

15

**4** Adult and Vocational Education

21

**5** National Longitudinal Studies

27

**6** Learning Resources

33

**7** Information Dissemination Services

37

**8** State Technical Assistance



## Introduction

The National Center for Education Statistics (NCES) collects statistics on the condition of education in the United States, analyzes and reports the meaning and significance of these statistics, and assists State and local education agencies in improving their statistical systems. In recent years, NCES' responsibilities have been increased by mandated studies from the Congress. These studies include developing and implementing a national vocational education data system, conducting a continuing survey of the supply and demand for educational personnel, and producing profiles on the degree to which States are achieving equalization of resources for elementary and secondary education.

NCES supports a wide range of activities to provide policy-relevant data on such issues as access of minorities to postsecondary education, impact of enrollment changes on institutions, and the outcomes of education, to assist State and local education agencies in improving information systems; and to provide comprehensive information services to the education community and the public.

The Center's fiscal year 1983 program, based on a budget request of \$8,700,000 will be directed toward:

- o Maintaining five data bases on public and private elementary/secondary, postsecondary, vocational, and adult education to monitor trends on enrollments, staff, and finances. The data bases are the core source of the Center's most widely used publications *The Condition of Education*, *The Digest of Education Statistics*, and *Projections of Education Statistics*.
- o Analyzing data from the Center's longitudinal studies that address differences in student achievement, effects of financial aid on access to postsecondary education, youth employment, high school dropouts, discipline and order, and the quality of education in public and private schools.
- o Administering surveys through the Fast Response Survey System that provide data within 6 months on current policy issues.
- o Operating the Statistical Information Office that provides comprehensive information services to some 24,000 users, including the Congress, the States, and the general public.



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## Elementary/Secondary Education

The focus of the Center's statistical program at the elementary/secondary level is to provide information on the condition of public and private education to the Nation. The basic program includes annual national, State, and local data-collection systems on public elementary and secondary school systems. An important recent addition to the system is the compilation of financial, pupil, and teacher data for each public school district in the United States. The private school portion is a major new undertaking.

### Data Sources

Elementary/secondary education statistics are collected from several sources. A major program of compiling statistics on public elementary/secondary school systems, students, staff, and financial characteristics is conducted each year in cooperation with each State education agency. This program provides information about fall school membership, the number of school staff positions; revenues from Federal, State, or local government sources; and expenditures for administration, instruction, and other purposes. Summary statistics for each State and the 20 largest cities are published on an annual basis. Similar, less detailed data are collected for each of the 16,000 school systems in the United States. Information on enrollment, number of teachers, location, and grade span of the 90,000 public schools is being collected periodically.

In the private school sector, a new census of private elementary/secondary schools was carried out for the 1980-81 school year, updating a 1978 listing. Other information in the latest survey included the public school district in which the private school is located; the number of students enrolled, graduated from high school, and the grade span of the school. These data were collected directly from the schools except that data for the Roman Catholic Diocesan schools were supplied by the National Catholic Education Association.

NCES also conducts or sponsors special sample surveys periodically to provide comparable general statistics on the characteristics of students, graduates, and staff that cannot be easily obtained from information collected by State education agencies. For example, statistics on children enrolled in preprimary schools are collected in October through the Bureau of the Census' Current Population Survey. They are published biennially. A sample survey of school district demand for teachers is conducted periodically to complement the data on the supply of new teachers among all recent college graduates.

Another major source of data is the 1980 Decennial Census of Population and Housing. Using these data, NCES began the school district mapping project in 1982, which will provide population and housing data for each of the 16,000 local school systems in the United States.

### Surveys and Studies

Statistical surveys and studies are conducted on the characteristics of students, schools, school districts and staff members of the school system.

#### Preprimary school enrollment:

sample of children 3 to 5 years old, enrolled and not enrolled, by age, sex, race, Hispanic origin, region, educational levels of parents, employment status of mother, and household income. For children enrolled, level (nursery school or kindergarten); public and private, and full- or part-day attendance. (Biennial)

#### Fall survey of local public school systems:

number of school districts, students, staff, high school graduates, and estimates of financial receipts, expenditures, and teacher salaries for each State, the 20 largest cities, and the outlying areas. (Annual)

**Revenues and expenditures:**

comprehensive State aggregate data covering (a) receipts of local public school districts from all sources including payments made on behalf of the local districts by the State education agency and other State agencies, and (b) expenditures of local public school districts by purpose. The principal data elements are receipts by source, current expenditures by major function, community services, other pupil services, capital expenditures, debt service, and average daily attendance. Some of these data are required for the administration of P.L. 89-10, P.L. 81-874 and P.L. 95-561, section 1201. (Annual)

**Census of local public school districts:**

name, county, State, number of schools, grade span and enrollment of each district. (Annual)

**Local school district, student, staff, and financial characteristics:**

enrollment by level, teachers, teacher aides, and other support staff; receipts by source and expenditures by purpose. Depending upon need, the detailed data may be collected for the entire universe of school districts or for a sample of districts. (Annual)

**State education agency officials:**

names, titles, and phone numbers of officials for each State education agency. (Periodic)

**State education agency operations:**

revenues by source and expenditures and employees by State education agency functions, i.e., approval of programs, consultative services, distribution of resources, general management, internal services, planning and research, operation of schools, and vocational rehabilitation. Data are reported for States grouped by public school membership. (Annual)

**1980 decennial census data for school districts:**

tabulations of the 1980 decennial census data will be provided for each of the 16,000 local school districts in the United States. Data on population, population characteristics, housing, etc., will be compiled within local school district boundaries and provided in the form of a series of data tapes for public use. Products will include (a) a set of data tapes for each State with the data for each school district in the State, (b) a set of maps showing the 1980 Census geography and school district boundaries, (c) a geographic cross-reference file that identifies each 1980 Census geographic unit completely or partially enclosed by each school district's boundaries, and (d) technical information needed by prospective users of maps, data tapes, and/or the geographic cross-reference file, as it might be applied to public use tapes or the school district tapes. This product will also include data on sampling errors and other information needed for extended analysis of the data. (Onetime)

**Teacher supply and demand:**

estimate of the numbers of college graduates added to the teacher supply, employed as teachers and employed in fields other than teaching, local education agency sample of number of teachers employed, teachers laid off, teacher openings, current and anticipated teacher shortages, all by level and field of instruction. (Periodic)

## **Congressionally Mandated Reporting**

In cooperation with State education agencies and the Bureau of the Census, NCES established a "reliable statistical" base as required by Section 1521, P.L. 95-561, to make available "... data developed from the 1980 decennial census... to the Secretary of Education identifying data for children under 18 years of age... for school districts."

Under section 406(b) (5) of the General Education Provisions Act, NCES is mandated to "conduct a continuing survey of institutions of higher education and local education agencies to determine the demand for and the availability of qualified teachers and administrative personnel, especially in critical areas within education which are developing or are likely to develop. . . ." These surveys are the major basis of reports on teacher supply and demand. The reports are based on a survey of teacher demand and shortages in local education agencies and other schools, a survey of college graduates newly qualified to teach, and NCES projections of teacher supply and demand. The report covers changes in the balance of the supply of and the demand for newly qualified teachers, and in the need for teachers in particular fields of study. It also examines how graduates who are newly qualified to teach fare in the labor market compared with other college graduates.

A persistent concern in education is the disparity in resources among public elementary/secondary school districts and among States. To ascertain the extent and significance of these disparities, the 1978 Education Amendments require NCES to publish information on disparities every other year.

## Data Uses

The statistics NCES collects from State education agencies and from other special surveys are used extensively in many ways, by persons outside of NCES for testimony before Congressional Committees, for planning in various Federal executive departments, and for planning by professional organizations. They are also used by various businesses that sell to educational institutions, by State executive and legislative staffs in making interstate comparisons, by associations of local school systems, by researchers in colleges and universities, and in State (SEA's) and local education agencies (LEA's) as well as in other nations, and by the media in reporting on educational issues and events. Examples of

data uses outside of NCES during this past year included the following:

The National Institute of Education used information on all the private schools in each of 11 standard metropolitan statistical areas in conjunction with one of their school finance projects.

Department of Education experts used NCES data on teacher shortages in the sciences for national planning purposes.

