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## ABSTRACT

This report discusses the 1980-81 program and plans of the National Center for Education Statistics that involve collection and dissemination of data monitoring trends in education, and address key policy issues. The report identifies and describes the regular and special surveys being conducted in the areas of elementary and secondary education, higher education, adult and vocational education, and learning resources. Sources and uses of the data gathered are discussed. The report also describes national longitudinal studies being conducted, briefly comments on the quality and reliability of the statistical methods used by the Center, and outlines the services provided by the Center for improving state and local information gathering, processing, and utilization. (PGD)

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# **The Condition of Education Part 2**

## **1980 Edition**

### **NCES Programs and Plans**

by  
**Iris Garfield**

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and Budget Planning  
and Evaluation**

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ED189687

EA 012 801

## 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

Although this is the sixth edition of the *Condition of Education*, it is the first published by the new Department of Education. This document, therefore, serves as the baseline report for the new initiative, as well as the annual up-date of the condition of education as originally mandated by Congress in 1974 (PL 93-380).

As I write this, in March of 1980, we are in the "transition stage" just prior to the formal establishment of the new Department. As we approach the end of the transition, I am struck by a sense of history and continuity which overrides organizational changes, executive orders, social change, and legislative and judicial actions. The need for timely, quantitative and objective data has been recognized and voiced without interruption from the original establishment of the first Department of Education in 1867. The act that established the Department stated that it was

"... for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of diffusing such information respecting the organization and management of schools and school systems and methods of teaching as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country."

Needless to say, the program has changed substantially since that original charter; however, I often characterize the Center as the spiritual inheritor of that original charter. As we look forward, now, with considerable anticipation to the new roles, new challenges, and perhaps a whole new set of priorities and activities in the new Department, I can only reflect on the excellent cooperation, assistance and encouragement we have received from the education community at large—the teachers, administrators, researchers and citizens. Without this cooperative effort, we would not have accomplished the major undertakings of recent years. My certainty that this cooperation will continue makes me look forward to the new challenges with confidence and enthusiasm.

# Acknowledgments

*The Condition of Education, 1980 Edition, Part 2*, was prepared by the National Center for Education Statistics in the Office of Program and Budget Planning and Evaluation. Iris Garfield was aided by Shirley Radcliffe in preparing the report.

Many individuals from NCES made significant contributions. More notable were: Robert Calvert, who provided guidance on the substance of the report; Lance Ferderer, who designed the format and enhanced the descriptions of the Center's program; and Phil Carr, who designed the graphics.

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Richard E. Whalen was responsible for typing and keeping track of the manuscript through various drafts.

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# 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 States 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, producing profiles on the degree to which States are achieving equalization of resources for elementary and secondary education, and coordinating education data acquisition activities of all Federal agencies.

NCES supports a wide range of activities to: provide policy-relevant data on such issues as access of minorities to postsecondary education, impact of Federal programs on the disadvantaged, education and employment, and high school dropouts; assist State and local education agencies in developing efficient information systems; provide comprehensive information services to the education community and the public; and reduce paperwork burden in education imposed by Federal agencies. The budget for fiscal year 1980 is \$9,947,000 and the request for fiscal year 1981, \$11,793,000.

The program in fiscal years 1980 and 1981 will continue to be directed towards maintaining data cores for the elementary-secondary, higher, and vocational education systems to monitor trends and to provide data needed for allocating Federal program funds, establishing institutional eligibility for Federal funds, and monitoring compliance in higher education by the Office of Civil Rights.

The elementary-secondary data core will be expanded to incorporate additional finance, enrollment and staff data for all 16,000 school districts to produce profiles on the degree to which States are achieving equalization of resources. In addition, private elementary-secondary school data will be augmented by the first survey of nonpublic school library media centers. Procedures will be initiated to transform decennial census data to school district boundaries, making possible up-to-date analyses of the

demographic, social and economic characteristics of the Nation's school districts.

The national longitudinal study that has followed the high school class of 1972 for the past 8 years will be extended to include 1980 high school sophomores and seniors. The addition of the two classes will enable comparisons to be made among all three. The study will also elicit data to assess the impact of major Federal programs, to determine causes and consequences of dropping out of high school, and to assess parental plans for financing postsecondary education.

Special studies will be undertaken to support program planning and policy development. The national vocational education data system was installed in 1979 and the first data collected on participants and programs to examine and evaluate the impact of Federal funds on secondary and postsecondary vocational education. In 1980, employers of participants in Federally-funded vocational education programs will be surveyed to determine the quality of the former students' technical knowledge, work experience, and job performance. Data will also be collected to assist the Department's Institute of Museum Services. NCES established the universe of museums and related institutions in 1979 in preparation for the national study being conducted in 1980 on the educational programs and services offered by museums, funding patterns, and characteristics of Federal, State and municipal support.

An important component of the NCES statistical program is the establishment of compatible definitions of statistical quantities. To further this objective, NCES provides financial assistance to States to improve their capacity to collect and report accurate and timely data. In fiscal years 1980 and 1981, approximately 25 grants will be awarded each year to States to improve their systems for collecting and reporting elementary, secondary, higher and vocational education data.

Special analytical reports on target groups will continue to receive special emphasis. The *Condition of Education for Hispanic Americans*, for example, will be published in 1980. Other reports on language minority groups and bilingual education are being prepared for publication in 1981.







# 1

## Coordinating Education Data Collection

Excessive government paperwork costs governments time and money that might better be spent on educating students. The problem reached such proportions by 1978 that Congress passed Public Law 95-561 creating the Federal Education Data Acquisition Council (FEDAC). FEDAC is charged with coordinating the activities of all Federal agencies that collect education data and insuring that the data are collected as efficiently as possible. The intent is to reduce the Federally imposed paperwork burden by eliminating excessive detail and redundancy in information requests. FEDAC follows the Education Data Acquisition Council (EDAC), established by the Education Amendments of 1976, to coordinate education data collection activities in the Department of Health, Education, and Welfare.

To carry out its purpose, FEDAC annually prepares the Federal education data acquisition plan and inventory. The plan identifies Federal instruments used to request education information from 10 or more persons. It includes questionnaires, telephone and personal interviews, guides and any other types of forms used for grant applications, research and evaluation studies, statistical surveys, financial and performance reports, and other management reports. FEDAC prepares the plan by coordinating requests proposed by Federal agencies and reviewing them for redundancy, costs, overall burden and the use of standard terminology and definitions.

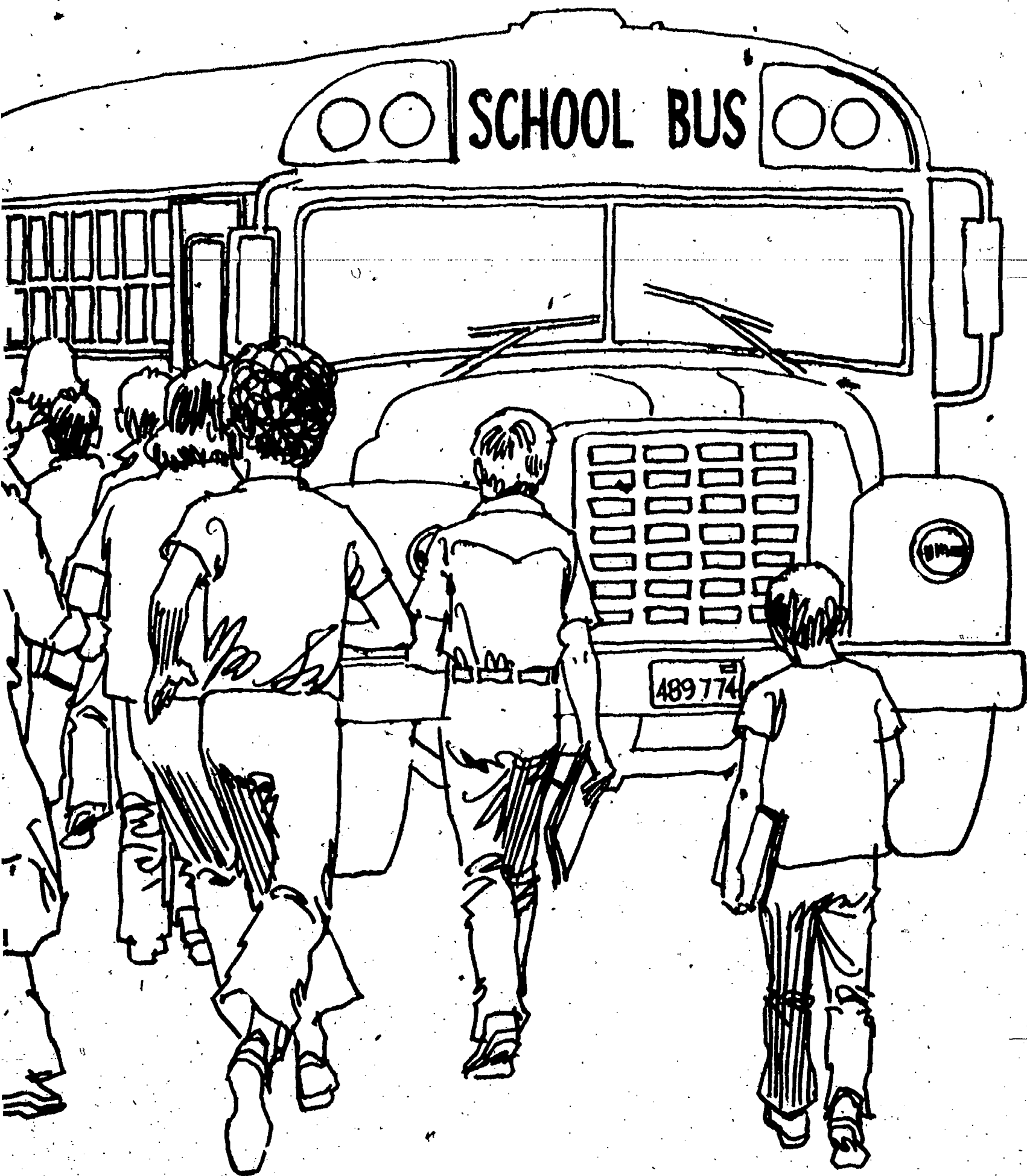
On August 8, 1979, FEDAC published interim procedures for the review and approval process in the Federal Register—the first step toward coordination. The Council has been operating under these procedures since that time (final procedures will be published after comments are assessed). The procedures require that data acquisition proposals include a justification of the need for the data, the legislative references citing data requirements, and an exact copy of the proposed survey instrument. Proposals must also contain evidence that the requesting agency coordinated with respondents and with Federal agencies conducting similar projects. An estimate of the costs and hours it will take to

respond to the survey is also required. FEDAC maintains a computerized system to identify and eliminate redundancy.