The Government's Division, Bureau of the Census, used the CCD school district universe to update their file of public school districts for the 1982 Census of Governments.

A State education agency research director used NCES' teacher supply and demand survey as a model for his own State's survey.

A State education agency used data about other State education agency operations for a comparative study of SEA staff costs.

The Council for American Private Education (CAPE) used data on teacher qualifications and tuition rates.

A Canadian government statistician used NCES' survey of recent college graduates as a model for a similar Canadian survey.

A university researcher used data for a first-time analysis on the number and characteristics of "rural" school districts in the United States, including enrollment size, metropolitan status, and number of schools.

## Plans

To assist NCES in its review of data collection priorities and in its selection of statistical materials for publication, meetings were held at least twice a year with representatives of 29 national organizations of public or private school administrators or practitioners at the elementary and secondary school levels. This process allows State and local people to make known to NCES their information needs. Their recommendations aid NCES in reviewing program priorities. They help "target" or "focus" publications on specific kinds of

users, and provide NCES with the opportunity to develop the content of new surveys with their intended users.

For example, on a new sample survey of private elementary and secondary schools, the Council for American Private Education is advising NCES about the information of most value to the constituent organizations. In this planned survey, expected in early 1984, the possible content includes candidate items recommended by a special subcommittee of CAPE in addition to those that are part of a general statistical information system.

The Common Core of Data (CCD) system, the Federal-State cooperative statistical system in elementary and secondary education, is being "streamlined" in fiscal year 1983. The system is composed of several parts; some of which are being switched from an annual basis to a biannual or triannual basis or are being collected on a sample basis. These changes were developed in concert with a special task force of the Committee on Evaluation and Information Systems (CEIS), a standing committee of the Council of Chief State School Officers, as beneficial to State and local education agencies. They were discussed with representatives of the major Department of Education offices, and other State and local education groups. The result is that the amount of administrative data, assembled by State education

agencies from their records systems, is being sharply reduced and will continue to decrease in fiscal year 1984. The decrease in the number of nonfiscal data items collected annually is 40 percent. The new streamlined system indirectly reduces the periodicity by reducing the annual collection and relying on sample surveys to provide additional information on a periodic basis.

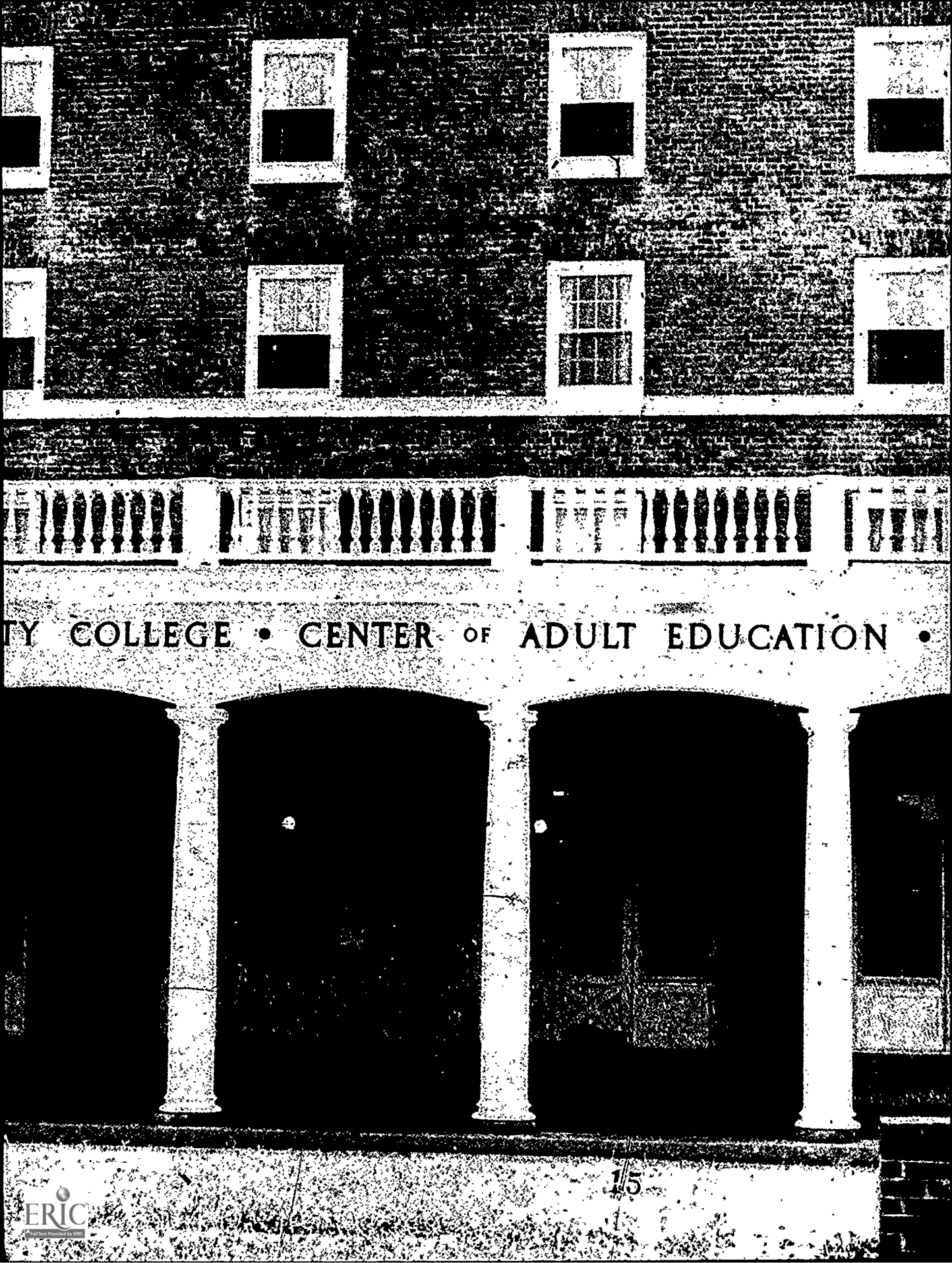
## Selected Publications

Revenues and Expenditures for Public Elementary and  
• Secondary Education (Annual)  
Statistics of Public Elementary and Secondary School  
Systems (Annual)  
New Teachers in the Job Market (Periodic)  
Selected Statistics of Private Elementary and Secondary  
Schools (Periodic)  
A Comparison of Selected Characteristics of Private and  
Public Schools (Periodic)  
Teachers Employed in Local Public School Districts  
(Periodic)  
Public Elementary and Secondary Education. A Sta-  
tistical Compendium (Annual)  
Statistics of Public School Counselors (Periodic)  
One Teacher-Schools (Periodic)  
Preprimary Enrollment (Periodic)

# Elementary and Secondary Education.

Surveys	Year				
	1982	1983	1984	1985	1986
Preprimary school enrollment	X	X	X	X	X
Public elementary and secondary school systems	X	X	X	X	X
Private elementary and secondary schools		X	X	X	X
Revenues and expenditures	X	X	X	X	X
Local school districts	X	X	X	X	X
State education agency officials	X	X	X	X	X
Teacher supply and demand	X	X	X	X	X
1980 Census Data for School Districts	X	X			





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## Higher Education

Social, demographic, educational, and economic issues challenge higher education today. Among the most critical are questions pertaining to access to higher education for various populations, the effects of shifting enrollment patterns, the long-range financial outlook for colleges and universities, and the uncertainty of job opportunities for graduates.

The NCES program in higher education provides statistical information used by planners, policymakers, and educators in addressing these issues. The primary source of this information is the Higher Education General Information Survey (HEGIS), an annual series of surveys initiated by NCES, that provides a variety of data on the Nation's 3,300 public and private institutions of higher education. Complementing HEGIS are special studies of recent college graduates and post-secondary education participants.

### Higher Education General Information Survey (HEGIS)

The HEGIS data base provides a census of public and private universities, including community and 2-year colleges, their enrollments, degrees awarded, faculty salaries, finances, and other characteristics.

#### Surveys

##### Institutional characteristics:

name, address, Congressional district, county, telephone number, year established, sex of student body, tuition, control or affiliation, calendar system, highest degrees offered, type of program, and accreditation. (Biennial)

##### Fall enrollment:

full- and part-time enrollment for men and women undergraduates, first professional degree students, graduate, and unclassified students. Racial/ethnic data by major field of study are collected in even-numbered years. (Annual)

##### Degrees and other formal awards conferred:

first professional degrees by field; bachelor's, master's, and doctor's degrees by disciplines; and degrees and awards based on less than 4 years of work beyond high school. Degree data by sex are collected on an annual basis. Racial/ethnic data are collected in odd-numbered years. (Annual)

##### Residence and migration of college students:

first-time student enrollment classified by residence status (in-state/out-of-state/foreign), by sex, attendance status, and level of enrollment. (Biennial)

##### Salaries, tenure, and fringe benefits of full-time instructional faculty:

number of instructional faculty by rank, sex, tenure status, and length of contract; salaries and fringe benefits of full-time instructional faculty. (Annual)

##### Financial statistics:

current funds revenues by source (e.g., tuition and fees, government, private gifts); current funds expenditures by function (e.g., instruction, research, plant maintenance and operation); physical plant assets and indebtedness; and endowment investments and performance. Since fiscal year 1975, data are collected on changes in fund balances. (Annual)

##### College and university libraries:

name, address, and telephone number; number and salaries of full- and part-time staff, by sex and position; circulation and interlibrary loan transactions; book and media collections; hours and days of service; operating expenditures by purpose. (Biennial)

## Data Uses

The NCES higher education data file provides such information as trends in the enrollment of women and minorities; patterns of expenditures and revenues of institutions; and the relationship between rising faculty salaries and college and university tuition charges. The Office for Civil Rights uses these data to monitor compliance with Federal legislation. These data are also used to distribute student aid funds to colleges and universities and to determine institutional eligibility for Federal assistance. Through special studies, the cost of redesigning collegiate facilities to permit full access to the handicapped has been estimated, characteristics of black institutions have been examined, and the educational participation and achievement of Hispanic Americans have been analyzed.

Thousands of requests for information or consultations are received by the Center each year, based on the Higher Education General Information Survey (HEGIS). The specifics below illustrate the range of these requests:

Members of Congress or Congressional committees request information from the Center on a regular basis. For instance, a Senator from Wisconsin requested financial data on colleges and universities, a Representative from Missouri asked for data on enrollment in occupational fields; and a Representative from Mississippi requested salary-range data for various college administrative positions. The House Education and Labor Committee needed information on enrollments for advanced degrees.

On numerous occasions, consultations were held such as with a higher education panel coordinated by the American Council on Education on needed data in higher education, on data-collection techniques for the Stanford University Institute for Chicano Research, and with the American Association of Colleges for Teacher Education on the implications of teacher-supply demand data.

Data on undergraduate enrollments were provided to the National Association of Independent Colleges and Universities. At the request of the Black Women's Summit, trends in higher education enrollment by race were supplied.

Media contacts included requests from Restaurant and Food Magazine for information on campus residence trends, KNBC News (Los Angeles) for trends in basic college student costs, The New York Times, for data on the family income averages for college students, U.S. News and World Report, for racial/ethnic college enrollment data, Working Women, for trends in enrollment of women in business administration, the Detroit News, for information on the status of the traditionally black colleges, and Time Magazine, for changes in graduate school enrollments in recent years.

## Plans

NCES is currently undertaking a review of its entire postsecondary data-collection program. With the adoption of the new Classification of Instructional Programs, the tools are now available to provide a much more complete and coherent statistical picture of postsecondary education. NCES has also adopted a system of classifying institutions that allows for stratification into more homogeneous grouping—essential for designing sample surveys. Representatives of the U.S. Department of Education, other Federal agencies, States, and institutions are being asked to assist NCES in re-evaluating the content and periodicity of each survey to provide better a similar data while minimizing the burden on respondents.

The redesign process is just beginning. However, it should ultimately permit a more comprehensive and systematic perspective about postsecondary education that still consists of many parts with specific constituencies.

In addition to the regular HEGIS surveys, NCES plans to sponsor a triennial supplement to the Current Population Survey conducted by the Bureau of the Census, which queries individuals in 56,000 sampled households on their higher education activities. One survey will provide demographic and economic data as well as other selected characteristics reported by individuals in sampled households on higher education students. This

survey will enable NCES to obtain basic student characteristic data not otherwise available through institutional surveys.

A second new survey is planned in the postsecondary education area—State Expenditures for Postsecondary Education. This survey will ask State officials to report total financial support for postsecondary education including postsecondary student aid, expenditures for non-HEGIS public 2-year institutions, expenditures for postsecondary education boards, and capital outlays for public postsecondary institutions.

NCES continues to work closely with the higher education community to establish priorities for data collection. The State Higher Education Executive Officers Organization (SHEEO) provides valuable feedback and input. Other higher education organizations such as the National Association of College and University Business Officers (NACUBO), the Association of College Registrars and Admission Officers, and the Association of Physical Plant Administrators recommend improvements to specific areas of data collection such as higher education finances, enrollments, and facilities, often with NCES' financial support.

## Recent College Graduates Study

The huge investment in a college education by students, parents, and institutions raises a key question: how valuable is a college education today in helping to secure a suitable job? The question concerns not only the immediate economic return for the years spent learning, but also—and perhaps more importantly—the opportunity for a challenging career.

An answer to this question comes from the NCES survey of recent college graduates, based upon a representative sample of graduates who received a bachelor's or master's degree the preceding year. The following summary specifies the data collected.

### Recent college graduates:

date of graduation, field of study, graduates newly qualified to teach, further enrollment, financial aid, employment status (especially teacher employment characteristics), job characteristics and earnings, city and State of residence, age, marital status, sex and racial/ethnic origins. (Periodic)

## Plans

The 1981 survey, the third in the series, provided data on the employment status of college graduates over a 6-year period. The data also addressed the demand component of teacher supply-demand by reporting the fields in which newly qualified teachers obtain employment. Reports will be prepared to address such issues as the economic returns of a college education; the supply and demand of professional personnel; the underemployment of college graduates; the access to professional opportunities for women and minorities; and the relationship of Federal assistance to employment and postbaccalaureate education.

## Selected Publications

Education Directory: Colleges and Universities (Biennial)  
Fall Enrollment in Higher Education (Annual)  
Profiles for Women's Colleges: Enrollment Statistics (Bulletin)  
Residence and Migration of College Students (Periodic)  
Earned Degrees Conferred (Annual)  
Associate, Degrees and Other Formal Awards Below the Baccalaureate (Annual)  
Faculty Salaries, Tenure, and Fringe Benefits (Annual)  
Financial Statistics of Institutions of Higher Education (Annual)  
Library Statistics of Colleges and Universities - Trends 1968-1977  
Library Statistics of Colleges and Universities, Institutional Data, Fall 1979  
New Teachers in the Job Market (Periodic)  
Occupations of Recent College Graduates (Periodic)  
Labor Force Status of Recent College Graduates (Periodic)

# Higher Education Surveys

Surveys	Year of data collection				
	1982	1983	1984	1985	1986
<b>Colleges and Universities</b>					
Institutional characteristics		<input type="checkbox"/>		<input type="checkbox"/>	
Fall enrollment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Racial/ethnic data collected	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Degrees and other awards conferred	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Racial/ethnic data collected		<input type="checkbox"/>		<input type="checkbox"/>	
Residence and migration of college students			<input type="checkbox"/>		
College and University staff		<input type="checkbox"/>		<input type="checkbox"/>	
Faculty salaries	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Financial statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
College and university libraries	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
State expenditures for postsecondary education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recent College Graduates		<input type="checkbox"/> S		<input type="checkbox"/> S	

S = Sample Survey



MIS







# Adult and Vocational Education

A number of issues have heightened interest in adult and vocational education. Teenage unemployment persists, for example, and leisure time is increasing. More women are entering or returning to the work force. Age populations are shifting, and new technology is changing job requirements or creating new jobs. NCES studies provide information to people who deal with these issues.