For each component of the data plan, FEDAC must announce a proposal in the Federal Register by the February 15 preceding the school year in which data are to be collected. The proposal must be titled and must state who the prospective respondents are and what their estimated paperwork burden will be. The lead time enables respondents and other members of the public to comment on the proposed data collection activities. Sponsoring agencies use the comments to modify their proposals and revise instruments.

Summaries of the data acquisition activities for the school year 1980-81 were published by February 15, 1980, in the Federal Register. FEDAC has already started to review activities proposed for the 1981-82 school year and will publish a list and accepted proposals by February 1981.

FEDAC officially began operating in April 1979. Between then and December 31, 1979, it reviewed data acquisition activities of the DHEW Education Division and the Office for Civil Rights, as well as those of several other Federal agencies. The latter included education-related data collections from the Department of Agriculture, the National Science Foundation, and the Department of Justice's Law Enforcement Administration. For the 9-month period, FEDAC reduced data burden by almost 13 percent. Some 160 data acquisition activities requiring a total of 7,900,000 burden hours were reviewed. These hours include time to be spent filling out student financial aid and campus-based program applications, evaluations, recordkeeping requirements and other data collection forms. As a result of its review, FEDAC was able to reduce response burden by about 1 million hours. FEDAC also provided extensive technical assistance to many data collection sponsors and recommended numerous improvements in survey/study design, question format, and the definitions and terminology used.



## Elementary and Secondary Education

Public school systems are faced with continuing cost increases in spite of declining enrollment. In addition, they are increasingly mandated to provide services to children who are costly to educate, such as language-minority children. Nonpublic schools that also share in available Federal funds have corresponding problems and are receiving more attention from Congress. During the past few years, more persons have been trained to teach than could be employed as teachers. Finally, the question persists about how well the public schools generally, and secondary schools in particular, are serving the needs of all children.

The focus of the NCES statistical program is to provide appropriate statistical information and analyses which measure the vitality of public and nonpublic education in the United States. Accordingly, the program collects annual national and State statistics about elementary and secondary school systems. An important recent addition to the data collection system is the compilation of financial, pupil and teacher data for each school district in the United States. These, linked with other information about school districts, provide the basis for studies of such areas as the equitable financing of schools and the effects of declining enrollments on staffing patterns and expenditures. Other statistical studies and surveys are conducted to address current and emerging issues, such as the need for bilingual education in the country and the relationship between supply and demand for school teachers.

### Data Sources

Elementary and secondary education statistics are collected from several sources. A major program of compiling statistics on elementary and secondary schools, 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 high school graduates, the number of teachers and other 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 received and published. Similar data are received for each of the 16,000 school systems in the United States. Also, since 1977, the membership, number of teachers, location, and grade span of the 90,000 public schools have been collected to provide a basis for statistical sampling as well as for research. Beginning in 1980, NCES will expand its information on the financing of public school systems to provide an improved basis for detailed studies on the distribution of school costs and resources for a series of biennial Congressionally mandated reports.

In addition to the statistics collected from State education agencies, limited information for the nonpublic schools was collected for the years 1976 through 1978. The data has been collected for NCES through the cooperation of the National Catholic Education Association and the Council for American Private Education. Over the 3-year period of data collection, a complete list of all nonpublic schools was assembled to establish the universe for the first time. The information collected covers size, grade span, religious affiliation and limited financial characteristics.

NCES also conducts special surveys periodically to provide general statistics on the characteristics of students, graduates, and staff that cannot be easily obtained from the information collected by State education agencies. Statistics on preprimary enrollment are collected through the Bureau of the Census' October Current Population Survey, supported by NCES, and published biennially. A survey of school district demand for teachers is conducted periodically to complement data on the supply of new teachers for supply and demand studies. Special surveys and studies on language minorities and bilingual education are being undertaken pursuant to a Congressional mandate. In addition, NCES utilizes its Fast Response Survey System (FRSS) to provide nationally representative data in approximately 4 to 6 months on new policy issues.

### Reports and Tapes

Statistical reports and tapes are produced on the characteristics of students, schools, school districts, and staff members of the school systems.

**Preprimary school enrollment:**

sample of children 3 to 5-years old, enrolled and not enrolled, by age, sex, race, Spanish origin, region, educational levels of parent, employment status of mother, and household income. And for children enrolled, level (nursery school or kindergarten), public/nonpublic and length of attendance each day (full- or part-day). (Biennial)

**Public elementary-secondary schools:**

number of school districts, pupils, staff, high school graduates; financial receipts, expenditures, including salary data. All States, the 20 largest cities and outlying areas are included. (Annual)

**Nonpublic elementary-secondary schools:**

all schools and numbers of pupils and teachers; finances by school affiliation and grade level. (Periodic)

**State school systems:**

organization, staff, pupils and finance of public schools in each of the 50 States, the District of Columbia and the outlying areas of the U.S. Selected historical trends. (Being resumed as biennial)

**Offerings and enrollments in secondary schools:**

courses offered in a sample of high schools and number of pupils enrolled in each. (Occasional)

**Revenues and expenditures:**

current expenditures of school districts for major functional categories. Revenues, capital outlay and debt service figures are also included. Universe of school districts for most years. (Annual)

**Public school finance—profiles of the States:**

pupils, teachers, and other characteristics of all school districts; measures of wealth, costs of educational services; program characteristics in relation to pupil need and financing capabilities; and resource allocation procedures. (Biennial)

**Local school districts listing:**

name, county, State, principal administrator, number of schools, grade span, enrollment. (Annual)

**State education agency listing:**

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

**Number of limited English proficient persons:**

estimates of the number of language-minority children and adults who have limited English proficiency, by age, residence, language, family income, and country of origin. Projections of the number for the next 5, 10, 15, and 20 years. (Occasional)

**Qualifications of teachers in bilingual education programs:**

estimates of the number of school teachers qualified or partially qualified to teach in a language other than English; the number qualified to teach English as a second language; and the number in projects supported by the Bilingual Education Act, ESEA Title VII. (Occasional)

**Teacher and administrator supply and demand:**

estimate of the numbers of college graduates added to the teacher supply; local education agency sample of numbers of teachers employed, teachers laid off, teacher openings, current and anticipated teacher shortages, by level and field of instruction. (Annual)

**Tapes**

The elementary and secondary statistics program makes additional survey data available only by computer tape. These tapes provide considerably more detail than the published reports. They thus provide an opportunity for policy analysts and researchers to combine these data with other information obtained from diverse sources in order to enhance their usefulness. Some of the computer tapes of survey data available for sale are:

**Local education agency (LEA) universe, non-fiscal:**

staff assignments, by sex; full-time-equivalent teachers; staff assignments for professional and non-professional categories; number of pupils by grade level; number of high school graduates by sex; pupils transported at public expense; number of schools; and number of days in which pupils



are expected to be in attendance. The 1978-79 LEA tape is the first fully processed tape for all school districts. The tape will be available by late 1980. In subsequent years, tapes will become available about 1 year following each survey.

**Public school universe:**

name and address, type of school, grade span, teachers and membership. The tape for the 1978-79 school year will be available in 1980.

**Nonpublic school universe:**

name and address, type of school, pupils, employees, size of population center, Federal program participation of school, and current expenses per child. Tape available for school years 1976-77, 1977-78, 1978-79.

**Merged data file for 1976-77:**

this file combines data from 7 sources and includes financial, student, staff and population characteristics for all 16,000 school districts in the United States. Data files include: NCES school district universe; Census of Governments survey of local government finances; Office of Civil Rights elementary-secondary civil rights compliance survey; Office of Education Section 437 State-administered Federal programs; Equal Employment Opportunity Commission elementary-secondary staff survey; equalized property value compiled by Killalea Associates; and National Institute of Education special tabulations of 1970 Census data for school districts. Tape is available.

## Congressionally Mandated Reporting

A persistent concern in education is the disparity in resources collected and distributed among elementary-secondary school districts. To ascertain the extent and significance of these disparities, Congress, in the 1978 Education Amendments, required NCES to collect uniform data from the States on financing elementary and secondary education. From these data, NCES produces a composite profile of each State every other year. The disparity profiles show the degree to which equalization of resources among the school districts has been achieved in each State. They also show the varying impacts of tax structures which support educational expenditures. The analysis examines elements which may account for the disparities in expenditures and resources, such as demographic factors, pupil concentrations, local wealth and school district characteristics. The first report will be published in 1980 using available Federal statistics. For future reports, NCES will support new work on statistical measures of disparity

and will acquire and utilize additional data directly available from the States so that the next profiles report will be based on more comparable and complete data. Also, the 1981 report will consider the combined effects of resource availability from Federal and State levels on school district financing and resource allocation.

NCES also reports annually to Congress on teacher supply and demand. This report is based on a survey of teacher demand taken from local education agencies and a survey of college graduates newly qualified to teach. The report covers changes in the size of the surplus of newly qualified teachers and the need for teachers in particular fields of study. It also examines how graduates who are newly qualified to teach fared in the labor market compared with other college graduates. Future reports will also examine emerging occupations for education graduates and the ability of schools to find qualified candidates for teaching positions.