## Adult Education

The changing socioeconomic composition of the population has provided the impetus for the steadily growing demand for adult education courses. People are living longer, are in better health in their later years, and have the economic resources to participate in a wide range of educational activities. Other factors encouraging the growth of adult education have been the demands for retraining by women entering or re-entering the labor force; the needs of new immigrants; State licensing programs which require occupational updating activities; new job technologies; and the expanding base of persons with college or other advanced education whose interest in lifelong learning is clear. Colleges and universities, seeking new sources of students, have also contributed to the growth of adult education by offering attractive courses at times convenient for workers and retirees. In addition, secondary school systems, converting unused classrooms and available teachers, have extended programs to adults in the community.

NCES data provide education planners and policy-makers with needed information on the types of courses taken by adult students and who provides them, financial sources used for this training, and the extent to which employers offer educational programs.

## Data Sources

To provide these data, NCES developed a program combining reports from individual participants supplemented by surveys of institutions sponsoring adult ed-

tion activities. These surveys are repeated to provide trend data on changes in students and courses.

NCES sponsors an annual supplement to the Current Population Survey conducted by the Bureau of the Census. This survey consists of a sample of 56,000 households to determine their education activities during the preceding year. The study provides demographic data on different segments of participants in education activities, including elementary and secondary students, postsecondary students, and adult education participants. These three segments, with some flexibility as to type of questions, will be rotated on a 3-year cycle.

Complementing this study of individuals are studies of organizations offering adult education. To reduce the burden upon respondents, most of these studies use nationally representative samples of institutions and are conducted periodically in intervals of 2 years or longer.

A schedule of adult education surveys is presented in the table at the end of this chapter.

## Surveys

### Participation in adult education:

demographic characteristics of students—age, sex, race/ethnic origin, income, education, employment; course characteristics—subject areas, reasons for taking courses, completion, method of instruction; duration, credit, sources of payment; and types of administering institutions or agencies. (Triennial)

### Adult basic and secondary education:

participants, by sex, race-ethnic origin, instructional level, and completions; program goals and impact; classes; and staff (national and State data). (Annual)

### Adult education through home study:

name and address of sponsoring school, control, programs, enrollments and completions. (Periodic)

#### Adult education in community organizations:

type of organization; (health, service, welfare, civic, religious); courses; tuition and fees; enrollments; completions; and methods of instruction (television, radio, telephone, kits). (Periodic)

#### Adult education in free universities and learning centers:

name, address, and telephone number; type of organization, year founded, affiliation; activities offered; participants by sex, race/ethnic origin; paid and unpaid full- and part-time staff; fees; sources of income; and expenditures. (Periodic)

In developing its priorities for adult education surveys, NCES consults with educational researchers, Federal and State education planners, and concerned organizations in the field. Planning sessions involve representatives of these groups to establish priorities, avoid overlap with other studies or existing data files, identifying the most-needed data elements, and establish the optimum periodicity. Priorities are also established by reviewing user response to previous studies. The keen interest, for example, in the first survey of free universities and learning referral centers sparked plans to repeat it in 1982.

## Data Uses and Plans

Information from studies in adult education provides the basis for examining the extent to which adult education is serving students with varying academic and vocational needs. In addition, these studies expand the scope of data available to postsecondary education planners.

Future plans for data collection on adult education include surveys on participation in adult education in 1984, adult education through home study in 1983, and adult education in free universities and learning referral centers in 1982.

## Vocational Education

Education and employment are closely linked in American society, but nowhere are they more directly aligned than in vocational education. Beginning with the passage of the Smith-Hughes Act in 1916, Federal policy has stressed direct support for a variety of educational programs to enhance employment opportunities for young people. Through a series of amend-

ments and new laws over the years, Federal funding now supports skills training for high school and post-high school students, specialized job training for handicapped and disadvantaged students, as well as occupational training and retraining for adults unable to compete in today's labor market.

The NCES vocational education data collection and analysis program provides information on federally funded vocational training programs in secondary and postsecondary schools. Other studies provide information on students and job training programs offered by public and private noncollegiate postsecondary schools.

## Vocational Education Data System

The Education Amendments of 1976 (Public Law 94-482) required NCES to develop, implement, and operate a national Vocational Education Data System (VEDS). Congress required reliable data on vocational students, programs, program completers and leavers, staff, facilities, and expenditures with such queries as: "Who is being served in vocational education?" "How are they being served?" "What is being accomplished?" "What is the cost?" VEDS' purpose is to provide accurate, State-aggregate information on vocational education as it is conducted through State-plan programs (under the Vocational Education Act) in the public schools and various postsecondary institutions. VEDS is designed to offer improved and consistent information to Congress and the various States. This is accomplished through the use of uniform definitions and standard data elements to replace the heterogeneous information elements formerly employed by different States. Such standard procedures will help to facilitate program audits, comprehensive planning and evaluation activities.

The VEDS system also provides information on the numbers of persons being prepared in various occupational fields and will be used by State Occupational Information Coordination Committees and Economic Development Councils. The resulting data base is being automated so that this information can be updated periodically and used for a wide range of special analyses.

### Surveys

#### Enrollment:

instruction program, by sex, race/ethnic origin and level (secondary and three streams of postsecondary: regionally accredited, State approved, and other); workstudy; completions by instructional programs; leavers by program level; and number of students benefiting from Federal funds in the areas of handicapped, economically and academically

disadvantaged, and limited English proficiency.  
(Annually)

**Staff:**

total staff and full-time equivalents, by program assignment.  
(Suspended for 1981-82)

**Finance:**

expenditures by Federal and non-Federal sources,  
functions, and instructional areas. (Annual)

**Employer**

**Followup:**

evaluation of employee's technical knowledge, work  
attitudes, and work quality, by instructional program.  
(Suspended for 1981-82)

**Student**

**Followup:**

employment/education status of completers and  
leavers by field of employment; instructional program,  
grade level, and earnings, by field of employment;  
instructional program and sex. (Annual—may be  
sample-based)

The schedule of surveys in the Vocational  
Education Data System program is presented in  
the table at the end of the chapter.

The VEDS system came into being with the collection of data for the school year 1978-79. These data were received June 1980. Data for 1979-80, the second year of the series, were received from the States February 1, 1981. Followup data on students and their employers, for a sample of the 1978-79 students who left or completed their programs during that program year, were also reported to NCES with the 1979-80 data; corresponding followup data for the 1979-80 school year were collected December 1, 1981, along with data for the 1980-81 school year.

Analyses of data received during the first 2 years of the VEDS system have revealed that some data elements are relatively stable across time, thus annual collection is not warranted. Other areas, such as program-leaver data are subject to considerable unreliability. In order to reduce reporting burden on the States, such areas of data collection have been temporarily suspended pending further analysis and possible redesign. These suspensions take effect with the 1981-82 school year collection.

## Data Uses

Early in 1980, NCES set up a Data Editing and Interpretation Task Force, composed of 12 representatives from the secondary and postsecondary vocational education community to provide insights on the inter-

pretation and evaluation of the VEDS data. The Task Force assisted NCES in assuring that the VEDS data are disseminated with due caveats regarding their limitations, and that they reflect as accurately as possible the status of vocational education.

Analyses of the VEDS data have been used in Congressional deliberations on the reauthorization of the Vocational Education Act. NCES presented testimony on this subject in September 1980 to the House Subcommittee on Elementary, Secondary, and Vocational Education; and again in December 1981. The data form the primary basis for the Secretary's annual reports on vocational education, which are scheduled for July 1 of each year. It is expected that data accumulated through the VEDS system, along with other NCES data bases, will permit NCES to prepare special ad hoc analyses and reports in response to inquiries and requests from a variety of decisionmakers in vocational education.

## Noncollegiate Postsecondary Schools with Occupational Programs

Nearly 8,000 public and private postsecondary career schools provide job training in hundreds of fields. Their significance is reflected in their enrollment of almost 2 million students a year. Almost 80 percent of the schools are proprietary (for profit) and enroll 72 percent of the students. In the early 1970's, NCES began a series of surveys to learn more about these schools, their programs, and their students. This series complements NCES survey programs for colleges and universities and for VEDS.

In alternate years, NCES surveys these schools to ascertain enrollments, programs, and other information. School-identifying information is published in a directory of noncollegiate postsecondary schools. A representative sample of schools is used to develop national estimates of average charges, length of program, and the number of completers and leavers, by occupational program.

Schools that offer correspondence programs are also surveyed to provide information on vocational training available to persons who, because of family responsibilities or geographic location, are homebound or who prefer to study on a more flexible schedule.

Paralleling the biennial school survey is a series of studies on students in these schools. A nationally representative sample of students is used to collect demographic information and to learn the students' education and work history, information on their current program, and plans for future education and work.



A schedule of these surveys of noncollegiate schools and students is presented at the end of this chapter.

## Surveys

### Characteristics of Noncollegiate Postsecondary Schools:

name, address, county, telephone number; enrollment; control and type of school; programs offered; accreditation; and eligibility for Federal financial programs. (Biennial)

### Programs and Enrollments in Noncollegiate Postsecondary Schools:

full- and part-time enrollments of men and women; completions and early leavers, by sex; length of program; average charges; and full- and part-time staff, by sex and assignment. (Biennial)

### Vocational Education Through Home Study:

name and address; enrollments and completions; length of program; average charges; residential requirements; and full- and part-time staff, by sex and assignment. (Biennial)

### Characteristics of Students in Noncollegiate Postsecondary Schools:

age, sex, and race/ethnic group; highest educational level; high school and work experience; reasons for selecting program and school; education and work plans; and parents' occupation and educational level. (Triennial)

Documented computer tapes for the 1976, 1978, and 1980 survey of schools and for the 1977 and 1979 survey of students are available for sale.

## Plans

The National Occupational Information Coordinating Committee, and a number of agencies, organizations, and key individuals play important roles in developing the dimensions and characteristics of the NCES vocational education data program. They are involved in planning meetings on individual projects and participate in the extensive consultations that characterized the development of the VEDS program. In all of these contacts, emphasis is placed upon the need to develop better information on job training activities and participants. The purpose is to aid national employment planning and to improve career guidance given to students and other adults.

Plans call for conducting triennial noncollegiate postsecondary surveys of students for 1983 and 1986. The next survey of postsecondary schools is scheduled for 1984.

## Selected Publications

Adult and Continuing Education in Colleges and Universities (Early Release)  
Participation in Adult Education (Early Release)  
Enrollments and Programs in Noncollegiate Postsecondary Schools (Biennial)  
Programs and Schools—A Supplement to the Directory of Postsecondary Schools With Occupational Programs (Biennial)  
Condition of Vocational Education (One time)  
Adult Basic and Secondary Education Trends (Annual)

## Adult and Vocational Education Surveys

Surveys	Year of data collection				
	1982	1983	1984	1985	1986
<b>Adult Education</b>					
Participation in adult education			<input type="checkbox"/>		
Adult education through home study		<input type="checkbox"/>			
Adult education in free universities and learning centers	<input type="checkbox"/>			<input type="checkbox"/>	
Adult basic and secondary education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Vocational Education</b>					
Vocational education data system—Enrollment, staff, finances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Vocational education data system—Student followup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Characteristics of noncollegiate postsecondary schools	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Programs and enrollments in noncollegiate postsecondary schools	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Vocational education through home study	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Characteristics of students in noncollegiate postsecondary schools		<input type="checkbox"/>			<input type="checkbox"/>





# 5 National Longitudinal Studies

The 1970's ushered in a shift in Federal emphasis, from the needs of institutions to the needs of students. The advent of programs to deal with these needs made it increasingly clear that data merely describing inputs to the educational process were not enough. To develop an understanding of the transition from school to work—and of the factors contributing to the demand for post-secondary education—education policy analysts needed to examine the process itself. Studies began to suggest that the economic value of a college education had declined. That finding alerted policymakers to the possibility that higher education enrollments might also decline and avenues of social mobility might narrow.

The National Longitudinal Studies program was launched to provide ongoing, descriptive information about what was happening so that intervening processes could be studied. To do so requires the periodic examination of educational and occupational attainment, aspirations, attitudes, and motivations during the pivotal years immediately following high school. With extensive questioning over succeeding years, longitudinal studies make long-range comparisons between what individuals expect and what actually occurs. In this way, such studies are critical to understanding the processes by which education leads individuals to develop their abilities and their roles in society.

Longitudinal studies are becoming increasingly important in the 1980's as new and far-reaching social and economic factors impact upon young adults. Changes in Federal funding for student financial aid and other social programs, higher unemployment rates, and continued operation of the all volunteer armed forces may all influence in unpredictable ways, the transition of young adults into adult life.

NCES is conducting two longitudinal surveys. The first covers the high school senior class of 1972. The second—known as High School and Beyond—covers both the sophomore and senior classes of 1980.

## The High School Class of 1972 (NLS)

The study began in spring 1972. A random sample of 18 seniors was selected from each sample school agreeing to participate. To conduct intensive studies of disadvantaged students, NCES over-sampled schools in low-income areas and schools with significant minority enrollments. From school records, the survey obtained data for each senior on high school curriculum, credit hours in major courses, grade-point average, standardized test scores and related information. In all, over 21,000 seniors in 1,200 public and private schools took tests and completed questionnaires about themselves and their plans for the future.

Young people's success in making the transition from high school varies enormously for reasons only partially understood. Some cling to dependency, others move into self-determination smoothly and completely. The followup surveys—conducted in 1973, 1974, 1976, and 1979—were designed to outline the various paths taken by young people in making the transition. These surveys charted work and postsecondary school experiences, marriage and family events, community activities, attitudes and aspirations by way of questionnaires and personal interviews.

## Data Uses and Plans

NLS data have been widely used for investigating educational policy issues. The Congressional Budget Office, for example, turned to these data to develop a model for estimating the costs of tuition tax credits and other financial aid sources. In Congressional hearings on vocational education, several researchers used NLS data to support their testimony about the long-term economic returns to vocational education. A Harvard study used

NLS data to simulate the likely effect of the Pell grant program on the college enrollment of low-income students. A recent NCES survey identified over 300 research reports that used NLS data. While NCES has sponsored the bulk of these studies, other Federal agencies (including the National Science Foundation and the Defense Department), universities, and private foundations have also sponsored research using NLS data.

Plans for further NLS followup surveys are currently under consideration. Large-scale surveys, such as these are expensive, and the arguments for collecting these data must be balanced against arguments for alternative uses of the funds. During the next few years, the NLS sample will be traced, but not surveyed, so that when and if a fifth followup survey takes place, the number of lost respondents will be minimal. The fifth followup survey, when and if it occurs, will collect data in two major areas of importance to the educational community: continuing educational enrollments, and long-term developmental consequences of education.

Because some young people delay their college entry, some drop out and then return to college, some attend college part time, and some attend graduate or professional school, a period of more than 15 years may be required to assess the eventual educational attainments of the 1972 cohort. An earlier long-term study of college students at one State university found that nearly half of its college dropouts went on to graduate 10 or more years after their initial matriculation. In 1979, 15 percent of the NLS population was still enrolled in school and had declined only one percentage point per year since 1977. Enrollment in graduate and professional school had leveled off at about 4 percent in 1979, but graduate and professional degree awards had not yet peaked.

Studies in the human capital literature have shown that educational attainments have very long-term effects on an individual's earning capacity. In the early years of work experience, before college and professional school graduates have been working very long, the work experience of those with lesser educational attainments provides a salary benefit that obscures the economic returns to education. It may take a decade of earnings after college graduation to assess fully the economic advantages conferred by higher education.

## Surveys

### Base-year survey (spring 1972):

age, sex, racial/ethnic background, religion, physical handicap; socioeconomic status of family and community; school characteristics; future educational and work plans; test scores; school experience; school performance; work status; work performance and satisfaction.

### Followup surveys (fall 1973, 1974, 1976, and 1979):

age, sex, marital status, community characteristics; educational and work plans; educational attainment; work history; attitudes and opinions; postsecondary school and program characteristics; grade average; credits earned; type of financial assistance for postsecondary education. The fall 1976 survey collected information on opinions relating to sex and race bias. It also included student rating of high school and postsecondary school attainment. Overall response to each of the first four followups was 90 percent.

## High School and Beyond (HS&B)

New education issues have arisen since NCES began its longitudinal study of the 1972 senior class. Declining test scores and minimum competency testing, for example, are causing concern among parents and educators alike. So is the rate at which many students drop out before graduation. Increased opportunities in vocational education are opening new vistas for youths concerned about their futures. And, concern over access to postsecondary and vocational education has brought a sharper focus on the education experience of Hispanic youths.