NCES is currently conducting studies on bilingual education in the United States and Puerto Rico. Their purpose is to establish the number of persons of limited English proficiency and to project this estimate into the future. The studies will determine the nature and extent of the services provided and the cost of delivering these services. The studies will also determine the extent and distribution of need, if any, for more well-qualified teachers in bilingual education programs.

## Data Uses

The statistics NCES collects from State education agencies and special surveys are used in many ways. At the local government level, for example, a rural school district in a Southern State used the data to support its application for Federal assistance for basic skills improvement. The Council of the Great City Schools most recently used NCES data for its statistical profiles of large city school systems. At the State level, the office of the attorney general in a large State used NCES finance data as evidence in a suit against the State education agency.

At the Federal level, NCES used data from these surveys to present a statistical overview of secondary education to the House Committee on Education and Labor. For DHEW, the NCES fast response survey system reported on the problems arising from the eligibility of individual students for more than one Federal categorical program. This was one of a number of special surveys performed to respond to specific user requests. Others recently covered include State education agency policies and Federal programs in arts education; school district needs for

technical assistance to evaluate Title I programs; and the needs of Indochinese refugee children.

Data from several Federal data bases have been merged to respond to Departmental needs for policy analysis. NCES is intensely interested in both the Federal and non-Federal uses of the data base and in finding ways to modify and extend the data base to improve its usefulness. The Center participates with an interagency group coordinating research, evaluation and statistical activities to provide information needed to meet the Congressional mandate of the Bilingual Education Act.

## Plans

NCES plans to continue publishing reports on enrollment changes and characteristics of schools. A major effort is being made to collect more policy-relevant statistical data about each of the 16,000 local school systems and 90,000 school units, to combine these data with other Federal data sources, and to produce analyses of changing characteristics of schools and school systems. For example, NCES is planning to transform decennial census data to a school district base. These data will be used to develop legislative proposals and to conduct studies of youth employment, high school dropouts, desegregation and school finance. Important new information on the financial characteristics of school systems will be collected for the biennial report on disparities in school finance. In addition, the total data base on financial information will be merged with the demographic information from the decennial census as soon as it becomes available. In 1982, NCES will initiate a new survey of high schools to provide data on course offerings and enrollments in secondary education. Detailed studies on the amount and kind of education received by pre-school children will be made. In addition, NCES will attempt to make maximum use of educational statistics on school enrollment, language, and educational attainment from the 1980

Census of Population. The planned program is indicated in the table at the end of this chapter.

Beginning in 1980, NCES has been meeting regularly with Federal and non-Federal users and potential users of each of the three major statistical programs in elementary and secondary education (teacher supply and demand, school finance and language minorities) and with the suppliers and users of the major institutional data bases. These meetings will augment the continuing series of meetings NCES holds with the Council of Chief State School Officers' Committee on Evaluation and Information Services (CEIS). In these conferences, the utility of the work to date is discussed and suggestions for improvements solicited from all interested groups.

## Selected Publications

Arts Education: Policies and Programs (Fast Response Survey System)  
Indochinese Children: A Survey of Selected States and Districts (Bulletin)  
Revenues and Expenditures for Public Elementary and Secondary Education (Annual)  
Selected Public and Private Elementary and Secondary Education Statistics (Bulletin)  
ESEA Title I Evaluation: School District Needs for Technical Assistance (Fast Response Survey System)  
School Districts Participating in Multiple Federal Programs (Fast Response Survey System)  
Statistics of Public Elementary and Secondary Day Schools (Annual)  
Students and Schools  
Teacher and School Administrator Supply and Demand (Annual)  
Training Needs of Public School Administrators (Fast Response Survey System)  
ESEA, Title I Schoolwide Projects: Eligibility and Participation (Fast Response Survey System)

# Elementary and Secondary Education

Surveys	Year of reporting					
	1978	1979	1980	1981	1982	1983
Preprimary school enrollment			<input type="checkbox"/>		<input type="checkbox"/>	
Public elementary and secondary schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nonpublic elementary and secondary schools		<input type="checkbox"/>		<input type="checkbox"/>		
State school systems				<input type="checkbox"/>		<input type="checkbox"/>
Offerings and enrollments in secondary schools						<input type="checkbox"/>
Revenues and expenditures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public school finance: profiles of the States		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Local school district listing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State education agency listing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Number of limited English proficient persons and estimates of services						<input type="checkbox"/>
Qualifications of teachers in bilingual education programs				<input type="checkbox"/>		
Teacher supply and demand			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





WINTER

# Higher Education

Major social and economic issues continually challenge higher education. Today, the most critical include equality of access to college training, the long-range financial outlook for private colleges and universities, shifting enrollment patterns, and uncertain job opportunities for graduates.

The NCES program in higher education provides statistical information to enable planners and policymakers to address these issues. It uses the Higher Education General Information Survey (HEGIS), which provides both current and trend data, complemented by special studies of recent college graduates, adult education participants and race/ethnicity.

The issues facing higher education have historically been related to population, economics and social changes. Today's concerns include the decrease in the number of persons 18-24 years old, the uncertain employment outlook for prospective college teachers, and increasing tuition and other costs which traditionally restrict access to college. In the 1960's, by contrast, the major concerns were the need to expand to accommodate a population peak and the removal of discriminatory barriers in higher education. Access to higher education has received continuing attention since that period and has been broadened to remove sex inequities and barriers for the physically handicapped.

## Higher Education General Information Survey

The comprehensive NCES data base in higher education provides information needed to examine these and other emerging issues. This data base includes a complete census of public and private institutions of higher education, including community and 2-year colleges, their enrollments, characteristics, degrees awarded and financial information.

### Surveys

#### Institutional characteristics:

name, address, Congressional district, county,

telephone number, year established, sex of student body, previous-year enrollment, undergraduate tuition and fees, control or affiliation, calendar system, highest degrees offered, type of program, accreditation, and name, title, and function of principal administrative officers. (Annual)

#### Fall enrollment:

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

#### Degrees and other 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. Racial/ethnic data are collected in odd-numbered years. (Annual)

#### Residence and migration of college students:

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

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

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

#### Financial statistics:

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

#### Inventory of physical facilities:

total gross square feet at each institution; assignable space, classified by room use and type of activity. (Biennial)

HEGIS surveys on noncredit adult education and academic libraries are described elsewhere.

## Data Uses and Plans

The regular NCES higher education data file provides such information as trends in the enrollment of women and minorities; their employment as faculty members and administrators; 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.

To establish priorities for data collection, NCES works closely with key leaders and researchers in the field of higher education and reviews requests for information received from Congress, associations, institutions and individuals. On a more formal basis, NCES consults the State Higher Education Executive Officers Organization and a panel of representatives from institutions and associations chaired by the American Council on Education. Both of these groups react to the type and content of past NCES studies, review plans for current projects, and help future planning by ranking proposed studies by priority and suggesting the optimum timing for each. These recommendations, plus the advice from Congress and key Federal agencies, help NCES to develop its data collection program. Advice from these sources was used by NCES to develop the survey plan shown in the table at the end of this chapter.

In 1981, the basic NCES survey program will be augmented by biennial studies addressing access to higher education and student migration patterns. Strong interest has led to the consideration of a full-scale survey to determine accessibility of institutions for handicapped students for 1981. The survey will build on the 1978 model which established cost estimates for modifying physical facilities in colleges and universities to make them accessible to the handicapped. In addition, NCES will conduct the survey of student residence and migration. Data from this survey help States and institutions plan for future enrollments, determine necessary levels of student financial aid, and estimate the effect of student migration on the State's economy.

## Recent College Graduates Study

The huge investment that students, parents, and institutions make in a college education 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, 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 is the third, thus providing data available on the employment status of college graduates over a 6-year period. The data also address the demand component of teacher supply-demand by reporting the fields in which newly qualified teachers obtain employment. In 1980, reports from the second survey 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 post-baccalaureate education.

## Selected Publications

- College Enrollment Patterns Differ for Handicapped Students (Bulletin)
- Degree Awards to Women: An Update
- Earned Degrees Conferred (Annual)
- Enrollment Declines Foreseen for Colleges in the 1980's (Early Release)
- Fall Enrollment in Colleges and Universities (Annual)
- Financial Statistics of Colleges and Universities (Annual)
- Financial Self-Assessment—Small Colleges (Paper)
- The Impact of Section 504 of the Rehabilitation Act of 1973 on American Colleges and Universities
- Issues in Postsecondary Education: Financial Viability of Institutions
- Nonresident Alien Enrollments and Degrees are Increasing (Bulletin)
- Profile of Women's Colleges: Enrollment Statistics (Bulletin)
- Salaries, Tenure, and Fringe Benefits of Full-time Faculty and Employees in Higher Education (Early Release)

## Higher Education Surveys

Surveys	Year of data collection					
	1978	1979	1980	1981	1982	1983
<b>College and University</b>						
Institutional characteristics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fall enrollment	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>
Racial/ethnic data collected		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Residence and migration of college students		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Faculty salaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>
Inventory of physical facilities	<input type="checkbox"/>			<input type="checkbox"/>		
Noncredit adult education	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
College and university libraries		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
<b>Recent College Graduates</b>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	





# 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. The studies offer data on job training for persons seeking employment or career advancement. They also cover continuing education programs offered by schools, colleges and other organizations. The results of these studies provide planners and policymakers at all levels of government with both basic information and trend data.

## Adult Education

Changes in the demographic makeup of American society during the past 25 years have provided the impetus for the dramatic growth of adult education. People are living longer, are in better health in their later years, and have the economic resources to participate in a 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. In addition, secondary school systems, converting unused classrooms and available teachers, have extended programs to the adult population.

NCES data show that adult education is growing at a rate approximately three times that of the adult population as a whole. This rapid expansion has intensified the interest of educational planners and policymakers. They want to know the types of courses taken by adult students and who provides these courses. They are also interested in the impact of adult education on traditional and nontraditional

educational institutions, 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 with surveys of institutions sponsoring adult education activities. These surveys are repeated on a regular cycle to provide trend data on changes in students and programs.

NCES sponsors a triennial supplement to the Current Population Survey conducted by the Bureau of the Census, which queries the 56,000 households in the survey on participation in adult education. The study provides demographic data on participants in adult education, on full-time adult students and on adult nonstudents. It also offers data on the characteristics of courses and activities taken in adult education.

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 bi- or triennially. They include studies of adult education offered by colleges and universities, community agencies, home study institutions, and free universities and learning referral centers. Presently, a literature search is being conducted in anticipation of an upcoming survey on programs offered by non-school organizations (business, industry, labor unions).

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; reasons for taking courses, completion, subject areas, method of instruction; duration, credit, sources of payment; and types of administering institutions or agencies. (Triennial)

**Noncredit adult education in colleges and universities:**

name and address of sponsoring unit or college; field of instruction; policies regarding GED and fee remission for the elderly; registrations. (Biennial)

**Adult education through home study:**

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

**Adult education in community organizations:**

type (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 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, identify 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 prompted plans for its readministration in 1981.

**Data Uses and Plans**

Information from studies in adult education provides the basis for establishing eligibility for various Federal financial aid programs. It also helps determine the extent to which adult education is helping compensate for the decrease in the number of students of traditional college age. In addition, these studies expand the scope of data available to postsecondary education planners.

Future plans for surveys in adult education include a survey of participation in adult education and a

survey of adult education in community organizations in 1981; a survey of noncredit adult education in colleges and universities, and a survey of adult education in non-school organizations in 1982; and a survey of adult education through home study in 1983.

## Vocational Education

Education and employment are inextricably linked in American society, but nowhere more closely 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 amendments 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, and occupational training and retraining for adults unable to compete in today's labor market.

The NCES vocational education program provides information on Federally funded vocational training programs in secondary and postsecondary schools and on students and job training programs offered by all noncollegiate postsecondary schools. In addition, NCES inventories training activities conducted by employers, associations, labor unions and community agencies.

## 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 that this system be designed to provide reliable data on vocational students, programs, program completers and leavers, staff, facilities and expenditures. Stated another way, Congress requires VEDS to show, "Who is being served in vocational education?" "What are they being served?" "What is being accomplished?" and "What is the cost?"

VEDS' purpose is designed to provide accurate 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. It is designed to offer improved and consistent information to Congress and the various States. It includes two key elements: first, a reporting system based on collecting State-level totals; and second, an accounting system designed to establish record-keeping standards.



The standards are to help facilitate program audits, comprehensive planning and evaluation activities. The VEDS system will also provide information on the numbers of persons being prepared in various occupational fields and will be used by State occupational information coordinating committees and economic development councils. The resulting data base will be automated so that this information can be updated annually and used for a wide range of special analyses.

In 1980, the first data will be collected on recent vocational education program completers and leavers. A sample of these students will be followed to determine the extent to which program completers and leavers find employment related to their training. A sample of employers will be asked to assess employee job competency and work attitudes.

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

## Surveys

### Enrollment:

instruction program, by sex, race/ethnic origin and level (secondary, postsecondary, adult); work-study; completions by instructional program; leavers by program level; and number of targeted students benefiting from Federal funds (handicapped, economically and academically disadvantaged, limited English proficiency). (Annual)

### Staff:

total staff and full-time equivalents, by program assignment. (Annual)

### Finance:

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

### Employer followup:

evaluation of employee's technical knowledge, work attitude, and quality, by instructional program. (Annual)

### 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)

Documented computer tapes will be available for sale once the automated system is established, beginning in late 1980.

The VEDS system came into being with the collection of data for the school year 1978-79. Data for the second year of the series are due from the States on December 1, 1980. Followup data on students and their employers will be collected for a sample of the 1978-79 students who left or completed their programs during the ensuing year. These data will be reported to NCES on December 1, 1980; corresponding data for the 1979-80 school year will be collected on December 1, 1981. VEDS has received clearance from the Federal Education Data Acquisition Council for the third and fourth years of this series, covering school years 1980-81 and 1981-82.

## Data Uses

Early in 1980, NCES set up the Data Editing and Interpretation Task Force to assist with monitoring the process of editing the first year's data. The Task Force, composed of 12 representatives from the secondary and postsecondary vocational education community, is providing insights on the interpretation and evaluation of the VEDS data. It will assure that the VEDS data are disseminated with due cautions regarding their limitations, and that they reflect as accurately as possible the status of vocational education. Analyses of the VEDS data will be used in Congressional deliberations on the reauthorization of the Vocational Education Act during 1980-81. The data will form the primary basis for the Commissioner'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 make special ad hoc analyses and reports in response to inquiries and requests from a variety of decisionmakers in vocational education.

## Noncollegiate Postsecondary School Training

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. Nearly 90 percent of the schools are proprietary (for profit) and enroll 75 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 postsecondary schools. A repre-

sentative sample of schools is used to develop national estimates of average charges, length of a 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 are home-bound by reason of family responsibilities or geographic location, or who prefer to study on a more flexible schedule.

Paralleling the biennial school survey is a series of studies of the students in these schools. A nationally representative sample of students is used to collect demographic information. It is also used 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 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. (Biennial)

Documented computer tapes for the 1976 and 1978 survey of schools and for the 1977 and 1979 survey of students are available for sale. The tape for the 1980 survey of schools will be available in mid-summer 1980.

## Plans

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 they participate in the extensive consultations which 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 for the biennial noncollegiate postsecondary surveys of schools and students and the survey of students is scheduled for 1981 and 1983.

## Selected Publications

Adult and Continuing Education in Colleges and Universities (Early Release)

Identification of Issues in Adult Education (Paper)

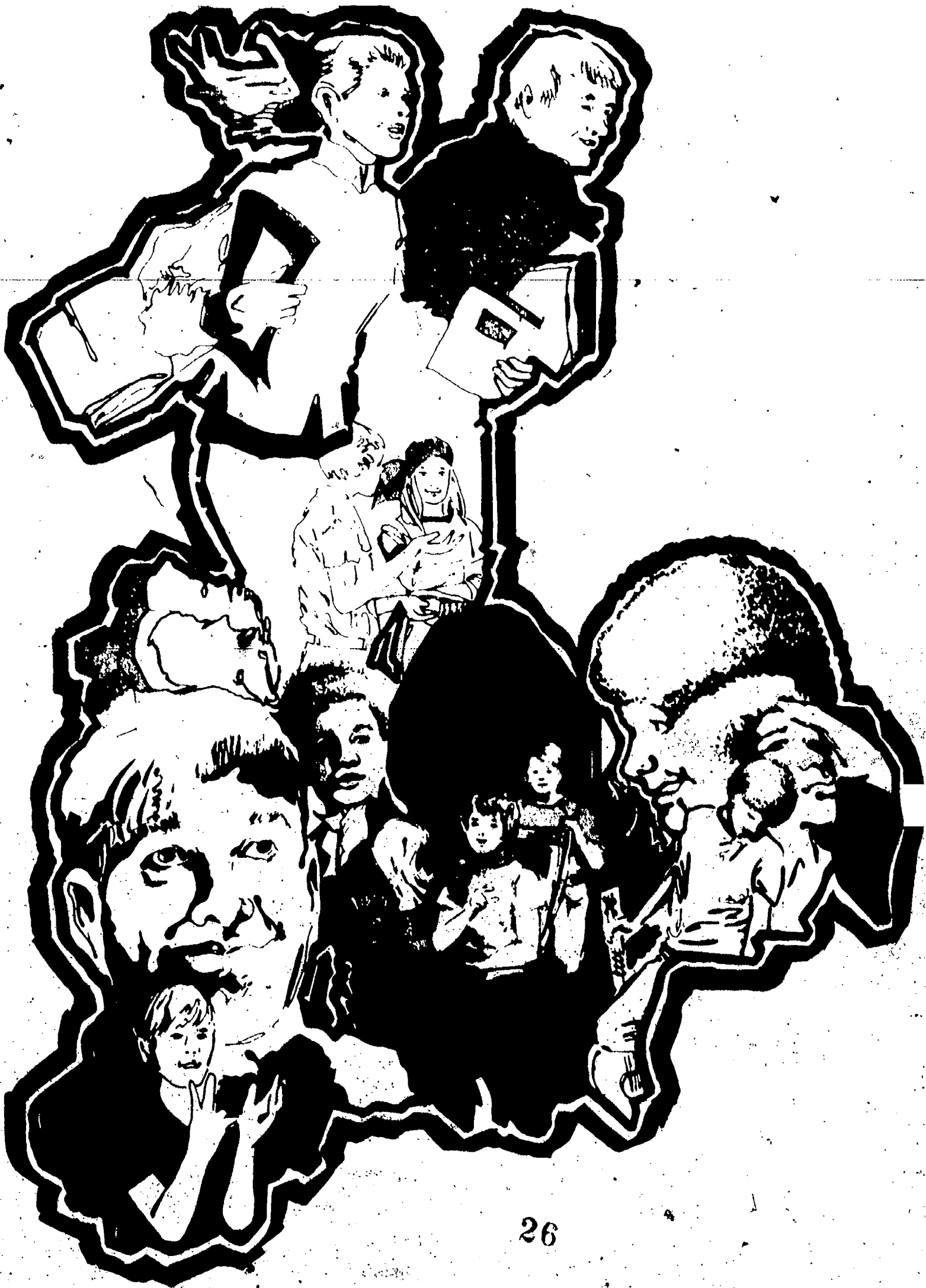
Participation in Adult Education (Preliminary)

Programs and Enrollments in Noncollegiate Postsecondary Schools (Biennial)

Women in Vocational Education

## Adult and Vocational Education Surveys

Surveys	Year of data collection					
	1978	1979	1980	1981	1982	1983
<b>Adult Education</b>						
Participation in adult education	<input type="checkbox"/>			<input type="checkbox"/>		
Noncredit adult education in colleges and universities	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Adult education through home study			<input type="checkbox"/>			<input type="checkbox"/>
Adult education in community organizations				<input type="checkbox"/>		
Adult education in free universities and learning centers	<input type="checkbox"/>				<input type="checkbox"/>	
Adult education in nonschools					<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"/>	<input type="checkbox"/>
Vocational education data system - Student follow-up			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vocational education data system - Employer follow-up			<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"/>		<input type="checkbox"/>



# National Longitudinal Studies

The 1970's ushered in new and enlarged Federal financial support to education. With this support came a shift in 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 postsecondary 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, the study is critical to understanding the processes by which education leads individuals to develop their abilities and their roles in society.