To examine these and other issues mentioned in the introduction to this chapter, NCES initiated a second longitudinal study, High School and Beyond, to complement the first. The new survey concerns the high school students of 1980. By seeking the same types of data gathered in the first study, the second allows a detailed comparison of the two senior classes and an assessment

of the changes and problems that have arisen since 1972. However, the second study differs from the first in two significant ways. First, it addresses many new elements in the educational process. And second, it includes the sophomores of 1980 as well as the seniors.

The initial study of 1972 laid the groundwork for comparison. It recorded the economic and social conditions surrounding high school seniors in that year and, within that context, their hopes and plans. It has since measured the outcomes while also observing the intervening processes. High School and Beyond allows researchers to monitor changes by retaining the same goals, measuring the economic returns of postsecondary education for minorities, delineating the need for financial aid, etc. By ultimately comparing the results of the two studies, researchers can determine how hopes, plans, and outcomes differ in response to changing conditions or remain the same despite such changes.

The additional concerns of the new study encompass issues that have surfaced since the original study began. How did the increased availability of student financial aid alter student plans for further education? How were these plans affected by parents' income and education? Has the financial squeeze on middle-income families altered their attitude toward postsecondary education? What will be the effect of changes in Federal student financial aid? These questions, as well as concerns about declining test scores, youth employment, and bilingual education will be addressed, along with a host of others.

## Data Sources

The initial national sample for High School and Beyond was considerably larger than that employed in the earlier study. The base year of this sample survey, which was conducted early in 1980, collected data from over 58,000 students enrolled in over 1,000 public and private schools across the Nation. To permit separate analyses, several student subpopulations were oversampled, notably Hispanic students in alternative and Catholic or other private schools.

Included in the base-year survey were 1) sophomore and senior questionnaires with a series of cognitive tests, 2) school questionnaires, 3) teacher comment checklists, 4) second language questionnaires, and 5) parent ques-

tionnaires (sample of parents from both sophomore and senior cohorts). The student questionnaire focused on individual and family background, high school experiences, work experiences and future plans. Cognitive tests administered to students measured both verbal and quantitative abilities.

In addition, sophomore tests included brief achievement measures in science, writing, and civics while seniors were asked to respond to tests measuring abstract and nonverbal abilities. The parent questionnaire elicited information about how family attitudes and financial planning affect educational goals. Each school in the survey was asked to provide information about enrollment, staff, educational programs, facilities and services, dropout rates, and special programs for handicapped and disadvantaged students. The teacher comment checklist provided teacher observations on students participating in the survey.

The longitudinal design of the study calls for follow-up surveys of substantial subsets of the two cohorts at 2-year intervals. Data collection for the first followup began in spring 1982. These data will enable analysts to determine how student plans and aspirations have changed or worked with time. The first followup of sophomores will also provide insights into the school dropout problems and to the influence of the last 2 years of high school on student attitudes and aspirations. In brief, HS&B will provide current information throughout the 1980's on the educational, vocational, and personal development of young people as they move from high school into adult life.

## Surveys

### Base-year (spring 1980)

age, sex, racial/ethnic background, religion; socioeconomic status of family and community; school experiences; test scores; school performance; school characteristics and teacher observations; future educational plans; family status and orientations; work experience and satisfaction; future occupational goals; plans for and ability to finance postsecondary education.

### First followup (spring 1982)

sophomores: Information collected in the base-year survey was collected again in the first



followup. In addition, student transcripts and data on dropouts were collected.

seniors: age, sex, marital status, community characteristics; work plans; educational attainment; work history; attitudes and opinions; postsecondary school and program characteristics; credits earned; type of financial aid for postsecondary education.

## Data Uses

The enlarged scope of High School and Beyond has generated even more interest than its predecessor, particularly in the areas of State and local policy. The basic design of this survey permitted State planners to obtain State estimates by providing funds for augmenting the samples in their States. This was done by two States: Washington and Illinois. In addition, one State (Ohio) added questions to obtain specific information related to its particular policy, program, and budget needs. Overall, six States have State-representative data and are therefore able to make meaningful comparisons between their students and national data developed by NCES.

In designing the base-year survey, advice and recommendations were sought from numerous groups with interest in secondary and postsecondary education and also from policy analysts who had worked with data from the 1972 study. As a result, HS&B data files are extremely useful for examining a wide variety of educational policy issues at the Federal, State, and local level. They also make it possible to compare the students of 1980 with those of 1972.

Among the first analytic studies using the base-year data was one by Professor James S. Coleman entitled "Public and Private Schools." It formed the basis for an NCES seminar in which the author and a number of other scholars debated the implications of the data for Federal policy regarding tuition tax credits. Another study "Youth Employment During High School" illuminates the effects of Government-sponsored work and training programs. Numerous other studies have been completed or are underway.

Several foreign countries have expressed interest in replicating HS&B in their own countries. Japan and Spain have already initiated such studies while Korea and Mexico have consulted with NCES about the possibility of doing so.

A representative list of publications based on NCES' two longitudinal studies appears below.

## Selected Publications

### National Longitudinal Study of the High School Class of 1972

Attrition From College: The Class of 1972 Two and One-Half Years After High School Graduation  
A Capsule Description of Young Adults Four and One-Half Years After High School  
A Capsule Description of Young Adults Seven and One-Half Years After High School  
Distribution and Packaging of Student Financial Aid  
Transfer Students in Institutions of Higher Education  
Experiences of Recent High School Graduates: The Transition to Work and Postsecondary Education (Published by Lexington Books)  
College Attainment Four Years After High School  
Highly Able Students Who Did Not Go To College  
National Longitudinal Study of the High School Class of 1972, Study Reports Update: Review and Annotations

### High School and Beyond

A Capsule Description of High School Students  
Youth Employment During High School  
The Draft? Student Opinions (Bulletin)  
NCES Study Examines Changes in Coursework of High School Seniors (Bulletin)  
High School Seniors Will Work for Less than the Minimum Wage (Bulletin)  
Public and Private Schools  
Discipline and Order in American High Schools  
The Achievement of Hispanic Students in American High Schools

# **National Longitudinal Studies**

Surveys	Year of data collection								
	Spring	Fall					Spring		Winter
	1972	1973	1974	1976	1979	1980	1982	1984	1986

## **High School Class of 1972—Seniors**

Base year ☐

Followup years:

First ☐

Second ☐

Fourth ☐

Seventh ☐

Fourteenth ☐

## **High School and Beyond—1980 Sophomores and Seniors**

Base year ☐

Followup years:

Second ☐

Fourth ☐

Sixth ☐





## Learning Resources

Learning resources play a vital role in the educational and cultural advancement of the Nation. NCES provides statistical information on:

- o Libraries
- o Educational technology

Information in these areas is used by Federal, State, and local governments, associations and businesses to aid in the planning and administration of these activities. An information explosion and rapid technological advances coupled with budgetary pressures have increased the need for information to make decisions affecting the future of learning resources.

### Libraries

The vital role of libraries in providing knowledge and information was underscored by the 1979 White House Conference on Libraries and Information Services. The conference called for the development of a national information policy to ensure broad provision of information through shared resources. It also sought to assure access to libraries and information services to children, the aged, the homebound, minorities and the handicapped. NCES provided relevant data collected by its surveys to the conference participants, using Data Information Display System (DIDS), for this purpose.

### Library General Information Survey

The Federal Government has collected and reported statistics on academic and public libraries for more than a century; on school libraries for a near half century. In the early 1970's, NCES applied the use of standard terminology (identical terms and concepts) to describe all libraries so that a systematic survey system providing comparable data for all libraries could be established. The Library General Information Survey was initiated to acquire data at irregular intervals on staff, collections

and holdings, services, cooperative interlibrary arrangements, facilities, and expenditures for the various types of libraries. These surveys are periodically updated. A handbook on terminology and concepts was published in 1981.