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

This study began in the spring of 1972. From each school included in the sample and agreeing to participate, a random sample of 18 seniors was selected to take part. In order to conduct intensive studies of disadvantaged students, NCES selected more schools in low income areas and schools with signif-

icant minority enrollments—a reflection of the increased Federal concern for student needs. 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 nonpublic 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 that are 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 young people have taken in attempting the transition. Using questionnaires and personal interviews, these surveys charted work and postsecondary school experiences, marriage and family events, community activities, attitudes and aspirations. Such information has proven essential to those who trace the vital options and decisions of youth at this stage of the life cycle.

## Findings

The analytical results confirm previous research findings that high school programs appear to have little impact on the success of graduates in the labor market. By comparison, family income, socioeconomic status and ability measurably affect student success, although ability alone is slightly less important. Analysis of replies to other questions also revealed some interesting findings. For example, over half the graduates initially indicated they would like to be professional or technical workers. Two and one-half years later, this proportion hadn't changed much; half still expected to be doing professional or technical work when they were 30 years old. Yet, the outlook for this hope is dim. In 1985, when many of these graduates will be 30, the U.S. Department of Labor estimates that only one-sixth of the labor force will be professional and technical workers. Clearly, a substantial proportion of the graduates will not achieve their goals. In fact, many students already appear to fall short of their own expectations by a considerable degree.



## Data Uses and Plans

Increasingly, the value of the NLS data for investigating policy issues has been demonstrated by its use. The Congress, Federal executive agencies, education institutions, and private researchers have all tapped NLS data. The Congressional Budget Office, for example, turned to these data to develop a model for tax credit costs and costs of other financial aid sources. The U.S. Office of Education used these data to report on the effectiveness of vocational education programs. And the American Association of Collegiate Registrars and Admissions Officers requested NLS data to study attrition from institutions of higher education.

To assure the policy relevance of questionnaire items, preparing for each followup data collection involves consulting and interacting with Federal education agencies, the Congressional Budget Office, and the Department of Labor staff. NCES holds periodic planning conferences to solicit the views and advice of representatives of State education agencies, educational leaders and researchers in institutions of higher education.

The survey schedule is listed in the table at the end of this chapter.

## 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 1974 and subsequent followup surveys requested information on political activities. The fall 1976 survey also began collecting information on opinions relating to sex and race bias. It further included student rating of high school and postsecondary school attainment. Overall response to each of the first three followups was 90 percent.

The currently available data file consists of base-year, first, second and third followup survey data which are available for sale as a set of computer tapes. Various analytical and descriptive reports are also available.

## High School and Beyond

Since NCES began its longitudinal study of the 1972 senior class, new issues have arisen in education. 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 for access to postsecondary and vocational education has brought a sharper focus on the education experience of Hispanic youths.

To examine these issues, NCES has initiated a second longitudinal study, High School and Beyond, to complement the first. The new survey, in part, covers the high school class of 1980. By seeking the same types of data the first study has gathered, the second will allow 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 extends to the sophomores of 1980 as well as the seniors.

Presently, the initial study is laying the groundwork for comparison. It recorded the economic and social conditions surrounding high school seniors in 1972 and, within that context, their hopes and plans. It has since been measuring the outcomes while also observing the intervening processes. High School and Beyond will allow researchers to monitor changes by retaining the same goals: measuring the economic returns of postsecondary education, examining access to 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 which have surfaced since the original study began. How has the increased availability of student financial aid altered student plans for further education? How are these plans affected by parents' income and education? Has the financial squeeze on middle-income families altered their attitude toward postsecondary education? These questions, as well as concern about declining test scores, youth unemployment and bilingual education, will be addressed, along with a host of others.

The presence of sophomores in the new study will open up fresh areas of inquiry. For example, researchers can study more completely the process by which students choose and work toward their goals. Attempts can be made to discover the shortcomings

of the educational process and perhaps formulate ways to overcome the resulting dropout problem. In the end, there will emerge a more comprehensive picture of the high school experience and its impact on students.

## Data Sources

The study design of *High School and Beyond* calls for a considerably larger initial national sample than the earlier study. About 36,000 sophomores and as many seniors from approximately 1,100 public and nonpublic schools will be asked to participate. A random sample of 36 sophomores and 36 seniors are to be chosen from each cooperating school. Black and Hispanic students will be represented by a larger portion than their percentage of the total population to allow for later in-depth studies of their education experience.

The base-year survey includes teacher observations, a school questionnaire, and a questionnaire and series of cognitive tests for each group studied. An additional questionnaire will be administered to a sample of parents of the senior class. The student questionnaire focuses on individual and family background, high school experiences and future plans. The tests measure verbal and quantitative ability. Those for sophomores also include brief achievement measures in science, writing and civics. Tests for seniors include abstract reasoning and other non-verbal abilities. The parent questionnaire will elicit information about how family attitudes and financial planning affect educational goals. Each school has been asked to provide information about enrollment, staff, educational programs, facilities and services, dropout rate, and special programs for handicapped and disadvantaged students.

To find out how the students' plans have worked out or changed, subsamples of the base-year students will be asked to complete followup questionnaires at approximately 3-year intervals over the next decade. In addition, the 1980 sophomores sampled will be resurveyed in their senior year, at which time it will be possible to study significant changes taking place during the final 2 years of high school, as well as to obtain data—at the critical point, shortly before graduation—on each student's plans for the future. Another important part of the plan is to use the sophomore data base to follow up those students who drop out of high school. In brief, *High School and Beyond* 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. The information collected in the base-year is as follows:

1980 sophomores  
and seniors (base-  
year survey,  
February 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.

## Data Uses

Many of the uses for *High School and Beyond* have been mentioned. Its widened scope is expected to generate even more interest than its predecessor, particularly in the areas of State and local policy. The survey is designed to enable State planners to obtain State estimates by agreeing to augment and finance expansion of the sample. In addition, States may add their own questions to provide specific information that is particularly relevant to their policy, program and budget needs.

Design of the *High School and Beyond* study has been greatly enhanced by the policy analysts in and out of government who have used data from the 1972 study. As part of the conceptual design activity in preparation for the base year, a large number of groups with interest in secondary and postsecondary education were consulted concerning the general design and specific questions in the instruments. In addition, an ongoing Committee of Federal Users of the National Longitudinal Studies Program has participated in the design, development and analysis of the 1972 study as well as the design and planned outcomes of *High School and Beyond*. The planned survey schedule follows.

## Selected Publications

- 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
- Distribution and Packaging of Student Financial Aid
- The Influence of High School Racial Composition on Black College Attendance and Achievement Test Performance
- The Relationship Between Participation in Mathematics at the High School Level and Entry Into Quantitative Fields—Results From the National Longitudinal Study (Bulletin)
- Transfer Students in Institutions of Higher Education
- Withdrawal From Institutions of Higher Education



**Women Who Enter Male-Dominated Fields of Study  
in Higher Education  
Review and Annotation of Study Reports  
Third Follow-Up Survey Composite Variables  
An Empirical Investigation of Alternate Item Non-  
response Adjustment Procedures**

**Concept of the Quality of Life, and Changing At-  
titudes Two and One-Half Years After High  
School Graduation  
Experiences of Recent High School Graduates: The  
Transition to Work and Postsecondary Education  
(Published by Lexington Books)**

# National Longitudinal Studies

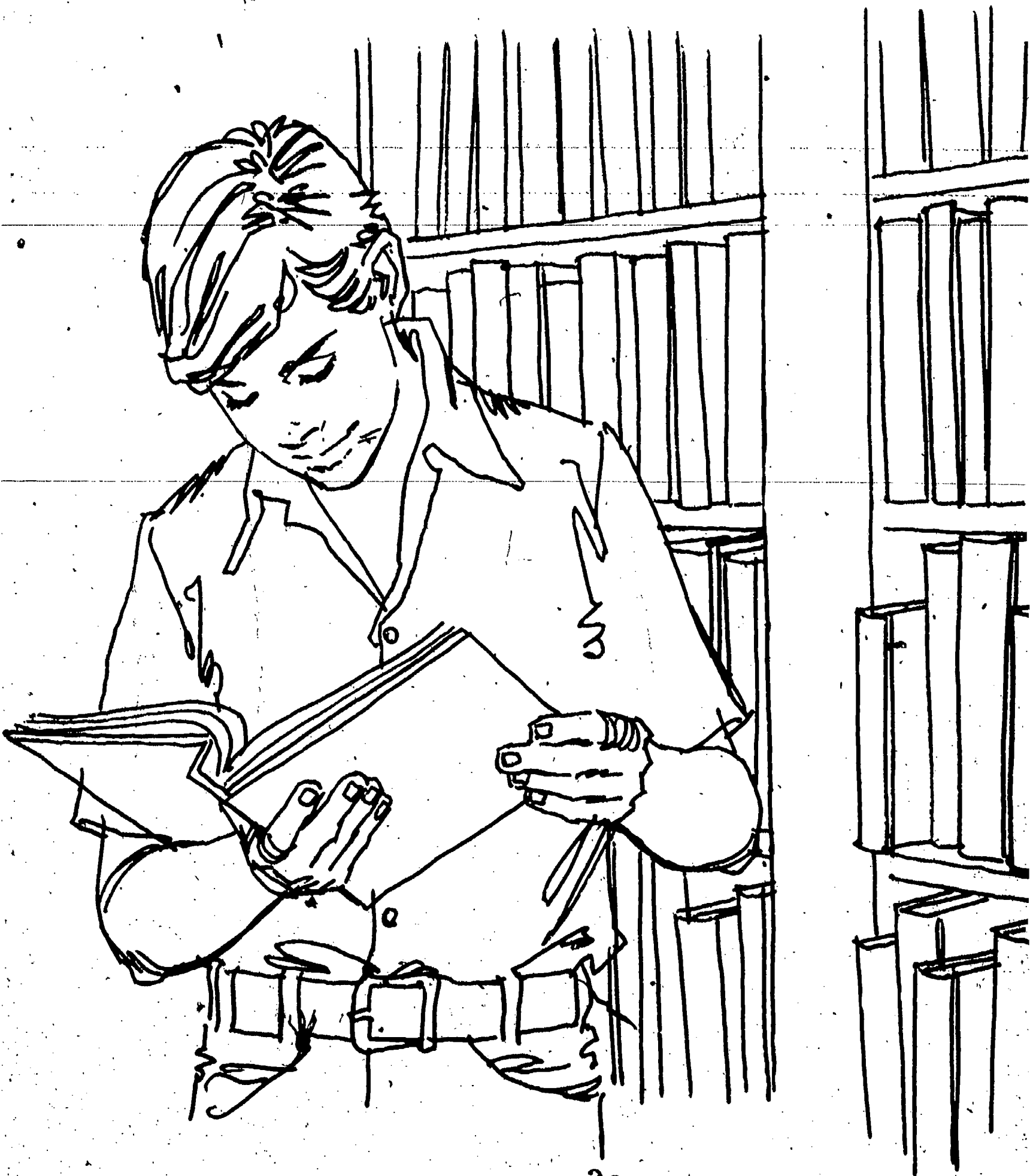
Surveys	Year of data collection							
	Spring	Fall				Spring		
	1972	1973	1974	1976	1979	1980	1982	1984

## High School Class of 1972 - Seniors

Base Year	<input type="checkbox"/>							
Year one followup		<input type="checkbox"/>						
Year two followup			<input type="checkbox"/>					
Year four followup				<input type="checkbox"/>				
Year seven followup					<input type="checkbox"/>			

## High School and Beyond - Sophomores and Seniors, 1980

Base Year	<input type="checkbox"/>							
Year two followup						<input type="checkbox"/>		
Year four followup								<input type="checkbox"/>



## Learning Resources

Libraries and museums play a large role in educating people and enriching their lives. In recent years, educational television has added its own unique qualities to that role. But all three of these resources have been challenged by an explosion of information, compounded by a revolution in technology. In addition, more and more people have come to rely on these resources as means for cultural enrichment and as sources of information with which to manage their lives.

The Federal role in meeting these challenges centers on several concerns. All involve funding and program guidance—how much is needed and where it should go. Policymakers must decide which services need the most support, which serve the greatest number of people, and which people need them more. Decisions must be made on how various information resources can be combined to serve several purposes. What innovations in management and technology can be used to increase accessibility to available resources? For resource planners to address these questions, they need current, wide ranging data.

NCES meets this need by working primarily with the Office of Libraries and Learning Resources, the Corporation for Public Broadcasting, and the Institute for Museum Services to provide basic data and determine how data collection can help solve resource problems. Moreover, the Center has deepened and broadened its own program of reporting statistics on learning resources. While it will continue to provide basic data on libraries, NCES will lengthen the time span between basic surveys. This will permit new surveys to be conducted in areas of emerging concern—areas such as library consortia and networks, library users and research libraries. Collecting and reporting information on the use of educational television in elementary and secondary schools is being extended to higher education. The Center is also conducting benchmark surveys of museums to assist the Institute of Museum Services.

### 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. The conference also sought to assure that special groups in the population (children, the aged, the homebound, minorities and the handicapped) have access to all libraries and information services.

### Library General Information Survey

The Federal government has collected and reported statistics on academic and public libraries for over 100 years and for school libraries for about half that time. 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 over a 5- to 6-year period on staff, collections and holdings, services, cooperative interlibrary arrangements, facilities, and expenditures for the various types of libraries. These inventories have for the most part been completed and are periodically updated.

### Surveys

#### Library manpower:

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 (educational, 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. (Periodic)

#### 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 and interlibrary loans; hours and days of service; and facilities. (Quadrennial)

**Public library users:**

name, address and telephone number, range of materials available (books, media, equipment); community, advisory, instructional and cultural services; facilities; mechanism for delivery of materials and services; groups for whom library provides services; and size of population in community. (One-time)

**School library media centers (public and non-public):**

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

**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 source; and revenue from Federal grants. (Biennial)

**Special libraries—selected research libraries:**

name, address, and telephone number; name and address of company/organization primarily served; reference, interlibrary loan and other transactions; hours and days of service; public access; operating expenditures; revenue from Federal grants; full- and part-time professional staff; library materials, by field; number and type of items in collection; collection catalogs; and cooperative arrangements with other organizations. (One-time)

**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 transactions; hours and days of service; other services (documents depository,

bibliographies, transactions); automated functions; expenditures for automation; operating 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; photocopying, 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 by 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)

**Special libraries—Commerce and industry:**

name, address, and telephone number; person in charge of library; name and address of company/organization primarily served; book and media collections; number of full- and part-time staff; public access; and hours of service, estimated percent of books and periodicals related to health sciences. (Quadrennial)

**Library consortia, cooperatives and networks:**

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

Tapes for recently completed library surveys, including academic, public, and public schools libraries, will be available for sale in 1980.

**Data Uses**

Yesterday's librarian would not recognize today's libraries. The new demands placed on them have



caused them to become veritable brokers for many types of information. Librarians have passed from their old role as "keeper of the books" to the more complex job of information specialist. Library facilities and training have changed accordingly.

With these expanding functions has come a funding crunch. At a time when circulation continues to grow and demand for other services is rising, library expenditures are not keeping pace. With inflation adding its impact, the outlook for libraries is uncertain.

Resource planners therefore monitor the situation regularly. The NCES data file on libraries was developed to aid planners as they study changing functions, manpower needs and funding. The file can help establish library standards and determine assistance needs. It is also vital for allocating resources, accrediting institutions and supporting policy analyses. More specifically, library statistics are used at the State and local level for establishing standards for facilities and services, and by the Office of Libraries and Learning Resources (OLLR) for determining needs for Federal assistance among public, school, academic and research libraries. Library statistics also are used in accrediting academic institutions, in planning and developing new facilities, and by the private sector in determining directions and demands for new material. The library manpower survey which NCES and OLLR are sponsoring in 1980 will provide data to project the trends of future supply and demand for library personnel into the 1990's.

## Plans

To map out its program, NCES coordinates and cooperates closely with the OLLR, the National Commission on Libraries and Information Sciences, the Chief Officers of State Library Agencies, and other associations of academic, public, special and Federal libraries. In addition, NCES works with the American Library Association's ten statistics committees (with a membership of more than 100). The program priorities and the frequency of survey cycles are developed in consultation with these groups (see table at the end of this chapter).

In 1980, NCES will conduct the survey of library manpower, nonpublic school library media centers, and public and academic libraries. NCES will also provide baseline information from its survey of library consortia, cooperatives and networks. This information will cover the organizational structure, staffing, resources, services and use of automation in these resource-sharing entities. These data on resource sharing, as well as the projected survey of library users, respond to new demands for data

underscored by the aforementioned White House Conference on Libraries and Information Services.

## Educational Technology/ Broadcasting

Television and other communication technologies have permeated our culture. And though our familiarity with these technologies rests mainly in the living room TV set, their pervasive use is not restricted to our homes. In the last 10 years, television, computers, radios, video-tape 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 on television, radio and related educational technologies. The NCES/CPB data base includes 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. (Quadrennial)

#### 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 towards ITV and radio; and perceived barriers toward ITV and radio use. (Quadrennial)

A tape of the elementary and secondary school ITV utilization study is available for sale.

### Data Uses and Plans

The elementary and secondary study was initially conducted in 1977 and was based upon a represent-

ative sample of school districts, schools and teachers. The survey will be conducted again in 1981. 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 spring 1980. The study is planned to be repeated in 1984.

The data collected from these studies are used by the Office of Libraries and Learning Resources, the National Institute for Education, the Corporation for Public Broadcasting and the public broadcasting community. To varying degrees, the data help these groups plan, implement and administer 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. These associations, as well as key Federal agencies, advise and help NCES and CPB to develop their data collection and analyses activities. (A table describing the planned program is at the end of this chapter.)

## Museums

Museum attendance has been climbing rapidly over the past decade. Attracted by new kinds of exhibits and diverse educational programs, museums have come of age as teaching centers for adults and children. However, with increasing demands have come escalating costs without corresponding increases in funds.

In 1976, the Congress established the Institute for Museum Services (IMS) to provide assistance to museums. Subsequently, NCES began to conduct basic surveys to assist IMS in program planning.

### Data Uses

To establish the universe of museums, NCES' first step was to survey the varieties of museums—those for art, children, history, and natural history, as well as botanical gardens, nature centers, planetariums, aquariums, science-technology centers and zoological parks. The universe survey is used to determine which institutions are eligible for IMS funds and is the basis for selecting a sample for the survey of museum programs currently underway. The survey,

in addition to providing current information on museum programs, will provide data on collections, exhibits, staff and funding.