#### Surveys

##### Library human resources:

staffing patterns for all types of libraries; number, full-time equivalent, sex and distribution of professional, paraprofessional, clerical, and other staff categories in staff positions; job functions, education and training; entry-level requirements, changes in manpower requirements and hiring patterns (education, experience, related fields), emerging occupations, job supply, positions filled, and vacant personnel sources; factors effecting employment changes; and projections of staffing needs for a decade. (Occasional)

##### Public libraries:

name, address and telephone number; number and type of units (central, branches, bookmobiles); number of full- and part-time professional staff by sex and earned degree; number of full- and part-time nonprofessional staff; number of unfilled budgeted positions; library revenues and expenditures by source; book and media collections; circulation; interlibrary loans; hours and days of service; and facilities. (Quadrennial)

##### School library media centers (public and private):

name, address and telephone number; enrollment; number of classroom teachers; grade span; number of library/ media staff, by sex and earned degree; book and media collections; circulation and interlibrary loan transactions; hours and days of service; facilities; and expenditures, by source. (Occasional)

**College and university libraries:**

name, address, and telephone number; number and salaries of full- and part-time staff by sex and position; circulation and interlibrary loan transactions; book and media collections; hours and days of service; operating expenditures by purpose.

Status: 1979 report published  
1982 survey planned

**Special libraries—Federal Government:**

name, address, and telephone number, type of library, number and type of units (central, branches, bookmobiles), classification system; book and media collections; circulation, and interlibrary loan transaction; hours and days of service; other services (documents depository, bibliographies, transactions); automated functions; expenditures; staff by GS rating and sex; unfilled budgeted positions; facilities; and consortia, networks and/or cooperative arrangements. (Occasional)

**Special libraries—State government:**

name, address, person to contact; number and types of units (central, branches); type of library; name of agency of which this library is a part; public access; number of full- and part-time staff, by sex and position; library revenues and expenditures, by source; library collection; loan transactions and use; circulation, reference and directional transactions; hours and days of service; facilities; classification system used for new acquisitions; and participation in cooperative arrangements and/or networks. (Occasional)

**Special libraries—State agencies:**

name, address, person to contact, principal administrator of State library agency; State library agency governance; State library agency's

administration; receipts by sources; number of full- and part-time staff, by sex and position and type of service; unfilled budgeted positions; total collection; use of collection; interlibrary loans; hours and days of service; public service outlets; facilities. Statewide specialized services, activities and functions. (Occasional)

**Library networks and cooperative library organizations:**

name, address, organizational structure; number of full- and part-time paid and nonpaid staff; source of funds; types of expenditures; major services and activities; computer and other automated support activities. (Occasional)

## Data Uses

New demands placed on libraries for various types of information tend to shift their role as depositories to the more complex role of information centers. At a time when circulation continues to grow, urgency for other services rises. Withstanding the impact of inflation, library expenditures do not keep pace with increasing needs, and the outlook for libraries appears uncertain.

The NCES library data files are used for various services at the State and local levels and by the Office of Libraries and Learning Technologies (OLLT) for administering Federal library funds. Currently, NCES and OLLT are conducting the library human resources survey that will provide data to project trends in the supply and demand for library personnel in the 1990's.

# Technology/ Educational Broadcasting

towards ITV and radio; and perceived barriers toward ITV and radio use.  
Status: Report available

In the last decade, television sets, computers, videotape machines and other technologies have emerged as dominant forces in education. Since 1970, NCES and the Corporation for Public Broadcasting (CPB) have jointly sponsored a statistical program to collect, analyze, and disseminate information relating to television, radio, and related educational technologies. Included in NCES/CPB data base are studies on the availability and use of television and other communication technologies in elementary, secondary, and higher education.

## Surveys

Educational technology broadcasting—elementary and secondary

district, school and teacher background characteristics; preparation and training in use of instructional television (ITV); availability, utilization, administrative and financial support for ITV; conditions affecting use of ITV; and attitudes towards ITV.  
Status: Report available

Educational technology/broadcasting—higher education

instruction, facility and background characteristics; conditions under which ITV and other technologies are utilized; available equipment and materials; faculty and student use of ITV and radio; percentage of course hours using ITV; institutional arrangements for ITV use; administration, faculty and student attitudes

## Data Uses and Plans

The elementary and secondary study, initially conducted in 1977, was based upon a representative sample of school districts, schools and teachers. The survey will be conducted again in 1984 and will include a full range of electronic technologies. The first phase survey of the higher education study completed in 1979 was a census of colleges and universities. A second, more comprehensive survey, based on a representative sample of institutions, faculty, and students, will be completed in 1985. The study is planned to be repeated in 1989. Both efforts will focus on the availability and use of computers in postsecondary education.

The data collected from these studies are used in varying degrees by the Office of Libraries and Learning Technologies, the National Institute for Education, the Corporation for Public Broadcasting, and the public broadcasting community to aid in planning, implementing, and administering television and radio budgets and programming.

To establish priorities for data collection, NCES and CPB work closely with key leaders and associations in the fields of elementary, secondary, and higher education. Each study requires endorsements from such major organizations as the Council of Chief State School Officers, the National Education Association, the Association of American Colleges and Universities, the American Association of Community and Junior Colleges, and similar groups. NCES and CPB are advised and helped by these associations, as well as key Federal agencies, in the development of their data collection and analyses activities. (See table at end of chapter describing the planned program.)

# Learning Resources Surveys

Surveys	Year of data collection				
	1982	1983	1984	1985	1986
<b>Libraries</b>					<input type="checkbox"/>
College and University Libraries	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Library networks and cooperative library organizations		<input type="checkbox"/>			
Library human resources (every 10 years)	<input type="checkbox"/>				
Public libraries				<input type="checkbox"/>	
Public school library media centers	<input type="checkbox"/>				<input type="checkbox"/>
Private school library media centers				<input type="checkbox"/>	
<b>Special libraries:</b>					
Federal Government		<input type="checkbox"/>			
State government and State agencies			<input type="checkbox"/>		
<b>Educational Technology/Broadcasting</b>					
Elementary and secondary			<input type="checkbox"/>		
Higher education				<input type="checkbox"/>	







## Information Services

Problems in education often require quick solutions. Planners can rarely spend long periods of time searching for appropriate data when preparing schedules and budgets and planning curricula. The ready availability of data is therefore vital to them for decisionmaking.

Aware of this need, NCES has developed an information program allowing easy access to a wide range of data. The program centers on the Statistical Information Office (SIO), computer services, and publications.

SIO has access to an exhaustive store of educational information through a series of constantly updated or expanded data bases. The information is drawn from studies made by NCES as well as those conducted by related agencies and organizations. This depth of resources has enabled SIO to respond to the 24,000 requests received in the past year. Users of this information represent a wide range of institutions and individuals. These include members of Congress and Congressional committees, government agencies, school and college administrators, educational researchers and writers, news media representatives, business firms, and private citizens. SIO frequently answers unique questions requiring special tabulations, analyses, and reports.

SIO also compiles data used to allocate funds for a number of Federal formula-grant programs or to determine how much various proposed changes in laws would cost. These programs have traditionally provided around \$8 billion a year in support of a wide variety of educational objectives.

The computer services program complements the SIO with a variety of products. Through computer tapes, special tabulations, microfiche and on-line computer capacity, the Center offers a range of data unavailable in printed form. Around 1,000 requests for these services were filled last year, coming from all types of public and private users. Computer tapes are especially in demand. To allow the widest use of these, NCES modifies its data sets, making them compatible with the unique specifications of the user's computer facility. Special tabulations from these tapes can also be produced, again tailored to the specific needs of the user.

NCES adds approximately 20 new tapes to its data base each year as data become available from NCES surveys and those of other government agencies. All available tapes and other computer-generated products may be purchased from the Center.

Another essential element of the Center's reference capacity is its publications program. Annually, NCES publishes approximately 60 documents that detail particular aspects of education for planners and researchers. They are published in a variety of forms: early releases that present preliminary data, reports and bulletins, analyses, directories, and handbooks of standard terminology. Of these publications, the most widely used are *The Condition of Education*, *the Digest of Education Statistics*, and *Projections of Education Statistics*. *The Condition* offers statistics on American education within a framework of social indicators, using tables and graphs supported by interpretive text. *The Digest* is a compendium of statistical information covering American education from preprimary to graduate school. *Projections* presents historical trends and projections for 10 years on enrollments, instructional staff, graduates, and expenditures for elementary, secondary, and postsecondary education. All three publications present data collected by NCES and other agencies.