### Surveys

#### Museum universe:

name, address, and telephone number; person in charge of museum; control of institution; type of institution; year chartered; number of employees; weeks open per year; annual attendance; and current operating expenditures. (Triennial)

#### Museum programs:

name, address, and telephone number; name of person completing the form; purpose and governing authority; collections and exhibitions; conservation/protection; education and public programs; accessibility and attendance; number of full- and part-time staff; salary ranges of full-time employees; operating income by source; range of assets in endowment fund; total capital expenditures; estimation of percentage of operating expenditures distributed among various areas of institution; security, facilities; and impact of inflation. (Periodic)

#### Financing museums:

name, address; amount of increase or decrease in corporation giving; effect of declining market value of stock and other holdings; impact of Federal funding on (a) Special project support, (b) Challenge grant support, (c) Federal funds for program development, (d) General operating support, and (e) other support available via Federal funding such as construction; energy conservation, personnel; municipal support—its form, type, and the percentages in relation to overall operating budget; and trends of support from the States. (One time)

A computer tape of the museum universe is available for sale.

The museum surveys which NCES is conducting for IMS reflect the needs of the National Museum Services Board, which established the basic program policies and regulations for IMS.

### Plans

In 1981, NCES will study museum funding sources and how much each source contributes to museum operating budgets. The planned program is indicated in the following table.



## Selected Publications

Availability and Use of Television and Radio in Colleges  
and Universities (Jointly with CPB)  
Federal Library Survey (Jointly with the Library of  
Congress)

Library Operations Statistics Handbook  
Survey of State Library Agencies (Paper)  
Uses of Television for Instruction in Elementary and  
Secondary Education (Jointly with CPB)

### Learning Resources Surveys

Surveys	Year of data collection					
	1978	1979	1980	1981	1982	1983
<b>Library</b>						
Library manpower			<input type="checkbox"/>			
Public libraries	<input type="checkbox"/>				<input type="checkbox"/>	
Public library users				<input type="checkbox"/>		
Public school library media centers	<input type="checkbox"/>				<input type="checkbox"/>	
Non-public school library media centers			<input type="checkbox"/>		<input type="checkbox"/>	
College and university libraries		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
Special libraries: selected research libraries				<input type="checkbox"/>		
Special libraries - Federal government	<input type="checkbox"/>					<input type="checkbox"/>
Special libraries - State government						<input type="checkbox"/>
Special libraries - State agencies	<input type="checkbox"/>					<input type="checkbox"/>
Special libraries - commerce and industry				<input type="checkbox"/>		
Library consortia, cooperatives and networks	<input type="checkbox"/>					<input type="checkbox"/>
<b>Educational Technology/Broadcasting</b>						
Educational broadcasting/technology: elementary and secondary				<input type="checkbox"/>		
Educational broadcasting/technology: higher education		<input type="checkbox"/>		<input type="checkbox"/>		
<b>Museums</b>						
Museum universe	<input type="checkbox"/>			<input type="checkbox"/>		
Museum programs		<input type="checkbox"/>				
Financing museums				<input type="checkbox"/>		

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$+ t_{i+1} + t_{i+2}$

# 7

## Statistical Methodology

Quality control and technological improvement are vital to NCES in its role as one of the five general purpose statistical agencies in the United States government. NCES has the principal responsibility in the Department of Education for advising on all statistical matters relating to present and proposed programs and policies of the Department. The Center provides technical assistance and support to the Department and works closely with other collectors of social statistics to improve state-of-the-art data collection and analyses and the quality of available education statistics.

To develop and implement techniques for improving the quality, usefulness and timeliness of NCES data, NCES established the Office of Research and Analysis (ORA) as the focal point for its activities in the areas of quality assessment, methodological research, and technical consultation. The work of the office is directed by the Assistant Administrator for Research and Analysis, appointed in January 1979.

### Quality Assessment

As a step toward improving the quality of its data, NCES is conducting a series of validation and quality assessment studies. The study results are provided to data users to indicate both the reliability and the limitations of the data they are using. Further, the studies provide a basis for determining where methodological improvements are needed. Validation studies of the higher education fall enrollment and earned degrees surveys have been completed. Studies of the higher education finance and faculty surveys are being conducted in FY 1980. Validation studies of noncollegiate postsecondary schools and public libraries are planned for FY 1981. A quality assessment study for the national vocational education data system is being conducted in FY 1980-81.

NCES has also conducted an a posteriori study to remove bias from estimates of limited English proficient children of non-English language backgrounds. The study has strengthened the existing data and provided design improvements for future surveys.

### Methodological Research

Quality assessment activities are supplemented by methodological research and application. This program undertakes taxonomic research, develops educational indicators and incorporates new techniques into NCES practice.

Taxonomic research on institutions of higher education is being conducted to develop recommendations for a new classification structure. This structure will increase the analytical utility of existing data bases and will serve as a useful sampling stratification strategy.

Another major activity is research into the critical problem which arises in survey data when some of the responses are missing or incomplete. NCES has been developing procedures for imputing missing data. These procedures will apply to all NCES surveys and will be useful to survey research in general. The methodology has been used in the NCES private school survey and in the instructional TV survey of elementary-secondary education. Similar techniques, with general application, will be developed in the areas of data base linkage and analytic models.

Considerable effort has been devoted to developing statistical indicators which assess status and measure change in social phenomena—be they related to groups of individuals or institutions. Thus far, NCES' effort to study indicators has been focused on the educational status of minorities and the financial status of institutions of higher education. In the future, NCES will expand its efforts in higher education indicators to look at institutional viability. This will be studied in terms of personnel, physical facilities, and student demand for educational services, as well as the role that institutions play in meeting Federal goals for higher education. Work in equal education opportunity will address the benefits of formal education for various minority groups and women. Additionally, NCES will expand its indicator efforts to encompass educational needs of school districts. It will do this by developing new approaches to assessing fiscal capacity and by developing methods for measuring this cost of services to special target populations.

The successful use of a scientifically developed sample of colleges and universities enabled NCES

to publish preliminary estimates of fall enrollment 16 days after the data were due from institutions. This sample is being incorporated into the fall enrollment survey design.

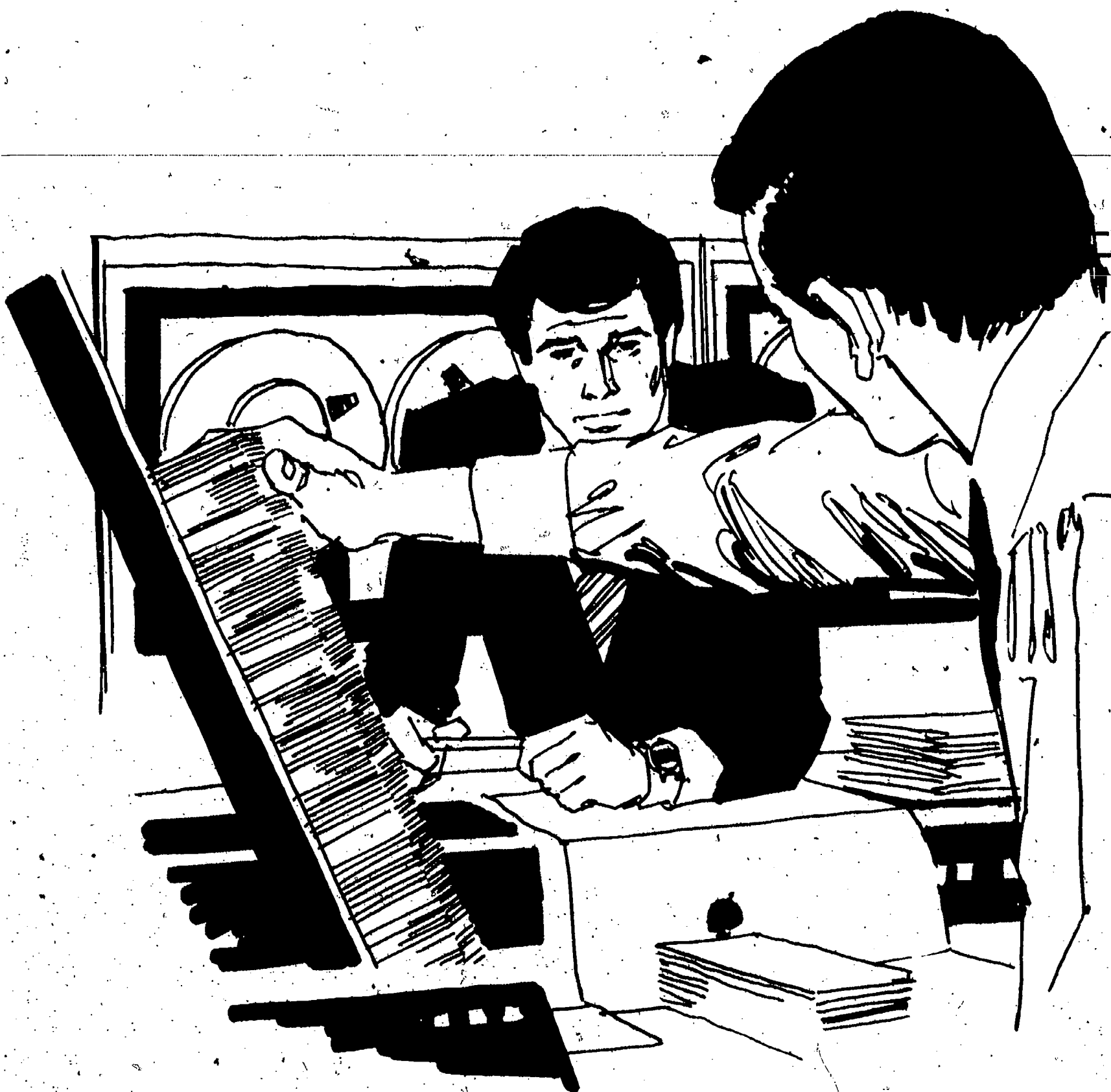
## **Technical Consultation**

Other activities of the office include technical consultation and standards development. NCES provides technical consultation and support to the various parts of NCES and the Department of Education, particularly in the area of survey sampling methodology. In addition to consultation with individual project officers and communication on technical matters with the statistical community, ORA sponsors statistical seminars, promotes presentation of technical papers at major professional meetings, and is responsible for developing training plans for future professional staff development.