## Fast Response Survey System

Emerging educational developments often require current data to assist education officials formulate policies, plans, or priorities. To help fill this need when policy-oriented data are not available, NCES established the Fast Response Survey System (FRSS) in 1976 to conduct, upon request, fast response surveys in six major education sectors: 1) State education agencies (SEA's); 2) local education agencies (LEA's); 3) public elementary and secondary schools; 4) private elementary and secondary schools; 5) institutions of higher education; and 6) postsecondary schools with occupational pro-

grams. The SEA's are canvassed as a universe and small, national samples are pre-established to survey the remaining five.

Some recent surveys conducted by FRSS include:

- o ESEA Title I Evaluation: School District Needs for Technical Assistance, a survey used for program direction.
- o ESEA Title I Schoolwide Projects: Eligibility and Participation, a survey of State education agencies, used to provide a better understanding of the Title I legislative amendment making schoolwide projects eligible for ESEA funding under certain conditions.
- o Availability of Evening or Weekend Baccalaureate Degree-Credit Courses, a survey of institutions of higher education, used as policy recommendations to improve access to higher education.
- o Preparation for Arts and Related Careers under Vocational Education, a survey of State education agencies used for program management.
- o Interactive Use of Computers for Instruction, a survey of public school districts, used to provide information on the extent or nature of student computer instruction and to investigate the need for Federal assistance in the planning of such a program.
- o School District Perceptions of Federal Competitive Education Programs, a survey of public school districts, used in conjunction with a Congressionally mandated study of current and alternative ways of providing aid to education.
- o Public School Utilization of Computers, a spring survey of public schools, to be used in the Department's formulation of policy and plans to develop the full educational potential of the new computer technologies, and to assist schools in realizing the full benefits of their utilization.

An additional mini-survey was conducted by NCES, using some of the techniques developed in FRSS. Nine States with large concentrations of Indo-Chinese refugee children were requested to furnish data on these children enrolled in the State and in each of five heavily impacted districts. The findings were used to determine the most effective funding option that would assist districts and States in coping with the increasing influx of the refugee children.

## International Education Statistics

The Educational Amendments of 1974 described one mandate of NCES to "review and report on educational activities in foreign countries." The NCES program for international statistics includes activities to improve the quality and comparability of international statistics relating to education and other social concerns; to assemble in a central location reliable studies of trends in schooling and educational achievement, principally from countries having a comparable level of educational development with the United States; to supply such international organizations as UNESCO and the Organization for Economic Co-operation and Development (OECD) with standardized statistics of the United States educational system; and to conduct and report on studies that have been identified as relevant to U.S. concerns and of policy interest.

The objective of the program is to provide systematic statistical data on the educational experiences and trends in other countries so as to provide insights into the educational practices of the United States. For example, in fiscal year 1979 NCES sponsored a study of adult education activities in nine countries. The outcome was a detailed volume of descriptive and statistical information about the individual programs for adults in those countries. Information comparing the public expenditures for schooling, participation rates of school-age children, and educational achievement levels of the population are disseminated in the major reports of NCES (annual tables are carried in The Digest of Education Statistics).

## Data Uses and Plans

Comparative statistics on schooling in the United States with other nations are used by members of Congress in their deliberations on the progress of education in the United States. In 1981, the Secretary of Education established a Commission on Excellence to examine the status of elementary and secondary education in the United States. That commission was asked to examine the progress of education in other countries; the purpose was to look at progress of the

United States in context of a world-wide concern about excellence. Statistics assembled by NCES could be used as the basis for some of those discussions.

An expanded effort is underway to assemble statistical data on educational trends and outcomes of developed countries and to publish a number of analytical and descriptive reports on the changes in schooling in some of these countries. Through the NCES-sponsored Statistical Analysis Group in Education (SAGE), efforts will also be made to identify large-scale surveys of students and youth in several countries. Cross sections or preferably longitudinal studies on the experiences of youth in school and work in a number of industrially developed countries make possible comparative descriptions of the outcomes of education. Special interest in the progress of education in Japan, the Federal Republic of Germany, the Union of Soviet Socialist Republics (U.S.S.R.), and other European countries has increased the attention NCES plans to give to collection of statistics about those educational systems.

## Selected Publications

Selected Programs for Worker Training (September 1981).

A summary description of worker-training programs in seven industrial nations, based on a study done for NCES by Educational Testing Service.

## Liaison with Outside Groups

Dissemination of educational statistics is also facilitated through cooperative activities with outside organizations, including participation in professional meetings and cooperative projects representing State education officials at the elementary/secondary and higher education levels.

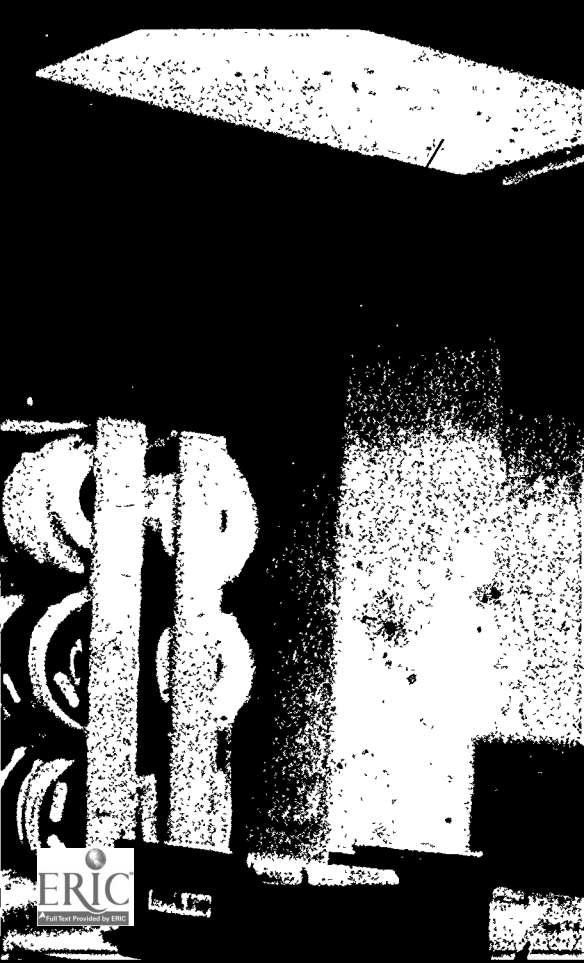
A series of regular meetings links NCES with representatives of such user groups as associations representing higher education institutions, a council of private secondary school representatives, and deans of teacher-training colleges.

NCES staff members regularly participate in programs at relevant professional meetings, both to communicate the results of recent statistical studies as well as to maintain contacts with those conducting surveys.

Another highly important link is the communication with the education community provided as a byproduct of the activity of the Advisory Council on Education Statistics. The council, mandated by Public Law 93-380, consists of seven public members appointed by the Secretary as well as ex-officio members from several Federal agencies concerned with educational statistics. The Council was established to review the standards and procedures used by NCES and to make specific recommendations for their improvement. The Council also helps insure that NCES products are free from bias or political influence.







# 8

## State Technical Assistance

NCES provides technical assistance to the States through two contracts that provide State postsecondary and elementary/secondary representatives with networks for the exchange of personnel and information. These exchanges result in the sharing of expertise and information concerning educational data collection and information systems among the States. The two networks help link Federal education data collectors with State contacts who aid in this process. Through use of these networks, NCES learns the availability of data in schools and colleges, the probable cost of collecting the data, and the priorities in data needs of State and institutional planners and administrators.

NCES also receives planning assistance from the networks in a number of other ways such as by helping to refine proposed survey instruments, by suggesting the best methods of gathering essential information while keeping data burden at a minimum, and by providing a continuing source of feedback in the data planning/collection process.

## State Personnel Exchange

The State personnel exchange is a federally funded program that encourages States to help one another. In many situations, a problem in one State has already been solved in another. The personnel exchange supports travel costs for State employees to review the methods or solutions used by other States. This enables State agencies to seek advice from their peers rather than consultants who may be less familiar with State operating procedures and operations in a particular area. In another use of the personnel exchange, a State may request personnel from one or more States to conduct a review of its management information system. In this situation, a team of experts from several States visits the State agency, reviews operations, and makes recommendations to the chief executive officer of the education agency involved. Approximately 30 personnel exchanges and team reviews occur during a one-year period.