Finally, NCES is placing considerable emphasis on the development of statistical standards. Implementing these standards into general Center practice will provide NCES with an effective mechanism for assuring that all projects and products are statistically sound.

## **Selected Publications**

An Empirical Comparative Analysis of Alternative Methods of Computing Eligibility Under Title III of the Higher Education Act of 1965  
HEGIS Post-Survey Validation Study  
Statistical Evaluation of Legislative Impact on Higher Education: A Case Study of Section 504 of the Rehabilitation Act of 1973. (Paper)  
Validation Study of the Imputation Processes Used in Compiling Data on Nonpublic Education of the Nation's Children





## State Technology Advancement

Policymakers are continually frustrated by untimely, poor-quality data. Through a program of grants, the Center helps States improve their statistical systems. It also encourages them to share technical expertise with one another through State personnel exchanges. The grants program is based on the premise that if all States collect data compatible with accepted standards and practices, the data States report to NCES will be more accurate and reliable and intra-State comparisons will be enhanced, thereby making the data more useful at the State level. A second objective is to reduce paperwork, redundancy, and excessively detailed reporting in meeting Federal-State data requirements.

### State Grants

Initiated in 1978, the program now provides grants to States in elementary-secondary, vocational, and postsecondary education. The grants are used for activities proposed by the States to improve their statistical and data processing activities. Grants are intended to develop the long-term capability of the State agencies to collect, process, analyze, and report about education data. Grants may focus on reducing data burden; improving the timeliness of data reporting; enhancing the quality, comparability, or utility of data; increasing a State's analytical capability; improving the flow of information to local or other educational agencies; and similar objectives. Because of limited funds, not every State that applies can receive a grant. Grants are awarded based on the following criteria:

- The significance of the project in improving the long-term statistical capability of the State educational agency;
- The quality and explicitness of the work plan and the soundness of the management plan;
- The qualifications of the proposed project staff;
- The agency's commitment and arrangements to ensure the long-term effect of the activities after Federal funds expire; and
- The reasonableness of the budget for the work to be done

In 1978, grants were awarded to eight States to improve statistical activities at the elementary-secondary level. In 1979, following a change in the authorizing law to permit the awarding of grants to postsecondary and vocational education agencies, 37 grants were made. Ten grants were awarded in elementary-secondary education, 6 in postsecondary education, and 21 in vocational education.

Funded projects include designing and implementing accounting systems in finance, staff, and curriculum; developing school district profiles for planning purposes; developing an integrated data base; upgrading data processing software and equipment; and developing software for improved analysis of data already being collected.

In FY 1980, NCES will continue its special emphasis on vocational education because the mandated vocational education data system, newly established in 1977, is still in the early stages of implementation. The Center plans to award approximately 6 grants in elementary-secondary education; 6 grants in postsecondary education; and 12 in vocational education.

### 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 State School Officer. During a year, approximately 20 personnel exchanges and team reviews occur.



## 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.

The Statistical Information Office has access to an exhaustive store of education data—data that are continually expanded and updated. This information is drawn from NCES' own data base as well as those of related agencies and organizations. Such depth of resources is necessary to enable SIO to respond to a growing variety of requests for education information requests that now number over 21,000 yearly. Users of this information represent a wide range of institutions and organizations. They include members of Congress and Congressional committees, government agencies, educational institutions and organizations, the press, business firms and private citizens. The SIO frequently answers unique requests which require special tabulations, analyses and reports.

The SIO also compiles data used to allocate funds for a number of Federal education programs. Currently, these programs provide about \$8 billion in support of a 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. Over 3,000 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 are for sale.

Another essential element of the Center's reference capacity is its publications program. Annually, NCES publishes approximately 50 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 for Education Statistics*, and *Projections of Education Statistics*. *The Condition of Education* 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.

In the coming year, NCES will place particular emphasis on widening its data services. User access to data tapes will be expanded with the upcoming publication of a data tape directory. As new concerns are studied, more special analyses will be incorporated into the NCES reference bank. The Center is considering ideas for developing more technical aids and training materials for users. The need to coordinate further multiple Federal data sources is also being considered, along with a government-wide information locator. In addition, some publications are being eliminated or consolidated and others created as education officials shift their focus from one aspect of education to another.

### Selected Publications

#### General Statistics

Comparisons of Public Perceptions of Education With the Current Status of Education (Paper)  
The Condition of Education, Part I—Statistical Report; Part II—NCES Program (Annual)  
The Condition of Education for Hispanic Americans

Digest of Education Statistics (Annual)  
 Education in the United States: Statistical Highlights  
 (Annual)  
 Projections of Education Statistics (Biennial)

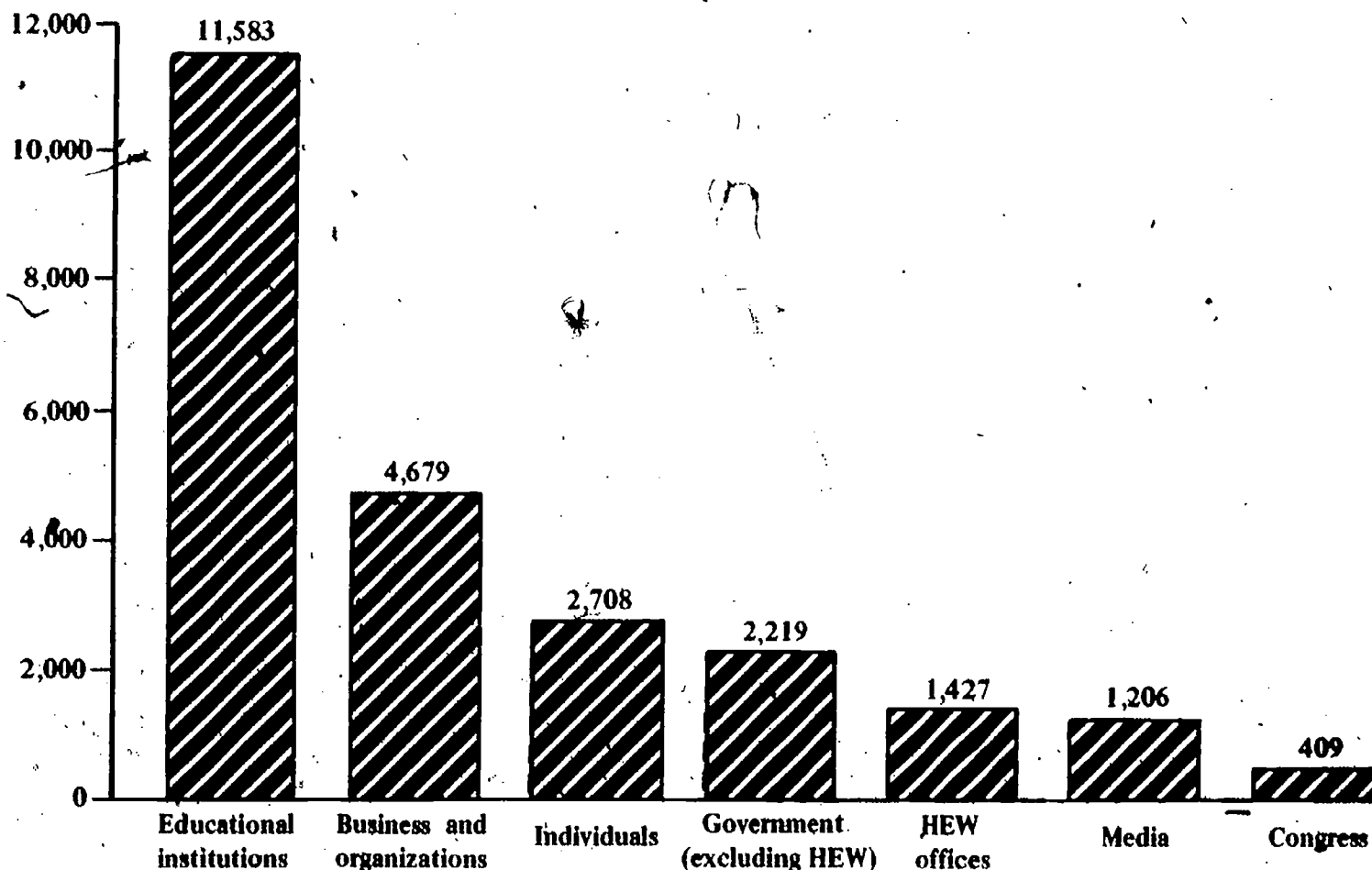
### Directories

Colleges and Universities Offering Accreditation  
 Programs, by Accreditation Field, Including Se-  
 lected Characteristics  
 Directory of Library Networks and Cooperative Li-  
 brary Organizations

Directory of Postsecondary Schools with Occupa-  
 tional Programs  
 Education Directory: Colleges and Universities  
 Education Directory: Public School Systems  
 Education Directory: State Education Agency Of-  
 ficials  
 Free Universities and Referral Centers  
 Institutions of Higher Education—Index by State  
 and Congressional District  
 Traditionally Black Institutions of Higher Educa-  
 tion: Their Identification and Selected Character-  
 istics

Number of information requests from the Statistical Information Office,  
 1979

Total requests



Note: This tally does not include the heavy volume of inquiries for major NCES reports, such as the more than 10,000 requests for a copy of *The Condition of Education*.